Indigenous Medicine and Knowledge in African Society

Kwasi Konadu



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To Nana Kofi Donkor, one whose approach to healing is worthy of emulation and

Nananom Yaw, Akua, Afia, Wofa Kwadwo, and my sister Akosua: may you all continue to pave the way for us from across the waters

Contents

List of Tables	ix
List of Figures	X
List of Images	xiii
Selected Akan (Twi) Glossary	XV
Mpaeε (libation)	xxiii
Preface	xxix
Acknowledgments	XXX
Chapter One Context and Approach to African Medicines	1
Chapter Two Bono (Akan) Society and Healing Perspectives	27
Chapter Three Aduro: Indigenous Conceptions of Medicine	77
Chapter Four Nyansa: Indigenous Knowledge and Medicine	123
Chapter Five Ayaresa: Discussion and Conclusion	157

vii

viii	Contents
Appendix One The Indigenous Bono (Akan) Calendar	181
Appendix Two Organizational Structure of the Bono-Takyiman District Assembly	185
Appendix Three Functional Hierarchy of Settlements in Takyiman District	187
Appendix Four Glossary of Pharmacological and Medical Terms	191
Appendix Five Medicinal Proverbs from Secondary Sources	195
Appendix Six Interview Protocol	201
Notes	205
Bibliography	219
Index	235

List of Tables

Table 2.1	Takyiman District Population Censuses for 1960, 1984, 1996, and 2000	36
Table 2.2	Writers on Akan Concepts of the Human Being	39
Table 2.3	Akan "Soul" Names and Their Character	43
Table 2.4	Categorical Profile of Indigenous Healers	58
Table 2.5	Categories and Descriptions of Sickness-Disease	68
Table 2.6	Selected Notions on Causation, Medicines, and Prevention	70
Table 3.1	Indigenous Healers' Classification of Medicine by Frequency	79
Table 3.2	What Healers Say Account for Bono Medicine's Uniqueness	80
Table 3.3	Medicines, Parts Used, Ingredients, and Diseases Addressed	81
Table 3.4	Names and Frequency of Medicines Spoken of by Healers	89

List of Figures

Figure 1.	Map of Africa Demarcating Ghana, West Africa	XXV
Figure 2.	Map of Ghana, West Africa	xxvi
Figure 3.	Map of the Bono-Takyiman District with Adjoining Districts	xxvii
Figure 4.	Map of the Takyiman Township—Center of the Bono-Takyiman District	xxviii
Figure 5.	A Conceptual Outline: The Bono (Akan) Spiritual- Temporal Perspective	47

List of Images

Image 1.	Pounding fufu or fufuo	142
Image 2.	Nana Kofi Owusu and Nana Kofi Donkor, 1973	143
Image 3.	Takyiman market—vegetable sellers	144
Image 4.	Takyiman market—cloth sellers	145
Image 5.	Nana Kofi Donkor treating a child who could not walk very well	146
Image 6.	An <i>odunsinni</i> or herbalist	146
Image 7.	Cutting a child for <i>\varepsilon soro</i>	147
Image 8.	Nana Kofi Donkor carrying Asubonten at a festival, 1970	147
Image 9.	Taa Kofi Obosomfoo Nana Kofi Kyereme in indigenous Akan attire	148
Image 10.	Drummers for the <i>bosom</i> named Akwatiamfiri	149
Image 11.	Biakuru Obosomfoo Nana Kwasi Ntua pouring libation at Amowi cave, 1970	150
Image 12.	Session 11 on First Aid at the Primary Health Training for Indigenous Healers (PRHETIH) program, Takyiman	151
Image 13.	Public health clinic workers, Takyiman	152
Image 14.	Decorated skin of a new mother, Jebiri, Takviman	153

xiv	List of Images
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Image 15.	Naming and "Outdooring" ceremony of twins, Ata and Ataa	154	
Image 16.	Drummers in procession	155	
Image 17.	Female akəmfoə at festival in Takyiman, 1969	156	

Selected Akan (Twi) Glossary

Akan (Twi) is a tonal language like many other West African languages and, therefore, pronunciation is critical. The language in written form uses most of the characters found in English, but with regards to the characters "o" and "ɛ," as well as a few diagraphs, a quick but effective pronunciation guide is necessary: ɛ (as the *e*-sound in get), o (as the *aw*-sound in law), ky (*ch* as in chew), dw and gy (*jw* as in "large war"), hy (*sh* in the word shirt), tw (as in *ch*-sound in chew), hw (as the initial sound in whew!), and kw (as the initial consonant in quick). Many terms can only be understood in the context of use, and low [·], middle [-], and high [·] intonation applies to every syllable in Akan (Twi). Nasals [~] are also indicated. This glossary contains key vocabulary in descriptive terms; etymological data in the sense of how the Akan generally understand and use these terms are provided in most cases. The abbreviations used throughout the text are as follows: sg. (singular), pl. (plural), lit. (literal), syn. (synonym).

Àbòrafóa

The term *aborofoo*, and *aburoni*, is generally used to refer to Europeans or white people and their language(s), particularly, English. The concept of *aburoni* (*buro*—lagoon; *ni*—suffix for person) refers to a "lagoon person" and the concept of *aburokyire* ("the place behind or in back of the lagoon") represented a foreign world, thus, both terms were applied to Europeans who encountered the Akan at the lagoon or at *mpoano* ("the mouth of the ocean") from the 15th century onward. The concept of *aborofoo* (*aboro*—the act of sabotage; *foo*—those who) denotes ill character or an abhorrent nature, and though this concept is linguistically distinct from *oburoni* (due to vowel harmony rules), it was nonetheless applied to Europeans as "wicked saboteurs," and the root word *boro*

was used for Europeans in Jean Barbot's 1680 West African vocabulary.

Àbràba

Abrabə (lit. "to come into the world with a sense of mission") refers to righteous and ethical existence or the realization of one's mission on earth (see *nkrabea*).

Àbráfoa

The *obrafoo* (pl., *abrafoo*; lit. "people who subdue or bring") functioned in the capacity of the *ohene*'s security force, as "executioners" in the indigenous state, enforcer of law, and, in spiritual practice, an *okomfoo*'s assistant (see *ohene* and *okomfoo*).

Àbùsùá

Matriclan, lineage group or family organization. The *abusuapanin* (*abusua*—family; *panin*—elder) is the head of this group. The institution of *abusua* (pl. *mmusua*) is said to originate in the forest country of Adanse where an Adansehene had an *akyeame* named Abu who instituted a system of ordering the various families, hence, *abu-sua* or "imitating Abu" (the verb *sua* means to study or learn by way of imitation).

Àdĭnkrá

The name of the *shene* (Kofi Adinkra) and the name of specific types of symbols that appear on funerary cloth, associated with proverbs, and whose symbolic characters or figures form an indigenous Akan script. As the name of an *shene*, the etymology of the term *adinkra* (*adi*—supposedly the first *shene* who made the symbols; *nkra*—[who says] farewell) makes direct reference to the transition from temporal reality to another. Precisely, in Akan "funerary arts, the arts related to funerals, there is a special cloth called *adinkra* that is worn during the funeral and at other funeral activities. This cloth is hand-painted and hand-embroidered and is adorned with Akan, or *adinkra symbols*. These symbols are arranged on the cloth in a specific manner to convey a parting message to the deceased."²

Àdúró

Medicine in the broadest sense referring to a range of organic and inorganic materials and therapeutic methods. According to Silverman, the term *odudu*, which is actually *odudo* (pl. *adudo*), refers to medicine produced by herbalists in the Bono-Takyiman area, but, more precisely, is one type of (liquid)

medicine produced from boiling leaves or leaves steeped in water.³

Àdútỗ

Harmful medicine. Writers such as Warren and Ventevogel claim that the herbalists provide *aduto*.⁴ However, *adutofoo* (people who use *aduto*) provide *aduto*, while herbalists provide "good" or "bad" medicine.

Akəm

Akəm is extremely difficult to translate into English. Akəm is neither "Akan religion" nor a "possession dance" as some would claim. Rather, in descriptive terms, akəm is both process and procedure unbounded by time or space, and is linked to the full range of rituals, medicines, spiritual entities, and specialists within the spiritual-cultural life of the Akan.

Àsàsé Yàá

In the southern parts of Ghana, the earth is identified by the name Asase Yaa; Yaa being the soul-name for all females born on Thursday, hence, the power or spirit of the earth is conceived as a feminine principle whose natal day is Thursday. In northern Ghana, the earth is referred to as Asase Afua; Afua is the soul-name for all females born on Friday. The Akan say, Asase nye bosom; onkyere mmusuo ("the earth is not an obosom, she does not divine"), which is a conceptual reference to the power or principle possessed by the Earth.⁵

Àsèdá

Aseda (lit. "the act of lying under") is a term used, traditionally, to express thanks and gratitude for services rendered or as part of settling judiciary matters through monetary and other means.

Àyàrèsá

Ayaresa (*ayare*—disease, sickness; *sa*—take away, cut off or into) refers to healing or, literally, "to take away or cut into/ off disease or sickness."

Báyīe

This term is generally translated as "witchcraft" (the act itself) with the terms *abayi* or *abayisem* (lit. "*bayi* affairs or cases"). The *abayifoa* (pl. *abayifoa*) is the person that does *bayi* or *bayie*. The term, according to Azzii Akator, derives from the phrase *ebeye yie* ("it will be or all right") and this was an optimistic utterance made to give hope as well as to advise one to consult the *abayifoa*. Others believe the term possibly derives

from *ba-yi* (lit. "to take away or remove a child"), which underscores the notion that *bayi(e)* is most prominent within the abusua or matriclan.7 The Akan distinguish between negative bayi(e) and beneficial bayi(e) perhaps because they know that a tool is a tool or energy is energy, yet it is the intention behind the use of that tool or energy which makes the difference

Hónhōm

The breath of life, a spiritual force sometimes translated as "spirit."

Nànánóm Nsámanfoa The most elder or ancient ancestors (see the section in the text on the four categories of ancestry).

Nkrábēā

Nkrabea is usually defined as one's destiny, yet the term nkrabea (nkra—message, act of asking to leave; bea—place, manner) refers, in this context, the manner in which one takes leave from the Creator, while the hyebea is the requested and "commanded destiny" given by the Creator when one departs the spiritual for the temporal world where that "destiny" will be actualized. 8 Consonant with the Akan notion of an integrated and cohesive society, the person is appointed a place in society and in that place they function for its total harmony and well-being.9 The Akan hold that one's destiny is negotiated with Onyankopon before one reaches the mundane world and upon physical death the *pkra* (soul) of the deceased returns to Onyankopon to account for its temporal existence.

Nyáńsā

Wisdom, intelligence. The term literally means, "that which is obtained and which never finishes" (nya—to receive; ansa that which never finishes).

Onyànkópon One of several gender-neutral terms that the Akan use to describe the attributes of and to refer to the Creator, whom the Akan regard more appropriately as *Oboades*, The Creator. 10 Other appellations include *Idomankoma* (lit. "the only one who gives grace" in that wo nko ara na woma yen adom, "it is only you who gives grace or favor"), Onyame (nyam—to shine; "the shining one" in that yenya wo a na yeamee, "When we receive you, we are completely satisfied"), and Onyankopon ("the only great one in that wove baako pe na wo tumi so sene obiara wo wiase mu nyinaa, "there is none whose power can be compared to yours in the entire world").

Obósōm

Considered an emissary or child of *Onyankopən*. An *əbosom* (pl. *abosom*) can also be regard as a "shrine," a "deity," or the power of a "shrine" or "deity," even though these English cognates are culturally inaccurate. The term *əbosom* does not mean "one who serves or worships stone" (*boɔ*—stone, rock; *som*—to serve) but rather entities that "serve an unlimited, invaluable purpose" as the etymology indicates (*ɔ*—reference to an entity; *som*—to serve; *bo*—price, limitless, precious). The *abosomfoɔ* are the custodians of the *abosom* and the *əbosomfie* is the structure where the physical shrine is housed.

ColmosòdC

An *obosomfoo* oversees the "shrine" attendants and in the Takyiman area the *akomfoo* are juniors to the *abosomfoo* who help to care for the *abosom* and provide offerings and related services.

Odunsinní

The *odunsinni* (*dua*—tree; *sin*—part of; *ni*—one who; pl. *nnunsinfoɔ*) or "one who works with parts of a tree" uses herbal medicines to cure sicknesses and many *nnunsinfoɔ* specialize in medicines for particular diseases. *Nnunsinfoɔ* usually do not address spiritually related diseases and serious diseases; these types of diseases are often dealt with by either the *ɔkɔmfoɔ* or *ɔbosomfoɔ*.

Ohémmáá

Female leadership component in local and indigenous sociopolitical structure, as well as heads of units or organizations and office holders, in the some cases, the *shemmaa* or *shene shaa* ("female *shene*") occupies the role of *shene*. The *smanhemmaa* (*sman*—cultural group, nation) is the female state leader who is typically the *ena* (mother) or *onua-baa* (female sibling), and in rare cases, the *shaa- panin* (female elder) of the present *shene*.

Ohéné

Male leadership component in the local and indigenous sociopolitical structure; the term is also applied to heads of units or organizations and office holders. The *smanhene* is the male state leader who is usually the *wsfaase* (nephew) of the previous male state leader. *Ahemfoo* is the plural form for *ohene* and the *ohemmaa*'s plural is *nhemmaa* or *nhemmaanom*.

Okomfóo

Unlike the pure *odunsinni* who may harm or kill, the *ɔkɔmfoɔ* is disallowed by their *ɔbosom* from engaging in such acts. As "the one who does *akɔm,*" the *ɔkɔmfoɔ* is an indigenous healer who works with an *ɔbosom* as more of an attendant and is a specialist in *akɔm. ɔkɔmfoɔ* (pl. *Akɔmfoɔ*) is a gender-neutral role and he or she may enter into spiritual communion with an *ɔbosom* at any time, hence, their mobility.

Okrá

The term ∂kra is made up of two parts: "5" being the personalized noun or the one (that part of you) announcing its departure and "kra" means "to bid farewell." Hence, ∂kra is a descriptive term for the "soul" (that part of you which departs after death or which returns to ∂kra upon physical death). The term ∂kra , not ∂kra , is one of two terms used to refer to a cat, which is regarded as a spiritual animal.

Okràmòní

Muslim or a person of Islam; *nkramofoɔ* (sg. (ɔ)*kramo*) derives from the Malinke term for Muslim, *karamoko* or *nkaramo*.

Okyeámē

The institution of *ɔkyeame* (pl. *akyeame*) connotes rhetorical competence *par excellence* and designates the most crucial diplomatic and communicative position within the indigenous Akan political system. The *ɔkyeame* is the *ɔhene's* diplomat and orator. The *ɔkyeame* is also a master of Akan protocol, encyclopedia of indigenous culture, and communicative medium between the indigenous local or state leadership and their constituencies. The Adanse are said to have pioneered the institution of *ɔkyeame* in Akan society in the sixteenth century under Adansehene Awurade Basa. 12

Osofoo

Pastor, precisely, in the context of a church. The term <code>osofoo</code>, however, is much older than its current meaning or application since it predates Christianity among the Akan, and that, in the Akuapem area, the concept is still analogous to the Takyiman <code>obosomfoo</code> in meaning and function.

Sàsà

The spirit of an animal; a vengeful spirit and/or one in an indeterminate state.

Sebe

The physical object (talisman) that contains the "suman" (see suman).

Súbáń or subán Character, nature. The term *su* refers to "essence or nature" and ban (as "fence") refers to the form or shape of that essence or nature. One proverb says, wahoofe de wobeko wo suban de wo bεba, "your beautiful body will take you to go [wherever you desire], your character will take will back."

Súmān

Suman (pl. asuman) refers to certain human-made objects (e.g., talismans) and the potency thereof, generally, for individual usage such as protective medicine and other prescribed functions.

Súńsūm

Often translated as "spirit," the term refers to an immaterial part of the person that determines individual and, in a collective sense, group character. One's sunsum could be light or heavy, and this intangible element could be cultivated. The root (e)súm may refer to "shadow, shade" as in sunsuma or esum mu sum ("darkness inside of darkness"), and, in some abstract way, to sumsum ("to support") as in the proverb, wo sum borodee a sum kwadu na ekom ba a wo nnim nea Ebegve wo (when you support plantain support banana too; when hunger or famine comes you won't know which will save you).

Yàdéε, vàréε Sickness, illness, disease (γγαν—painful; adeε—something; pl. ayàré or ayareyárē). Nyarewa (ɔyare—disease, sickness; wa small) refers to "small or minor diseases,"

Mpaeε (Libation) By Nana Akwasi Owusu

Osoro Onyankopon, adeε akye Onyankopon above, it is morning time

Asase Yaa begye nsa Mother earth come to receive (this) drink

Oboo benom nsa Oboo come to drink (this) drink

Nantee begye nsa Nantee come to receive (this) drink

Apomasu nsa Apomasu (come and) drink

Enys bone What we do is not something bad or evil

Enne wo de Kwasi Konadu aba Today, you have brought Kwasi Konadu to

aduru ha reach here

resre wo

in the case of t

in the same of t

Nea me resrɛ ne sɛ . . . ɔyɛ akora What I am requesting is that . . . he is a man

Senea ebeye a, obehunu nwoma That he will know the book [knowledge]

Na Onyankopən nso mmoa yen That Onyankopən will help us

Na senea ebeye a, obenya nkosoo So that he will progress or achieve prosperity

wo aburokyire-man mu eno na me in the foreign nation [i.e., USA], this is what I

am requesting from you

Na Odomankoma busuyefoo, a этре по aye yie	But any evil-carrier created by <i>Odomankoma</i> who wants to see his downfall
Meresre wo, saa nipa koro no dee	I am requesting from you that that person
Ansa na əbekə akəduru aburokyire	before he (Kwasi) reaches abroad (United States)
no dee, ma nipa korə no mmebu	Let that person come
Ne nkotodwe no n'anim sɛ, "Akwasi Konadu, mepa wo kyɛw!"	Kneel before him and say, "Kwasi Konadu, I ask for your forgiveness!"
Senea ebeye akora yi behunu nwoma	So that this man will have good book knowledge
Oda Anadwo a, momma no nhunu	when he sleeps at night, let him still know
Oda awia momma no nhunu	When he sleeps in the daytime, let him know
Ema biribiara enye yie	So that everything will be successful
Ema biribiara enye yie Odomankoma busuyefoo, bayifoo, konkonsa nea ompe no nye yie dee	So that everything will be successful The wicked person created by <i>Odomankoma</i> , those who do <i>bayie</i> ["witchcraft"], negative instigators, or those who do not wish him well
Odomankoma busuyefoə, bayifoə,	The wicked person created by <i>Odomankoma</i> , those who do <i>bayie</i> ["witchcraft"], negative
Эdomankoma busuyɛfoə, bayifoə, kənkənsa nea этрє по пує yie deє	The wicked person created by <i>Odomankoma</i> , those who do <i>bayie</i> ["witchcraft"], negative instigators, or those who do not wish him well
Odomankoma busuyefoə, bayifoə, kənkənsa nea этре по пуе yie dee Ennee Эboə w'adaworoma Enne Wukuo, ma nipa koro mfa ne	The wicked person created by <i>Odomankoma</i> , those who do <i>bayie</i> ["witchcraft"], negative instigators, or those who do not wish him well That by your grace, <i>Oboo</i> Today is a Wednesday, let that person use his or
Odomankoma busuyefoə, bayifoə, kənkənsa nea этре по пуе уie dee Ennee Эboə w'adaworoma Enne Wukuo, ma піра koro mfa ne nsa benkum mfa nnidi	The wicked person created by <i>Odomankoma</i> , those who do <i>bayie</i> ["witchcraft"], negative instigators, or those who do not wish him well That by your grace, <i>Oboo</i> Today is a Wednesday, let that person use his or her left hand to eat [i.e., a cultural act of insanity] Let him or her realize that there is a (greater)

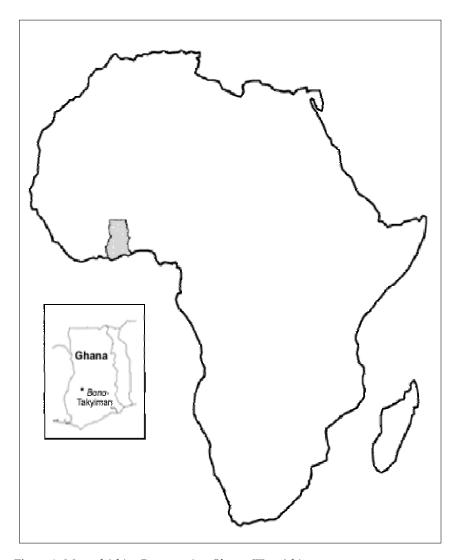


Figure 1. Map of Africa Demarcating Ghana, West Africa.

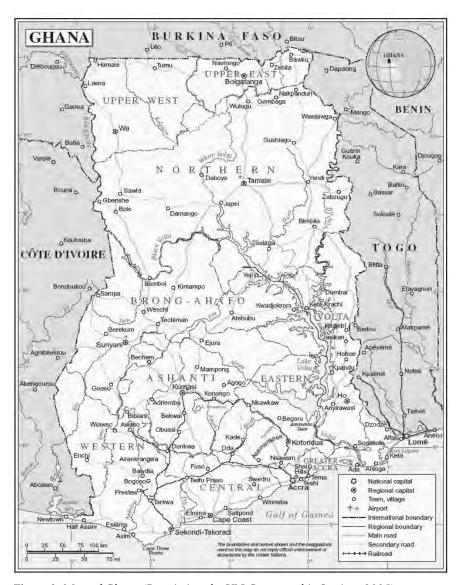


Figure 2. Map of Ghana (Permission the UN Cartographic Section, 2005).

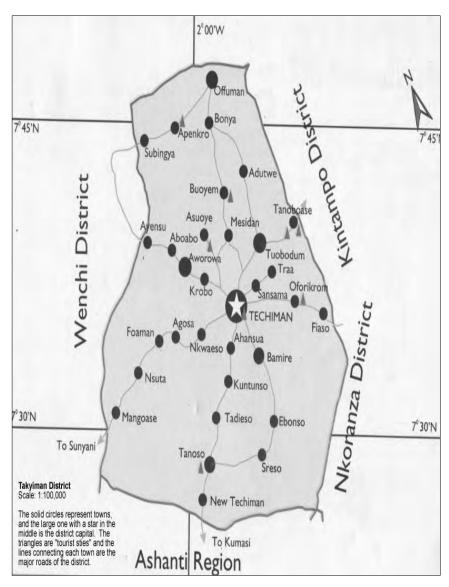


Figure 3. Map of the Bono-Takyiman District with adjoining Districts.

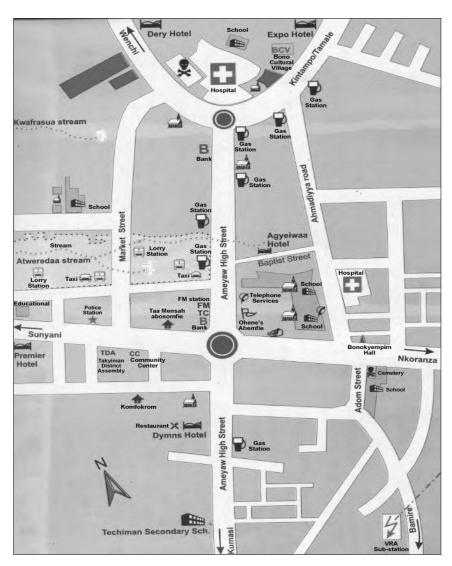


Figure 4. Map of the Takyiman Township—Center of the Bono-Takyiman District.

Preface

Through a discussion with Kofi Sakyi Kumankoma, an odunsinni and research associate, it became clear that this research was not so much about the depth of knowledge that one or several indigenous healers possessed but prevailing concepts of medicine related to health and healing among a representative group of indigenous Bono healers and archives of indigenous knowledge in the Takyiman district of central Ghana. The idea and object was to generate a substantive framework for investigations and writings that reflect how specialists of the Bono-Takyiman (Akan) therapeutic system conceptualize medicine and translate those conceptualizations into practice. The collected works of Dennis M. Warren (1941-1997) remains a benchmark for any study on the indigenous medicine and knowledge systems of the Bono (or Brong) of Takyiman as evidenced by how often Warren has been cited and his long bibliography. Arguably, much of Warren's early and later works were based largely upon his dissertation research in the late 1960s and early 1970s in the Bono-Takyiman district of Central Ghana. In reading Dennis Warren's dissertation on religion, disease and medicine among the Bono-Takyiman, this writer's main contention with the document, specifically, its disease classification scheme, was that it relied primarily on the knowledge of Nana Kofi Donkor-father of Kofi Kumankoma and a wellrespected *bosomfoo*—as the baseline data juxtaposed to several indigenous healers and the 4000 or so community members surveyed.

Though Warren's work is certainly commendable, it must be stated that the experiences, perceptions, and levels of competence amongst healers are not identical, and to use one person as a standard or benchmark seems problematic in the articulation of an "ethnomedical system" authenticated by so few sources that possess equivalent levels of in-depth medicinal knowledge and aptitude. In this regard, Nana Kofi Donkor can be considered as exceptional in the nature of his understanding and articulation of Bono

xxx Preface

medicine and healing among other healers as well as in his openness to share such information, which is typically not the case, especially, among akəmfopanyin (elder or senior akəmfoə) in the Bono-Takyiman area. Nana Kofi Donkor and Nana Kofi Kvereme "trained" together and were the most senior akomfoo until the passing of Nana Kofi Donkor in 1995, after which Nana Kyereme became the *skomfopanyin* of the Bono-Takyiman area. Conversations with Nana Kofi Kyereme provided further clarity on the type of information given to researchers, especially those of the past and present, and the level of access to that information. Essentially, one has to be a part of the institution of akəmfoə or abosomfoə, both indigenous healing institutions, to really know the depth of information that provides more than a glimpse into the nature and workings of either body. Let me be clear: the fact that one has to be a "trained" and competent specialist of the Bono-Takyiman therapeutic system to fully know its scope and depth does not obscure or render frivolous the information shared with me during my discussions. The term "glimpse" is used to suggest that the research undertaken represents a very critical starting point or continuation in the study of indigenous Akan medicinal conceptions rather than an all-encompassing destination.

This study investigates the ways in which Bono-Takyiman healers and indigenous archives of Akan cultural knowledge conceptualize and interpret medicine and healing. The research focuses on the primary institutional specialists that constitute the core of the indigenous therapeutic system—the *akəmfoɔ*, *abosomfoɔ*, and *nnunsinfoɔ*—and the proverbial, gold weight, adinkra symbolism, and oral narrative domains of Akan cultural knowledge, in order to unearth prevailing concepts of medicine using in-depth interviews, medicinal samples, material culture, linguistics data, and historical and archaeological sources. The object of the study was to generate a consummate perspective on the knowledge system of indigenous healers that would serve as a substantive framework for investigations or writings that seek to examine how these specialists conceptualize medicine and employ those conceptualizations in practice. To that end, what follows herein is the quest for that perspective and the results of this endeavor.

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Chapter One

Context and Approach to African Medicines

The healer must first have a healer's nature. . . . [He or she] who would be a healer must set great value on seeing truly, hearing truly, understanding truly, and acting truly. . . . You see why healing can't be a popular vocation? The healer would rather see and hear and understand than have power over men. Most people would rather have power over men than see and hear.

-Ayi Kwei Armah, The Healers, 80-81

INTRODUCTION

The greater part of Africa during at least the last seven centuries has been consciously or unconsciously absorbed by, and has participated in, externalizing economic, socio-political, ideological, and religious systems largely of European, Arab, and, to a lesser extent, Asian origins. The decade of 1985-1995 was a period characterized by structural adjustment schemes, collapsing health structures, and the emergence and spread of HIV/AIDS in the African context. The recent import of cheaper generic drugs for AIDS and other health-related challenges reveal the global confrontation between pharmaceutical companies and the governments of so-called developing countries, and the lawsuits brought by pharmaceutical multinationals against these governments put into perspective the overriding concern for profit at the expense of real people. In this context, one can suspect the guidelines issued by the World Health Organization (purported to ensure the sustainability and safety of the \$60 billion herbal medicine industry) are more than humanitarian in motive as issues of herbal medicine—such as poisonings, heart problems, the addition of steroids to plant medicines, poor plant quality and collection practices—continue to plague the United States, China, and Europe, Two decades ago the U.S. pharmaceutical industry spent \$4.1 billion

on drug research and development and consumers purchased in excess of \$8 billion, and since seven-four percent of the chemical compounds of the 119 known plant-derived drugs have the same or related use as the plants from which they derive, this industry exploits historical and current "claims from alien cultures" in the "discovery" of new drugs (Farnsworth 1988). This is where medical anthropologists and ethnographers enter the arena or make their presence explicit, while sustained by the false "claims to speak for others, to represent them as they would represent themselves" (Good 1994, 25).

The emergence and life of the Western anthropological project was more than simply "framed by the [supposed] superiority of European and American science and industrial development and by the colonialist context of research" (Good 1994, 21). This project was and is a vehicle embodying the views and values of those who desire or claim global hegemony in politico-economic and military terms. Therefore, as Jackson (2003) argues, nineteenth century imperialism and biomedicine, the latter of which was re-imagined as tropical medicine, were inseparable and the intimate relationship between disease and empire, in terms of ailing African bodies constructed as vectors of infection, allowed for African exploitation and colonial imposition. The diseased African body cast as "other" or "alien," through the introduction of co-colonizing diseases such as tuberculosis, necessitated the denigration and suppression of "efficient indigenous healing systems in operation" and expedited the expendability of those from that "afflicted continent" (Jackson 2003, vi, 5). In the contemporary period, the foregoing colonial processes and perspectives toward indigenous healers have been maintained in most African ministries of health, and in Cameroon, and elsewhere, the "new traditional doctors" that appeared during the 1970s engage in commercial activity and imitate Western medical practices (e.g., national organizations with membership cards) saturating or confusing the conception and practice of indigenous therapeutic systems and its specialists (Bongmba 1998, 176; Warren and Green 1988, 1). In the Ghanaian context, the late nineteenth and early twentieth century witnessed the suppression of indigenous medicine specialists beyond the coastal areas as missionary and colonial activity heightened. During the tenure of Kwame Nkrumah, Ghana's first prime minister and president (1957–1966), the political economy affected the nature of the indigenous healers' vocation as well as efforts to organize them through a national body (i.e., The Ghana Psychic and Traditional Healing Association).

The political landscape of Ghana during the last five decades—decades punctuated by military coups in 1966, 1972, 1978, 1979, and 1981—parallel its economic situation since joining the International Monetary Fund

(IMF) in 1957 wherein the Ghanaian cedi [sedes] shifted in equivalency to the US dollar from one cedi to US \$1.40 in 1967 to 2.75 cedis to US \$1.00 in 1983 and, following unfailing devaluation, 150 cedis to US \$1.00 in 1990. By 2005, one US dollar was equivalent to 9,100 cedis. This very simplistic yet necessary political and economic excerpt is rooted in the struggle for political independence in West Africa. This struggle was against the sociopolitical structures that managed the means of production rather than the means of production themselves and the control thereof. In essence, the concerted and sometimes contradictory efforts of the "independence" movement were largely political rather than economic in nature, hence, the concessions toward demands for the former. African political leaders were given prerogative over the management of the truncated nation-state and soon military persons seized this authority. Still West African nations continued to feed the industrializing colonial metropolis and markets as primarily suppliers of raw materials; most in the West African region, for instance, ate wheat bread, but none were producers of this product. The failed structural adjustment schemes of the 1980s were replaced by the Highly Indebted Poor Countries (HIPC) initiative of the 1990s in which such countries did not have to repay their debt but had to make available the aggregate foreign debt in local currency only to be told what to do with those funds. Other conditionalities include privatizing all industries for waiting foreign buyers and reducing poverty through micro-credit mechanisms restricted to the development of "micro" (small) enterprises rather than the building of factories. The latter effort, of course, is aimed at making the impoverished less poor.

What do these economic initiatives and for that matter the political economy of the Ghana have to do with health, medicine, or healing? Well, in terms of the delicate balance between economy, ecology, and human health environment, almost everything. Forty percent of West African nations' budgets are anchored in or dependent upon "foreign aid," and economic development causes rapid ecological changes which disturb and facilitate vectors of infectious diseases as well as severely limiting crop and medicinal plant development. The unfortunate irony, if economic development continues to be pursued as currently conceptualized, "is that Africa's economic development will to a large extent depend on the level to which her plant genetic resources are conserved and sustainably [sic] used through a careful and deliberate effort to integrate them into both short and log-term [sic] economic development plans" (Adebooye and Opabode 2004, 704).

The economic factor in indigenous medicine is not only linked to ecological and health considerations, but also and more significantly to the cultural order within which these considerations are realized in the immediate and distant historical context. In this respect, as Blench (2001, 9) argues, "the

environment is culturally constructed." By way of example, sacred groves in Northern Ghana, and elsewhere, provide a model in the preservation and management of forests, yet the extent to which this model is effective will be contingent upon the maintenance of culture and indigenous systems of plant resource management resulting in increased indigenous crop and medicinal plant varieties (Adebooye and Opabode 2004, 702; Dorm-Adzobu et al. 1991, 31). The greatest challenge and opportunity, however, does not revolve around ill-conceived socio-economic planning but the rapid erosion of culture, as perhaps the most precious and endangered resource, paralleled by the illicit antiquities "trade," tourism, removal of plants with spiritual significance in front of homes due to Christianity, multinational companies disguising commercial ventures in the name of assisting reforestation, and many Africans increasingly seduced by the Western worldview (Kankpeyeng and DeCorse 2004; Agbovie et al. 2002, 6; Blench 2000, 9). Yet and still, while African governments sell their countries' resources for quick and inadequate capital, the potency of culture is illustrated in Zambia wherein "despite poverty and higher costs of treatment from a traditional healer, people still frequently decide to seek treatment from a traditional healer" (Stekelenburg et al. 2005, 78). Thus, the assumption that if people pay higher prices for indigenous medicine they should be willing to pay for biomedical health care has been unmasked as questionable and dangerous, and related user fee systems in government health facilities are likewise unjustified (Muela el al. 2000, 296, 301). The reason for this is that, economically and culturally speaking, hospital costs are personal and paid prior to treatment, while indigenous medicine costs fall on the kin-group and healers offer alternative means to cash payment in the negotiable terms of cash, in-kind gift, labor, and credit according to wealth and status (Muela et al. 2000, 299). Given these cultural mechanisms and the context of culture in relationship to its ecological, health, and economical dimensions, it is difficult to entertain or accept propositions that incriminate and ridicule African culture for not behaving like another culture on conceptions of nature, science, and reality (see Gyekye 1997, 245–246).

It is generally held that over eighty percent of Africans depend upon medicinal plants to address their health needs; however, the exploitation of these plants by "developed countries" arrests Africa's capacity to come to terms with its health needs and interests (Ekpere and Mshana 1997, 2, 5). Databases such as Natural Products ALERT (NAPRALERT), which is a specialized computer database of information on natural products derived from a systematic search of the world literature, contains 80,000 or more articles with 25,000 species of higher plants alone and the database is updated with 6,000 articles each year. NAPRALERT is maintained at

the University of Illinois at Chicago and this database demonstrates how industries are increasingly knowledge intensive yet there is a disjuncture of medicinal knowledge. However, before we can examine the level and value of medicinal plant research in the African context, it is first necessary to make some general observations on medicinal plant use in Africa.

Rukangira (2001), following Sofowora (1996a; 1996b; 1982), listed the commonly used plants in Africa and Madagascar as Adansonia digitata, Alstonia boonei, Carica papaya, Nauclea latifolia, Piper guinense, and Zingiber officinale. All of these medicinal plants were among those listed by Bono-Takyiman healers as frequently used and most effective plant medicines. Blench (2003) named 17 plant medicines with corresponding Hausa terms, while Ayensu (1978) and Hyam and Pankhurst (1995) listed 12 and 9 medicinal plants, respectively, which were among those employed in Takyiman in terms of both frequency and potency. The Baka, who inhabit the Dia reserve of Cameroon, were found to share many common plants and similarities in medicinal plant use with West and Central African nations that belong to the Guinean-Congolian forest area, and plants also employed in the Takyiman district included Aframomum daniellii, Alchornea cordifolia, Astonia boonei, Carica papaya, Erythrophleum suaveolens, and Pycnanthus angolensis (Betti 2004, 9, 15–16). Spices or condiments that are used in the production of medicines, such as Aframomum melegueta, Monodora myristica, Piper guineensis, and Xylopia aethiopica, are commonly found nonwood forest products in the markets of Equatorial Guinea and in Takviman, specifically, and Ghana in general (Sunderland and Obama 1999). Of the most commonly used medicinal plants by disangoma and other healers in Botswana only two—Flueggea virosa and Secundaca longepedunculata were congruent with the Takyiman list, while plants used by the n'anga or chiremba of Zimbabwe included Cassia singueana, Bridelia micrantha, Securidaca longepedunculata, Zingiber officinale, and Carica papaya (Helberb and Straugård 1989, 300-302; Gelfand et al. 1985, 285-292).

In Guinea, Fairhead and Leach (1996, 186–186, 297–309) found 12 to 19 medicinal plants employed in the local pharmacopoeia that corresponds to those medicines prominent in Takyiman. In Dokosi's (1998, 668–684) *Herbs of Ghana*, he examined only five medicinal plants which corresponded to those listed by Bono-Takyiman healers; Abbiw's (1990, 277–282) *Useful Plants of Ghana*, which appeared eight years before Dokosi's text, explored 22 of the most effective and frequently used medicinal plants among Takyiman healers. Several medicinal plants in West Africa and specifically in Ghana have demonstrated antiplasmodial, antidiabetic, antimicrobial, and other effects under laboratory conditions and recent phytochemical screening of four primary medicinal (spice) plants—*Afromomum melegueta*,

Zingiber officinale, Piper guineense, Xylopia aethiopica—reaffirmed what had already been known by indigenous populations (Lantum 1980; Köhler et al. 2002, 1026; Bever 1980, 119, 126; Dokosi 1969; Konning et al. 2004, 66–67; Rowson 1969). What is more significant than the supposed "scientific" confirmation of medicinal value is the indication that there exists a relatively shared pharmacopoeia among proximate and distinctive African societies who adhere to indigenous approaches to health and healing. On the parts of medicinal plants used and the forms of preparing and administering plant medicine, there seems to be also relative consensus in terms of high degrees of consistency across African societies. Moreover, the data presented above for Takyiman (Ghana), and those correlated with other indigenous African societies, are very much consistent with medicinal use and efficiency as found in the historical record related to Ghana.

In the late seventeenth century, Bosman (1967 [1705], 224) wrote, "the chief medicaments here in use are first and more especially limon [sic] or lime juice, malaget [Afromomum melegueta], otherwise called Grains of Paradise, or the cardamom, the roots, branches, and gramms [sic] of trees, about thirty several sorts of green herbs." He went on to say, contrary to de Marees" (1987 [1602]) statement that "[the Akan] do not have any medicines which might help them against their diseases," not only were the "remedies used here frequently . . . very successful," but also commented, "I have seen several of our country men cured by them, when our own physicians were at a loss what to do" (1967 [1705], 224–225). William Smith (1967 [1744], 225), writing approximately forty years after Bosman, observed, "the medicaments, plants, herbs, have such virtues here, that they really perform very surprising cures." In the early nineteenth century, Bowdich (1966 [1819], 371, 397) collected 37 plants or "medicines [used] by the Ashantees," and of the 37 listed nine were intelligible from his English rendition of Akan (Twi) terms, and of those nine plants four were among the frequently and most potent medicines used by Bono-Takyiman healers. The nine intelligible medicines, in which Bowdich's rendering appears next to the Akan (Twi) spelling in parenthesis, are as follows and their use and preparation is very much consistent with contemporary means of deployment.

- (1) Adumba (*Adubena*): bark of a specific medicinal plant that contains reddish fluid. According to Bowdich, the bark and fruit were pounded with pepper [*Afromomum melegueta*], and "awhinteywhinting" [*Ahwentia* or *Ahwenteaa*; Ethiopian pepper] and boiled in a fish soup for consumption (1966 [1819], 371).
- (2) Tandoorue (*Tannuro*): bark is pounded and boiled with pepper for stomach pains; this medicine also acts as a purgative (Ibid.).

Unreported by Bowdich, *tannuro* is used for a disease or infection of the vagina called (ε) *daekoa* as well.

- (3) Bissey (*Bese*, "kola"): Bowdich wrote, "the fruit is constantly =chewed by the Ashantees, especially on a journey; it is said to prevent hunger and strengthen the stomach and bowels; has a slight bitter aromatic astringent taste . . ." (Ibid.).
- (4) Anafranakoo (*Anafranako*): bruised leaves are applied to boils and inflammatory swellings, and it is used for fractures (Ibid., 373). Sheep, unbeknownst to Bowdich, rather than other animals, seem to die from eating the leaves.
- (5) Kattacaiben (*Kotodweben*): leaf decoction is used for pregnant women with uneasiness in the abdomen; the powdered bark is rubbed on chronic swellings (Ibid.).
- (6) Aserumbdrue (*Asenamduro*, "malnutrition medicine"): leaves are used in a soup for stomach swellings (Ibid.).
- (7) Ocisseeree (*Sisire*, also known as *Kokonisuo*): Bark is used to stop purging in dysentery and diarrhea (Ibid.).
- (8) Tointinney (*Toantini*): chewed with pepper as a cure for a cough (Ibid.).
- (9) Dammaram (*Damenam* or *Damaram*): Bowdich did not provide any data for this plant; however, it is a (common) climber plant with purple leaves used as a male and female aphrodisiac.

Plant research in Africa has generally been academic rather than applied research in terms of the industrial use of plants with a perspective toward producing and benefiting from value-added plant derived products (Rukangira 2001, 180; Ekpere and Mshana 1997, 2; Rowson 1969). The neglect of indigenous leaf vegetables and fruits as a priority by African governments in terms of nutrition, medicine, crop development, and nature makes little sense in light of the studies that have shown that the chemical composition of those vegetables and fruits contain "appreciable amounts of crude protein, fat and oil, energy, vitamins and minerals" (Adebooye and Opabode 2004, 701). One hundred and fifteen of the 150 food-plants humans consume, according to Adebooye and Opabode (2004, 700), are indigenous African species. At a general level, Africa has an estimated forty-five percent of indigenous plant species found nowhere else in the world, and of the 30,000 estimated plant species in Africa twenty-one percent or 6,376 are used by humans. That twenty-one percent constitutes a "basic list" so to speak, and of those

6,376 plant species 1,975 are medicinal plants, 820 timbers, 611 forages, 477 fruits, 397 vegetables, and 130 spices and condiments (Ibid.). Given that approximately ninety percent of global drug research goes toward the illnesses of the richest ten percent of the world population, the propagation of "knowledge economies" based on indigenous knowledge systems interlinked with life-sustaining sectors of society seems incumbent on African societies. A "knowledge economy," according to Hamel (2004, 46), who compiled an extensive glossary on knowledge-based topics, is

[a]n economy in which knowledge is one of the main factors of production and constitutes the major component of economic output. This may occur directly through knowledge products and services or indirectly where knowledge is an added-value part of other products and services. Contrast with agricultural and industrial economies. An economy in which knowledge plays a predominant part in the creation of wealth. An economy in which value is added to products primarily by increasing embedded knowledge content and in which the content value evolves to exceed the material value.

The uncontrolled access to and exploitation of indigenous knowledge, in the areas of biomedical technology and pharmaceutical innovations, for example, has immensely bolstered Western capitalism and its notion of free trade and has provided little to no real benefits to existing sites of knowledge mining and extraction. In the year 2000, "the sale of drugs based on traditional medicines alone amounts to over US \$32 billion (1 billion equals 1,000 million) a year" (Prakash 2000, 1). "It has been estimated," according to Prakash (2000, 1), "that by consulting indigenous peoples, bio-prospectors can increase the success ratio in trials from one in 10,000 to one in two. . . . Without the input of indigenous knowledge, many valuable medical products used extensively today would not exist." The flow of unregulated capitalism and free trade is the cornerstone of the democracy and globalization advanced by non-African nations; the phenomenon of globalization has created new or heightened existing challenges for Africa. Of these challenges, the specific issues of owning and maximizing the use of indigenous knowledge for the promotion of health and the production of knowledge on indigenous therapeutic systems have not been seriously addressed, especially from the perspective of indigenous specialists and knowledge systems, as African governments grant permission to bioprospectors and biopirates with few conditions (Makhubu 1997, 40; Ekpere and Mshana 1997, 2).1

As industries in the U.S. and Canada-European Economic Community-Japan triangle become more knowledge-intensive, and "as what constitutes national wealth shifts from the natural resource endowments toward the acquisition, manipulation, and application of knowledge," the ownership and marshaling of indigenous knowledge by and for Africans become ever so crucial (Edoho 1997, 100). The value of indigenous knowledge has been apparent to indigenous knowledge centers, primarily located in the Western world, that document, institutionalize, and decide which knowledge should be disseminated through their inventory of extracted knowledge to be brokered between academic and business interests. The reality is Western (social) science has a direct relationship with European interests and imperialism, and its global presence is an expression of European expansion. As such, the notion "that indigenous/folk/local groups should determine . . . their own historical destiny—with the anthropologist as facilitator or broker"—has been heralded and unquestioned (Purcell 1998, 260). Even among those who question the foregoing belief, they have also "fail[ed] to escape the Western hegemonic mentality that they criticize" (Pfeifer 1996, 47).

THE AKAN AND THE (MEDICAL) ANTHROPOLOGY OF AFRICA

The West African nation of Ghana lies near the equator and is encircled by the countries of Burkina Faso, Benin, Togo, Côte d'Ivoire (Ivory Coast) and the Gulf of Guinea. Ghana derives its name from one of several leadership titles of Wagadu (ancient "Ghana") that became synonymous with this formation; a number of indigenous Akan societies (aman) of Ghana trace their most ancient migrations from the region of the Niger River between Jenne and Timbutku. The Akan are a cultural-linguistic group that occupies the greater parts of Ghana and to a lesser extent Ivory Coast, Burkina Faso, and Togo. The Akan are defined by a shared cultural-spiritual system, indigenous calendrical and political system, language, and ethos. The present Akan constellation includes the Adanse, Ahanta, Akwamu, Akwapem, Akyem, Anyi, Aowin, Asante, Assin, Baule, Bono, Denkyira, Fante, Guan, Gyaman, Nzema, Twifo, and Wassa peoples.² This constellation suggests that the notion of Akan civilization corresponds to the development and expansion of a singular cultural-linguistic people. Indeed, the Akan are the cultural nucleus of Ghana (Arhin 1967, 83). The Bono are an Akan society anchored in and around the current Takyiman (Techiman) district of the Brong-Ahafo region in central Ghana.

The population of Ghana is estimated at 21,030,000 with an urban population of approximately one-third of the total population. The composite percentage of the African population is 99.8%—of which about half culturally identify themselves as Akan—and the remaining 0.2% is assigned to

European and other (Wright 2002, 572). With a total area of 92,100 square miles, the country's most densely populated sections are the coastal areas, the Asante (Ashanti) region, and the two principal cities of Accra and Kumase. Ghana is divided into ten administrative regions. Those regions with respective capitals in parentheses consist of Greater Accra (Accra), Central (Cape Coast), Eastern (Koforidua), Western (Sekondi Takoradi), Asante/Ashanti (Kumase), Northern (Tamale), Upper East (Bolgatanga), Upper West (Wa), Volta (Ho), and Brong-Ahafo (Sunyani).³ Regional ministers who function as the direct representatives of the government are assisted by regional coordinating councils that are responsible for district plans and programs within the parameters of national development policies and priorities. Under the regional administrations are 110 district administrations headed by a District Chief Executive who also acts as the chairman of the Executive Committee of the District Assembly—the highest political and administrative authority in a district. Approximately sixty-five percent of Ghana's total population lives in rural areas, some eighty percent live in villages, and the indigenous medicinal or therapeutic system are the primary source of preventative and curative treatment in these areas. The agrarian sector employs approximately sixty percent of the total Ghanaian workforce, which averages about nine million or more; rural peoples form the bulk of the population and they are the backbone of the national economy (Appiah-Kubi 1981, 143). Rural areas are considered those towns and village settlements beyond the core of the capital area of each region, Appiah-Kubi (1981, 143) aptly observed, "It is ironic that many of our villages in Ghana these days are cleaner than most of the towns—where sanitation is at a zero point—even though the towns receive the lion's share of the national health budget."

The ratio of "biomedical" doctors in Ghana to the total population is approximately 1:22,000 and for indigenous healers the ratio is close to 1:400. Here, and henceforth, "biomedicine" and its variants (e.g., biomedical, allopathy, conventional medicine) refer to the use of biological, biochemical, physiological, and other basic "scientific" assumptions to address issues in clinical medicine, particularly as they relate to an almost obsessive focus on the body as a biochemical contraption that is the source and site of disease or sickness. Since 2002, there has been a large and growing exodus of biomedical doctors, nurses, and other health care workers from Ghana to parts of the United States and Europe. This exodus is rampant and is mirrored by the experience of other countries. Kenya, for instance, has seen doctors, nurses, and clinical workers leave for Europe, the U.S., South Africa, and Namibia during the past decade after being educated in Kenya at a rate of \$25,000 per nurse and \$50,000 per doctor. In 2003, 240 doctors and 1000 nurses departed from Kenya, and the outflow of medical workers continues at a

steady or increasing pace. Most of these biomedical workers settle in Europe and North America not as health workers but as minimum wage earners and odd or service job employees. Though the government of Ghana pays for the medical schooling of doctors, many who have left the country feel that they deserve better wages and working conditions, and so the idea of going abroad offers (at least) the possibly of a better salary even if this means working in areas other than the health field. At the fifty-seventh World Health Assembly in 2004, a deal of sorts was struck between African Union (AU) members and wealthier member states of the World Health Organization in which AU members won concessions to be compensated for the loss of health care workers to the latter; however, the sum to be compensated was said to be worked out among African governments. The realization and implication of this concession has not received much attention.

The agrarian and natural resources sector, with the exception of fisheries' products, produces cocoa (second only to gold as the largest export), rice, coffee, timber, industrial diamonds, manganese, bauxite, wood products, textiles, pineapples, cotton, plantains, and coco-yams for some indigenous, but largely export markets. Ghana has 33.6 million acres of arable land suitable for crops or livestock, and uses 3,600 plants that account for a sizable proportion of plant species not found anywhere else in the world (Adebooye and Opabode 2004, 700). However, only twelve percent of all arable land is used, while forests and woodland (35%), meadows and pastures (22%), permanent crops (7%), and other (24%), which includes neglected and irrigated land, account for the remaining land use in Ghana (Wright 2002, 511). Lake Volta is the world's largest artificial lake and it provides electricity to several neighboring countries. In many rural communities in Ghana, preventative and curative treatments based on the integrated system of indigenous medicine form the indispensable core of health care. The need for research into indigenous medicinal concepts reflects the vital role those concepts and related practices play in the maintenance of human health, particularly in largely agrarian communities whose culture and population are generally de-linked from essential, though limited, quality of life services found in Western-imitative urban centers. Among agrarian communities, indigenous medicines are assigned cultural and economic values and, because of their widespread and long use, their efficacy is trusted. Yet, because of habitat degradation and over-collection, forest areas exploited by non-African capital interests, and a disregard for indigenous medicinal institutions, the loss of effective remedies and knowledge of their use seems imminent. The rural population contributes to approximately ninety percent of the national economy, yet this population receives little in return toward their own development and, in recent times, there have been questions raised

about this issue from the people themselves. In response, according to one diplomatic source, the government has only extended some academic scholarships to the children of a number of farmers.⁵ Infrastructural development and social services, principally health services and the study thereof, receive insignificant attention and resources from the Ghanaian government.

The debate with regard to the integration of the indigenous medicinal system, specifically its various categories of healers, into the national health delivery system remains a discourse captured by seemingly irreconcilable ways of thinking, cultural behaviors, and sensibilities. Nonetheless, the quality of the majority of the (rural) population's lives continues to deteriorate; forests, natural habitats and waterways are compromised; and indigenous resources are exploited by foreign interests and discarded by increasing numbers of the indigenous population. The internal corruption of indigenous institutions associated with medicinal knowledge and use were engendered by the indigenous population themselves and further compromised by the external factors of foreign cultural thought, behavior, and institutions. Foreign thought and institutions sought (and still seek) to accomplish one prime objective: the undermining of indigenous culture and institutions to facilitate foreign hegemony and exploit valued and human resources. Clearly, this objective is not limited to the Akan and corresponds to the extrinsic drive toward liberal democratization, open market economy, non-restrictive trade provisions, proliferation of non-African religious institutions, and the facilitating of health epidemics that ensure the least amount of resistance to the control of valued resources.6

In conceptualizing this study, the foregoing perspective served the purpose of providing a sense of the broader considerations in which the present research into indigenous medicine and knowledge were embedded. The production of indigenous knowledge from the perspectives of producers and users of that knowledge, specifically as it relates to health and medicine, receives disdain and little consideration in the minds of African scholars and medical practitioners alike (Adjibolosoo 1999, 116; Gyekye 1997, 245-246; Addae 1996, 12-13; Addae-Mensah 1992, 49). "Instead of promoting research that might lead to further growth of knowledge in the field of traditional medicine," Makinde (1988, 106) wrote, "many African doctors, especially Euro-African doctors, ridicule any effort made towards that direction." The proposition, however, is that doctors or (social) scientists should assume the posture of saviors and brokers of the "healing arts" guided by a stringent pragmatism and "scientific proof" (Yangni-Angate 2004, 3; Rukangira 2001, 180; Addae-Mensah 1992, 6; Twumasi 1988, 26-27). Even with the exodus of many biomedical workers and the increased reliance of the greater part of the population on indigenous medicine, many scholars and medical

professionals have not developed a real interest in researching the indigenous therapeutic system from the perspectives of its practitioners and for what that system can offer in terms of approaches to holistic health, and perhaps as an industry unto itself (e.g., India). The ambiguous attitude towards indigenous (medicinal) knowledge and its specialists in Ghana reflects an entrenched ambiguity born of "a fatal impact of irreconcilable social systems and cultures," that is, African and Western, and this situation is expressed in the language of Ghanaian and other writers (Assimeng 1999, 247). This discourse is plagued by the familiar lexicon of fetish priest, juju (man), magic and religion, tribal system, and superstitious beliefs, and is fostered by African governments' acceptance of "the supremacy of the scientific model . . . urging all traditional healers to base their operations on that model," and by tensions of nationalism and anti-Westernism and psychological subservience to Europeans and their agents (Assimeng 1999, 247; Twumasi 1988, 27). By reassessing published materials and a range of multidisciplinary sources in conjunction with my own research in the Takviman district of central Ghana, this project attempts to contribute a new dimension to the study of health and healing systems in the African context built upon, vet critical of, what other scholars have produced thus far.

In the medical anthropology of Africa, the ideas of W. H. R. Rivers and C. G. Seligman (both medical researchers who became anthropologists) have immense implications since the orientation of Rivers' (1924) work became a widely used model (some still employ it now) in "ethnomedical" research. For Rivers, death and illness were defined as afflictions and misfortune and the study of health and disease was reduced to his conceptions of witchcraft, sorcery, and magic—conceptions which, no doubt, were rooted in the long history of witchcraft and related phenomena in the European experience and imagination. The primary concern was with the disease—wherein the person was viewed as a diseased organism—and its magical, superstitious sources in terms of an unvielding obsession with magical theories of disease causation as the basis for indigenous therapeutic systems. This same orientation figured prominently in the works of V. M. Turner and E. E. Evans-Pritchard; Evans-Pritchard's studies, precisely his work on the Azande published in 1937, became the framework that others have used to fit their data linked to "witchcraft" in Africa. Evans-Pritchards studied under C. G. Seligman, who wrote the foreword to his text on the Azande, and in that same text Evans-Pritchards wrote, in spite of contradictory statements throughout, "witchcraft is ubiquitous" for "the Azande attribute sickness, whatever its nature, to witchcraft or sorcery" and secondary causes are "associated with witchcraft and magic" (1937, 63, 479). Evans-Pritchard noted that the "royal class" detest their European colonizers and "were useless as informants,"

suggesting that those who were useful informants were receptive or yielding to European conquest which surely made a difference in the value and volume of information obtained during his cumulative twenty month stay among the Azande.

Robert Sutherland Rattray's collected works on the Asante are considered (by some) "a monument of colonial ethnography and manifestly a major source" and are utilized as the baseline data for Asante and general Akan studies (McCaskie 1983, 187). In 1921, the then Gold Coast Government chose Rattray as the first head of the department of Anthropology. In the capacity of British colonial anthropologist, he traveled to areas formerly under Asante control and documented aspects of socio-political organization and indigenous "religious" life (Rattray 1923, 5-10). Rattray's work focused on the Asante and, in the several chapters dedicated to festivals and aspects of the "religious life" of Takviman, he did not attempt to explore the indigenous medicinal system nor its conceptual underpinnings. Instead, he contended that religion was inseparable from other facets of life and regarded the Bono-Takyiman area as a place "hitherto untouched by the anthropologist and hardly opened up to the European [and which] should be the ideal ground upon which to study Akan customs and beliefs" (Rattray 1923, 114). In the 1930s, Margaret J. Fields, a British colonial government anthropologist intrigued by the new "witchcraft" shrine movement in Ghana, spent time at the Bono town of Mframaso (20 miles north of Takyiman) at a "witch-catching" shrine. She generalized from this experience and concluded, "According to African dogma [sic] sickness and health are ultimately of supernatural origin" and "organic illness is almost always attributed to witchcraft, bad medicine or sin, seldom to worry and stress" (Field 1960, 112, 117). In the latter part of the 1960s, Dennis Warren came to Takyiman as a Peace Corp science teacher at the Takyiman Secondary School. Warren later conducted his doctoral study on Bono "disease, medicine and religion" and concluded the "religious system" had nothing to do with the majority of Bono disease lexemes or Bono diseases, which were conceptual, and that the vast majority of Bono diseases were defined in terms of natural causation (Warren 1974, 431). Warren (1974, 270) found that the most serious and common diseases were linked to the stomach, head, and malaria and the highest-ranking causes were associated with the (impure) blood, dirt and a dirty body, and insects (e.g., germs and mosquitoes). The anatomical location of most diseases was in the skin or internal; disease prevention included eating good food, a living environment, drinking good water, and bathing twice a day; the most frequently named medicines and ingredients consisted of ginger, varied peppers, water, and lime; and the most utilized methods by which medicine was administered were

through drinking, enemas, baths, and rubbing into the skin (Warren 1974, 299, 343, 357).

The baseline data for Warren's study derived from nearly 1500 "disease names organized into a 12-level taxonomic system expressed by one venerated Bono priest-healer [Nana Kofi Donkor]" (Warren 1974, v). The data gathered from Nana Kofi Donkor was compared with data from other informants within the same community; this approach used more than one informant as a reliability check on initial and primary informants, "the most important being Nana Kofi Donkor of [Takyiman]" (Ventevogal 1996, 132). In addition to the construction of his disease classificatory scheme, Warren argued that spiritual causations of disease do occur but naturally-caused diseases (mogya mu yadee) did not have structural or functional relationships with Bono "religion" (what he termed Onyamesom and Abosomsom), hence, the dichotomy between "spiritually and naturally caused diseases" (Warren 1974, 95, 431). Peter Ventevogel, who conducted his studies on the effects of Primary Health Training for Indigenous Healers (PRHETIH) program, argued, "the literature on Akan medicine lacks real consensus on the indigenous nomenclature of nutritional diseases . . . [and] indigenous disease names cannot be substituted unproblematically by Western disease terms" (Ventevogel 1996, 95). The Primary Health Training for Indigenous Healers (PRHETIH) program was established in 1979 as a project to "train" indigenous healers in some of the fundamental techniques employed in the biomedical system. The project collapsed in 1983 and was later revived in 1991. Evans-Anfom (1986, 58) commented that the outcome of an evaluation of the PRHETIH program "should help in determining how trainable the traditional healers are." Not surprising, he neither considers nor questions how "trainable" are biomedical practitioners, who appear to be hegemonic and the most hostile toward attempts aimed at "cooperation" (whatever that means). In sharply criticizing Warren, Ventevogel (1996, 137) concluded,

It became clear to me that the indigenous knowledge is not readily available in the minds of the informants, ready to be 'discovered' by the anthropologist. . . . The Techiman-Bono ethnomedical classification system can be seen as an attempt to formalize a system that is not formalized in its nature. . . . Akan traditional medical knowledge is not a solid body of knowledge. It differs from town to town, from healer to healer, from day to day. Akan medical knowledge is partially idiosyncratic and is embedded in an externalizing medical system.

To bolster his criticism, Ventevogel (1996, 133–136) cited Fink (1990), whose work drew heavily on Warren's dissertation and classificatory scheme; Pool

(1994), who noted the few key informants used by Warren and argued that the anthropological understanding of indigenous knowledge is produced and reproduced in an interplay between informants, interpreter, and researcher; and Van Delen (1987), whose study in a Bono town revealed that disease was always the effect of certain natural and spiritual happenings rather than spiritual or natural (causative) factors. In challenging G. P. Murdock's dichotomy of natural and supernatural theories of illness causation and Pool's assertion that "everything boils down to witchcraft" in African ethnomedicine, Green (1999, 17, 37) attempted to advance his indigenous contagion theory with the claim that major (contagious) diseases in African societies are naturalistic or impersonal.

The recent works of British anthropologist Robert Pool, who spent time in the Wimbum town of Tabenken (Cameroon), resurrects Evans-Pritchard and propagates the model set forth by W. H. R. Rivers, and his devotees, when he concluded that "in the final instance everything boils down to witchcraft" in Wimbum and perhaps African etiology (Pool 1994b, 12). In other words, according to Pool, witches are the ultimate cause of all (significant) illness, misfortune and death, and given his acceptance of the long-standing dichotomy between "natural" and "personalistic" (supernatural) etiologies he argues that Wimbum etiology is personalistic and the "Wimbum do not have a medical system" at all (1994a, 108-112, 254, 264). Peter Ventevogel, who was based in the Bono town of Bonkwae in Takviman (Ghana) during his study of the PRHETIH project, concluded that Akan medicine too was not a "real system" as a result of its highly externalizing and diffuse character (1996, 136). The issues of the existence (or denial) of indigenous African "medical systems," theories of "natural" and "supernatural" or "personalistic" disease causation and therapy, and the ubiguity of "witchcraft" as underpinning the foregoing permeate the discourse on African therapeutics and culture. In fact, these issues are the discourse. Whether one (de)emphasizes the "natural" or "supernatural" causation and behavior or (mis)represents indigenous African healing praxis as a "medical system," the aforementioned issues will remain entangled and unresolved as the quest for magic, gods, witchcraft, and supernaturally charged medicines continues (Chesi 1989; Peltzer 1992; Pool 1994a). In medical anthropology, it has become somewhat popular nowadays to have cultural "conversations" about medicine and healing in ethnographic representations of those therapeutic "non-systems" studied (Brodwin 1996; Pool 1994a).

In these ethnographic representations, the ultimate goal is some sort of negotiation "between the insider and outsider perspectives" (Brodwin 1996, 194). Yet, as this goal or the mode of illness conversations seeks to occupy the foreground of healing discourses, vital issues which threaten that quest

are simultaneously pushed to the background. In these ethnographic conversations, relations of inequality and power are glossed over and presented as a given, that is, white university doctors or professors linked to "established" educational or medical institutions and supported by grant-giving agencies to conduct research in African or largely African populated societies in which colonialism or enslavement is a part of the living fabric. Whatever research related discussions or conversations occur, they are most likely "artificial dialogues" configured by the power relations historically situated between the African and the non-African (i.e., Arab, European, and Asian). Robert Pool (1994a), as one of several constraining factors, mentions a fragment of this issue, but this fragment is presented as a featherweight contender in the super heavyweight fight of his conversations about illness. Perhaps, his preoccupation with "witchcraft" obstructed this issue during his mediated dialogues. Similarly, Brodwin (1996) talks much about the goal of ethnographic research as one of representation between "insider" and "outsider" perspectives, yet he does not say much about money in terms of limited options in the availability of "biomedicine" for most of the rural population in Haiti, nor about the fact he paid to witness treatments and consultations, which calls into question what actually occurred during his fieldwork and the dubious picture of village life he presents. In other words, Brodwin wrote as if he was absent from village life, when in fact his presence alone changed whatever normalcy existed prior to his periodic arrivals. His aim, therefore, was not one of clarifying the reality of healing in rural Haiti but rather a convenient ethnographic exercise linked to issues in medical anthropology.

Many seem oblivious to the reality that indigenous African therapeutic "systems" are concerned with health and healing, primarily. In this context, disease or illness is a factor linked to both overriding concerns since healing and health occur on multiple levels and in varied areas of life that may have nothing to do with biologically determined notions of disease. Minkus (1980, 187-188, 190), in her study among the Akuapem in the Eastern Region, found that (a) medicine is categorized as good medicine (adurupa), bad medicine (adubone) or poison (aduto); (b) all medicines operate by virtue of the combined sunsum ["spirit"] of their ingredients, and medicine which is properly prepared and administered functions efficiently by virtue of its own power; (c) all events are caused but not all causes are said to operate in a spiritual way; (d) some but not all illnesses are thought to be spiritually induced; (e) the designation of an illness as sunsumyare indicates that the causal agent acted in a spiritual way marked by a prolonged or recurrent nature; and (f) the nature and presumed cause of all illness determines the treatment administered, and in the treatment process, patients either use their own knowledge and/or seek the herbalist, "priest or other healer," or

the hospital to the extent of the nature of the disease. Maier's (1979, 64, 80-81) study of nineteenth century Asante medicine concluded, contrary to Addae's (1996, 12-13) speculations, "Asante recognized the need for, and developed methods of, treating physical illness by physical (as opposed to spiritual) means," "organized and controlled methods of acquiring medical knowledge and practicing the profession," and that "the notion of traditional medicine's inhibiting adaptive change must be reevaluated." The need for reevaluation reflects Craffert's (1997, 1, 3-4) view that "illness and healing or health care systems are in one way or another determined by or closely connected to culture or world-views," and that all illness and healing are culturally interpreted or determined (Fink 1990, 320). Fink's (1990, 317) study among the Dormaa (Domma, "beloved children"), who are a Bono (Akan) society, argued, "Dormaa traditional medicine can only be viewed in connection with religious conceptions." Her (1990, 326) study also "clearly show[s] that the population [had] more confidence in the medical knowledge of priest-healers [abosomfo2, ak2mfo2] than of herbalists [nnunsinfo2] . . . [since] they possess a more thorough medical knowledge." Furthermore, following Ekpere and Mshana's (1997, 5) recognition that "there is a need to seriously consider using traditional medical practitioners as para-taxonomists" in surveying the landscape of indigenous medicines, the use of indigenous healers as agents in the research process could also bolster the efforts of Africans to own, access, utilize or conserve their extensive stock of indigenous medicines.

Clinical pharmacologist Peter A. G. M. De Smet's volume on herbs, health and healers in Africa underscores the relevance of indigenous visual arts that illustrate illness diagnosis and treatment. However, perhaps because he has never traveled to Africa, his text does not consider the verbal arts, dance and music as part of the full cultural context of health and healing, which are imperative to explorations that seek to explicate indigenous African healing systems (Peek 2000, 14; De Smet 1999). Bishaw (1991, 199), in his study of indigenous Ethiopian medicine, found that "one of traditional medicine's most important contributions may come from its holistic approach to disease and other human problems," and argued, "any attempt to separate the 'empirical' from the 'spiritual' for the purposes of approaching and incorporating only the 'empirical' into the modern health care system is bound to result not in the promotion of traditional medicine, but, on the contrary, in rendering it as mechanical and segmented as modern medicine may have become of late." The need for a consummate understanding of indigenous notions of illness causation and preventative health, as articulated by Komla (1997), augmented by the need to investigate indigenous systems as "tools for archiving" knowledge, provides further currency to the object

of this study (Anquandah 1996, 297). In surveying the extant literature on the Akan indigenous therapeutic system, few if any have explored indigenous Akan concepts of medicine and the framework from which indigenous healers operate in terms of conceptions of illness causation and diagnosis, preventative and curative medicine, and post-recovery treatment. The approach most have taken is one where they either go data mining and unearth "facts" that fit their thinking and priorities, or they invent constructs to record and explain a dynamic reality in crystallized terms. The latter approach, which is frequent, embodies "a reductive urge to codify. . . . carried out to such an extreme of rigidity that the unruliness of reality is too often forced into neat, mentally manipulable categories, as if such constructs can account for all emotional, physical and psychic data" (Warner-Lewis 2002, xxviii; Seebode 1998, 141).

AN APPROACH TO INDIGENOUS AFRICAN MEDICINE

In this text, the concepts of culture and indigenous knowledge constitute an analytical as well as interpretative axis around which much of our discussion revolves. The concept of culture subsumes notions of language, politics, economics, society, governance and law, spiritual systems ("religion"), and other major human endeavors. The operational definition for culture is that culture is a composite of the spiritual, ideational, and material-physical dimensions of reality. Culture is a process that provides a procedural framework for living as well as ways to engage, interpret or make sense of reality. In this regard, culture and history affect each other in symbiotic ways. History as occurrences or developments over a period of time in a specific locale—with or without interactions with other locales—engenders culture and culture, in turn, shapes the development of that history. Since the notion of culture implies a rationale, it also has features of material, ideational, and spiritual value, values which themselves reflect indigenous African conceptualizations of the human being as a composite of physiological, ideational, and spiritual constituents. Whereas the spiritual and perhaps ideational dimensions of culture are deeply structured, "it is the material aspect of culture that is subject to the most relentless change" due to its concreteness and vulnerability (Abraham 1962, 29).

Every culture has an ideology or fundamental framework used to interpret and respond to the historical, socio-political, cosmic, and temporal environment. Material culture can therefore be considered the physical, technological or tangible aspects of life used, made, and shared, and include all of the physical manifestations of a culture. Ideational culture refers to ideas, symbols, values, principles, ways of feeling, thinking and acting, as well as a

stock of knowledge and ways of making sense of the reality constructed by a group. An ideational culture embraces the temporal or physical-material dimension of the world, but goes on to accept the notion that a non-physical, immaterial reality is real and apprehensible. Spiritual culture constitutes larger cosmological or non-temporal elements and, in a sense, can be considered the progenitor dimension in relation to the temporal, but as part of the continuum of the material, ideational, and spiritual. In other words, if this continuum was a tree, the material would be the physical tree, the ideational would be the roots, and the spiritual would be what nourishes the roots as well as the "unseen" (underground) activities of sustainability. As a corollary to the foregoing concept of culture, "indigenous knowledge" refers to the collective human product of ongoing cultural development forged through the ways in which people approach their reality and its coherent body of knowledge. 8 The domains of indigenous knowledge include, but are certainly not limited to so-called "ethnobotany" and indigenous medicine, socio-cultural systems, food and agriculture, sustainable uses of natural and cultural resources, and the philosophical basis of indigenous knowledge systems. The multiple sources of indigenous knowledge presented herein serve the purpose of providing indigenous perspectives on significant aspects of an indigenous medicinal system, in addition to allowing for the generation of theoretical propositions grounded in that knowledge system itself. Here, "system," as linked to "medicinal" or "knowledge," parallels the idea of "organization," but, more specifically, refers to interacting, complementary, interdependent, or functionally related constituents forming and reflective of a complex or unified whole engendered by the larger cultural order within which the "system" is anchored.

Though there exist various categories of indigenous healers in the Akan region—such as "bone-setters," midwives, and healers from a number of non-Akan cultural groups—the primary institutional specialists that constitute the core of the indigenous Akan therapeutic system are the *akəmfoɔ* (sg. *ɔkəmfoɔ*), *abosomfoɔ* (sg. *ɔbosomfoɔ*), and *nnunsinfoɔ* (sg. *odunsinni*). The domains of Akan cultural knowledge explored in the study are proverbial, geometric and figurative gold weights, adinkra symbols, and oral narrative archives. The proverbs, gold weights, adinkra symbols, and oral narrative archives all have a "language," which functions as a repository and transmitter of culture and the experiences of past generations, and serves as a nexus between the life of the "language" and the life of its speakers. These archives also facilitate the reception, retention, and retrieval of cultural knowledge. There is neither an hypothesis to confirm or disconfirm nor a theoretical framework to bolster the assertions herein since one of the primary goals of the study was, in fact, to generate a theory or perspective grounded in the

data. The study began with general questions that provided the setting for data collection and analysis, and the development of emergent indigenous concepts from the information gathered. The primary research questions were how do healers and indigenous knowledge systems conceive and interpret medicine? What are the prevailing explanations for medicine and the ways in which those explanations are employed in practice? What kinds of terminologies are used to encode and decode those explanations? Of those medicinal terminologies in use, what does the etymology of each term reveal about the indigenous therapeutic reality that it encodes? Is the Bono (Akan) approach to health and healing, including its institutions of knowledge transmission, largely a composite of the idiosyncrasies of individual healers or is it a culturally structured process that allows for adaptations by indigenous healers? The outcomes of these questions take the form of theoretical statements underpinned by data from multiple sources, including physical (and living) and non-physical archives of knowledge.

RESEARCH DESIGN

Research is the advanced or systematic study of a subject and "there is no neutral, value-free research, especially in the unnatural or so-called 'social' sciences. Even in the natural sciences, what gets researched, when, and with what priority and thoroughness, are all matters determined by political and economic considerations" (Chinweizu 1977, 24). To research implies a pursuit and a motivation related to that pursuit. Why re-search? What purpose will the research serve? How will the research contribute to the quality of human life and living? The design and process of research are human constructions and are motivated by specific human considerations and sensibilities. Research is neither isolated nor insulated from conceptions of reality as perceived by geo-political entities, cultural groups, communities or individual persons. Research is analogous to the function of a physical tool in that by itself the tool lacks agency; it is only through human agency that this tool becomes useful, and its usefulness is distinct in how the tool is used and toward what objective(s). Thus, a household hammer becomes functional through human agency—only at the point of human contact or use—but this tool can be used to build or destroy, repair or facilitate additional damage. Here, the tool does not cause or resolve; it is the user of this instrument who is wholly responsible for how, when, where, and why the tool was used. The relationship between the researcher, design, and undertaking of research directly parallels the user and a tool, but with human considerations and sensibilities, since the user is human and the tool is an object, whether this object exists in the physical or the conceptual. The point is that the approach

taken here understands research design to be both a physical and a conceptual tool developed to gather and process data that would address primary research questions. Research design is a physical tool in terms of the materials employed in the design and implementation of the study, and it is a conceptual tool in terms of framing the study, analysis and interpretation, and the final presentation.

In terms of conceptualizing the contours of this research, it is necessary to provide a note on traditions of orality as they directly relate to the validity or reputation of data sources employed. The fragility and lack of currency associated with oral traditions and transmission of bodies of knowledge (as distinct from information) applies to written traditions as well. In fact, given the sophistication of certain indigenous knowledge archives in Akan society—such as drum and flute text—the oral method of preservation and transmission is more reliable than written sources, which may themselves misinform, omit, or purport something other than the facts. On this matter, Rattray (1923, 219) wrote,

[t]he custodians of the [societal] lore, each of whom has his or her understudy, have to be absolutely 'word perfect.' Their memory is constantly exercised in the numerous rites they attend at which they have to repeat correctly long lists of names and events in their proper order. . . . I was informed that in the old days two executioners (abrafo) would have been detailed to stand behind [the custodian], and that if they made a mistake they were 'taken away.' . . . In written histories, clerical and typographical errors creep in, or even at times deliberate misstatements may be introduced, all of which tend to become perpetuated in subsequent editions.

One must bear in mind that orality is linked to the cultivation of the memory—a role suitable to those with the demonstrated propensity to store and recall volumes of information verbatim—and through recurring rituals (culturally mandated), the ear and the tongue are trained to keep and speak what is heard rather than distort or interpret the archived oral texts. To distort or re-interpret oral texts based on personal or other inclinations would result in serious consequences in terms of one's physical health and, in some instances, one's life. This is how seriously the Akan took the issues of preservation and propagation of information and how they were able to protect and transmit knowledge that was both sacred and institutionalized. An analogous situation is found in Hampâté Bâ's (1990, 63–64) discussion on the *doma* or *soma* ("those who know") who, unlike the *djeli* (French, *griot*) who is allowed to have "two tongues," is only committed to speaking and

living truth. The *doma* is accompanied by witnesses to supervise and bear out what he said and quote their sources, and, for them, "lying is not merely a moral fault, but a ritual taboo which, if violated, would put an end to their function" (Bâ 1990, 64).

The research approach utilized the main principle of the grounded theory approach, a qualitative research method designed to aid in the systematic collection and analysis of data and in the generation of a theoretical perspective "grounded" in the data. However, this is not a "grounded theory" study nor does it adhere to the varied and conflicting interpretations of what constitutes a grounded theory study (Dey 1999, 14–18). The main principle of the grounded theory approach, that is, beginning with "no theory at all with the intent of 'grounding' the study in views of participants," was suitable for an approach not hampered by internal conflicts (Creswell 1998, 241).

Given the lack of an appropriate perspective for elucidating indigenous conceptions of medicine and the limited studies conducted on Bono-Takyiman healers (Ventevogel 1998; Warren 1974, 1975), a multilayered approach was used for reasons that it (a) evolved during the course of the study; (b) went beyond in-depth interviews as a primary staple of research; and (c) made use of indigenous archaeological, linguistic, aesthetic, and medicinal sources. The focus of this study was the development of an explanatory perspective—as theories are built to explain or clarify—grounded in the data and the production of knowledge that contributes to a greater appreciation of cultural archives as viable sources of knowledge. The data serves as evidence for the phenomena of conceptualizing medicine; phenomena, in this sense, include objects, states (ideational and spiritual), processes and activities, incidents and events, and other occurrences that are difficult to classify.

Preliminary interviews were conducted in 2001 among a homogenous group, that is, five *akomfoo* from the Takyiman Township. All of the selected participants had a common experience of "training" and practicing as an *okomfoo* and thus had potentially relevant contributions to make to the study. As the data collection proceeded and the themes emerged, additional *akomfoo* and heterogeneous groups of *abosomfoo* and *munsinfoo*—that is, others who had similar yet distinct experiences with the same phenomena of indigenous healing and medicinal knowledge—were selected to see how prevalent, and perhaps, comprehensive the emergent concepts were and at what points medicinal and healing ideas converged or diverged. These interviews were conducted in 2002; thereafter, completed interview drafts were submitted to each interviewee for editing and clarification, or simply to confirm or modify the accuracy of translations and renderings into the English language.

Data collection and analysis were simultaneous processes of acquiring, reading and re-reading data collected; initial data guided future data collection

so that the exploration acquired some depth. After saturation, when similar patterns were observed, interviews of additional and categorically distinct study participants stopped and the analysis became the focus. Emerging patterns were identified and cross-referenced with other interview cases, and systematic classifications of types that had characteristics in common were developed. The data for this research consisted of primary and secondary sources. Following a study of a similar nature in Botswana that interviewed 20 renowned herbalists "representing all of the major ecogeographical zones of Botswana," 20 in-depth interviews from a representative group were conducted. Additionally, collecting gold weight samples and collections of Adinkra symbols and cloths, engaging in many informal conversations, and participating in festivals, consultations, and collecting medicine in the forest and savanna zones were also an integral part (Hedberg and Straugård 1989, 28). The latter processes helped to maximize the varied sources of information that contributed to initial and more developed concepts generated from the data collected. The criteria for selecting interviewees included (a) a history of "training" and practicing as an əkəmfoə, əbosomfoə, or odunsinni; (b) excellent character as determined by members of the locale where the healer lived or practiced; and (c) willingness to "freely" share what he or she knew about Bono (Akan) medicine. All interviewees were in agreement with the purpose of the research and none requested nor received monetary compensation, though indigenous gifts consistent with Akan protocol, such as a drink, were offered for the pouring of libation.

Two fluent speakers of both Akan (Twi) and English were utilized, in addition to my own competency, to authenticate the interview data as well as ensure cultural accuracy in the translation of Akan (Twi) to English. All interviews were recorded on digital videocassettes and later transcribed and translated. Interviews were conducted in Akan (Twi) with literal and summary interpretations in English, and later authenticated by two indigenous language specialists for quality and accuracy of the translations. Essentially, an attempt was made to capture the conceptual and pragmatic reality of the indigenous healers interviewed as best as could be done, since there is reality and then there is the attempt to capture reality. Thereafter, final drafts of the interviews were submitted to each respective interviewee in order for them to confirm or clarify the representation of their ideas. Once this was accomplished, an analysis of the data continued by going back over previously categorized and (tentatively) analyzed data with the revised versions of the interview data.

Data collection instruments consisted of an observational protocol and an interview protocol, and transcriptions of all interviews were transferred to computer files for manual analysis. Secondary data included regional

and local documents, published and unpublished studies, journal articles and indigenous newspapers. The process of data analysis was systematic and began with a reading through of the data collected, making marginal notes, and looking for salient patterns or categories derived from key statements and supported by data (transcripts and field notes). All of the analysis was done manually and a separate notebook was kept to help facilitate an examination of the interview data. A search was then made for instances that represented each pattern or category and this continued until new information did not provide further insight. So that the data would assist in providing multiples perspectives on a category, the dual analytical goals were to describe the kinds of responses indigenous healers gave and compare the responses of the various groups of indigenous healers. The interview protocol was divided into three broad categories consistent with the research objectives and approach, soliciting information about (a) the perspective of healers related to the context of their thinking and practice; (b) medicinal knowledge and concepts in relation to the healing vocation; and (c) indigenous knowledge archives, which delved into the relationship between medicine and proverbs, gold weights, adinkra symbolism, and oral narratives. In other words, what did these indigenous knowledge archives of the Akan have to say about medicine and were those articulations consistent (or not) with the indigenous healers' conceptions?

The responses to questions in each of the three categories were compared for patterns, themes, consistencies and inconsistencies, and juxtaposed at two levels using the interview data as the baseline data. The interview data—specifically, the primary category that addresses the topic of medicinal concepts and knowledge—once categorized and analyzed, were then compared at the first level to the third category of indigenous knowledge for new or reinforced patterns, themes, consistencies and inconsistencies. At the next and last level of comparison, the result of the first comparative level was then contrasted with the existing literature to: (1) see what new knowledge and/or perspective had been produced on the topic; (2) find out where both the research findings and the published literature converged and diverged, and perhaps why; (3) validate the accuracy of the findings or determine how the findings differed from the published literature; and (4) develop a set of theoretical statements, supported by the research data, that have the greatest explanatory power as a viable perspective for the study of indigenous medicine.

OUTLINE OF CHAPTERS

Chapter Two focuses on the specialists of the Bono-Takyiman therapeutic system and situates this focus in the context of Bono (Akan) history and society

before proceeding to a delineation of the Bono spiritual-temporal perspective. The chapter provides an overview of the Bono cosmological system, delineation of the categories and functions of healers (with a concise profile of those who participated in the study), and a discussion on the healers' perspectives on the environmental context of healing and their practice. Chapter Three provides a detailed exposition of the indigenous conceptions of medicine held by Bono healers and describes the substance of prevailing and obscure ideas related to medicinal conceptions and practice, and a cultural-linguistic analysis of those medicines most frequently employed because of their efficacy. Chapter Four explores some of the core indigenous knowledge archives of the Akan—proverbs, gold weights, adinkra symbolism, and oral narrative—and what they reveal about Akan medicinal conceptions and practice. Chapter Five addresses the results and implications of the study juxtaposed to relevant bodies of literature. Specific conclusions as well as a set of theoretical statements relative to a broader perspective on indigenous medicine are provided.

Chapter Two

Bono (Akan) Society and Healing Perspectives

What really is a healer's work? You may say it's seeing. And hearing. Knowing. . . . Men walk through the forest. They see leaves, trees, insects, sometimes a small animal, perhaps a snake. They see many things. But they see little. They hear many forest sounds. But they hear little. . . . A healer sees differently. [He or she] hears differently. . . . Yes, [he or she] hears and sees more. . . . No one sees without preparation. Not the healer's kind of seeing. . . . And preparation isn't unnatural. It is also natural.

—Ayi Kwei Armah, The Healers, 79

HISTORICAL CONTEXT

The Bono are indigenous to their relative area of occupation as early as the fifth century CE and only the Bono of Takyiman and Wankyi (Wenchi) claim to be autochthonous (Effah-Gyamfi 1979a, 177; 1979b, 199). In fact, the term bono (bo—create; no—the) speaks to assertions of being pioneers in occupying their present location, which is closely linked to the region of Bono antiquity. According to Bono tradition, the Bono were led by Bonohene Nana Asaman from Amowi, a subterranean cavern adjoining large rock shelters and occupied as early as the fifth century CE, to Yɛfri and then Manso after the collapse of the Amowi cavern (Effah-Gyamfi 1979, 192; Effah-Gyamfi 1979b, 173, 178; Warren 1975, 2; Meyerowitz 1956, 118). The Amowi rock shelter is located near the town of Pinihi in the Bono-Nkoransa indigenous settlement. The Kontihene (ko—war, fighting; eti—head; ohene—male leader) remained at Yɛfri and was left in charge of the area as those families who left for Manso settled in different parts of the emergent Bono region under the leadership of an elder. Though the

precise historical time is unclear, the expansion of the territory began as the families, towns and villages increased soon after Bono-Manso was settled. The Bonohene ensured that people were also settled at strategic points as a way to secure the frontiers of Bonoman (Bono nation). The Bono region is ideally situated for market establishments and the Manso-Takyiman area is a transition zone between the forest and savanna area where much of the Mande trade between the Sudanic nations and the Guinea coast took place (Posnansky 1987, 21; Arhin 1979, 11; Warren 1975, 3). Takyiman was a major area between Bighu, a significant trading town, and Kwaman, which later developed as Kumase. Bighu and Bono-Manso, the capital of Bonoman, were positioned on the northern limits of the forest where routes from the forest to the Bighu area branched off from the one going to the northeast into Hausaland (Effah-Gyamfi 1979b, 180).

Bonoman was not founded at Amowi, as Meverowitz (1958, 44) had thought, but rather at Manso (man—ethnic group, nation; so—on, at), hence the capital's name, Bono-Manso. The capital city was approximately 11 miles north of Takyiman. From the archeological evidence, it appears that Bono-Manso had 177 streets and Bonoman's provincial capitals had 77 streets whereby the urban fields or provinces related to the urban center of Bono-Manso (Effah-Gyamfi 1979b, 182). Rivers and streams generally marked the limits of Bonoman. The approximate boundary of Bonoman appeared to be Kete Krakye to the east, Mampon and Ofenso (Offinso) to the south, Bonduku and Banda to the west, and (what formerly was the polity of) Gonja, the Black Volta River, and possibly Yendi to the north. ⁵ The statement that "all subsequent Akan kingdoms which got established to the south claimed association with [Bonoman]," may not be wholly accurate though it contains some truth (Nkansa-Kyeremateng 1999, 42). Denkyira, which was founded by the Adawufoo of Bono-Manso, had established relations with Bonoman utilizing a road that passed through the present town of Takyimantia. The Fante and Awutu-Effutu settled in the Manso-Takyiman area before moving to the coast around the 1400s, and the Akyem Bosome settled at Edwira (Ejura), an area within the past confines of Bonoman, before moving south (Ephirim-Donkor 2000, 25-31; Effah-Gyamfi 1979,190; Warren 1975, 3; Fynn 1971, 2). Bonoman's demise began in the start of the eighteenth century as a result of succession (leadership) disputes, the arrogance of the governing family, taxation, the immoral practices of Bonohene Ameyaw Kwakye, and the invasion by Asante in 1722–23 facilitated by the treachery of Bafo Pim (Effah-Gyamfi 1979b, 173).6 In the October 1722—September 1723 Bono-Asante war, nine villages were taken by Asante and placed under the jurisdiction of specific Kumase ahene to collect taxes or tolls for the Asantehene (Silverman 1987, 282; Arhin 1979, 13; Flight 1970, 263).

Known as akurotuokron (nine separate villages), the nine villages consisted of Tuobodom, Tanoboase, Buovem, Ofuman, Nkyeraa or Nchiraa, Braman, Nwoase, Subinso, and Tanoso.8 After the defeat and destruction of Bono-Manso, which became totally abandoned in the second-half of the eighteenth-century, Takyiman, the second largest settlement of Bonoman, became the new capital, hence, Bono-Takyiman and the current thinking that a "real Bono" is one who comes from Takyiman. After the second defeat by Asante in 1877, most of the people and Takyimanhene Kwabena Fofie moved to the Gyaman (Abron) settlement in Ivory Coast through a self-imposed exile for 25 years.¹⁰ After the British defeated the Asante, the people of Bono-Takviman returned and rebuilt their *oman* in 1896 (Warren 1975, 4). Upon return from the self-imposed exile in Gyaman, the annual Apos (pos—to reject something) festival was instituted in Bono-Takyiman (Ntim-Yeboah 1985, 3). It is said that the state *phosom* Taa Mensa advised the organization of the *Apos* festival, sometimes referred to as *atenndie* (insults), wherein acts of public criticism, settling of disputes, and supporting the *oman* and its obosom, Taa Mensa, take place.

The defeat of Asante prompted the people of Bono-Takyiman to take advantage of the Asantehene Nana Agyeman Perempe I's exile to the Seychelles Islands, British anti-Asante sentiments and its invasion of Kumase, British interest in the northeast trade once controlled by Asante, and they thus convinced the Colonial government to return the nine villages. This ruling was overturned in 1935 and the nine villages were incorporated into Asante's territory under the auspices of the Asante confederacy inaugurated in that year. It was R. S. Rattray's Ashanti Law and Constitution (1929) that provided a blueprint for British "indirect rule" (which had experienced a crisis in the 1920s) and prompted officials to restore the Asante confederacy along indigenous lines in 1935 (Stahl 2001, 71; Wilks 1975, 124). During the 1930s and 1940s, being Bono or Brong became synonymous with denying political allegiance to the Asantehene and, by extension, the Asante confederacy. This posture became the impetus for the Bonokyempem movement that began in 1935 with Takvimanhene Nana Kwasi Twi (Brempong 1988, 1–45; Arhin 1979, 11). 11 A year later, Nana Kwasi Twi conceded his destoolment; Nana Kwaku Tawia or Kyeremeh (1937-41) became the new Takyimanhene and continued the struggle to reclaim the nine villages, but was also destooled.¹² Nana Kwaku Gyako III (1941-44) then became the Takyimanhene and was destooled as well. Nana Akumfi Ameyaw III (1944–61), the next Takyimanhene, continued to fight for the nine villages, and was later succeed by Nana Kwakye Ameyaw II (1962-1990s).¹³ The youth and elders of Bono-Takyiman supported the struggle marshaled by Nana Akumfi Ameyaw III through several meetings, and petitions were sent to the Gold

Coast government and the British parliament declaring Bono-Takyiman's withdrawal from the Asante confederacy because of the nine villages, the mistreatment of Bono *ahene*, unfair tax collection practices, and the treaty signed with the government assuring the return of the nine villages (which were earlier given to Bono-Takyiman but returned to Asante in 1935).¹⁴

Bono-Takyiman was allowed to disengage from the Asante confederacy in 1948. In 1951, the Bono federation was established by several Bono ahene who joined Bono-Takyiman and seceded from the Asante confederacy. The struggle then became one of Bono unification rather than reclaiming the nine villages (Brempong 1988, 45; Warren 1975, 2). The government of Ghana created the Brong-Ahafo region and the Brong-Ahafo House of Chiefs in 1960; the Ahafoo ($aha(y\varepsilon)$ —hunt; foo—people), who were the hunters for Asante, followed the other Bono aman in creating the region that bears the name of both (Warren 1975, 2). The Brong-Ahafo House of Chiefs and the National Chieftaincy Secretariat, both established by the government, are authorities that are politically superior to the Takviman Traditional Council. Moreover, the indigenous political structures of the Takyiman Traditional Council and its leadership have less "political authority" than the parallel governmental structure of the District Assembly and the District Secretary (Ventevogel 1996, 9). The Brong-Ahafo region is currently divided into thirteen administrative districts and the Bono occupy all except the southern district, which the Ahafo almost exclusively inhabit. The Bono-Takviman settlement has about ninety-two akuro (towns) and akuraa (villages) within a total area of 371 square miles.

BONO (AKAN) SOCIETY

The Bono inhabit the Takyiman district and are characterized by a shared material, ideational, and spiritual culture found among Akan societies with some features specific to the Bono. The oral and written record suggests the Asante and other Akan not only obtained knowledge of fiscal and bureaucratic systems from the Bono, but also the Akan traditions of kingship, the rituals and panoply of sacred kingship symbolized by golden regalia, the umbrella and swords of the *oman*, the palanquins and stools of the *oman*, goldsmithing, blacksmithing, brass casting techniques, *kente* cloth weaving, and the system of weighing gold by inscribed symbolic weights of stool authority (Dumett 1979, 40–41; Effah-Gyamfi 1979b, 183; Arhin 1979, 53; Arhin 1967, 70). Proximate to Bono settlement, the northern forest fringe was significant as a population dispersal area and a center for the transmission of defining cultural elements in Akan historical traditions. It also allowed for the northern extension of Asante to markets in the northeast and southern

extension of trade routes to the coast (Adjaye 1984, 8; Dumett 1979, 53; Odoom 1979, 44). If Asante expansionist activities in the eighteenth century were attempts to control the Akan goldfields and trade routes to the north and south, then Asante conflicts of the nineteenth century, not including their defeat by the British in 1874 and its civil war of 1884–1888, were episodes of re-conquest and consolidation (Wilks 1993, 158–159; Wilks 1989; Arhin 1967, 44). The irony is that the same European weaponry that was a contributing factor to the success of Asante expansion also provided the impetus for attempts that sought to halt Asante hegemony and expansion, some of which were undeniably European-inspired (Morrison 1981, 48).

Here, the intention is to only provide a general rather than a detailed overview of several defining characteristics of Bono society. What is not commonly known is that Bono speech has preserved the greatest elements of a proto-Akan language, and has been rather conservative in its retention of some of what used to be characteristic of that proto-Akan language (Effah-Gyamfi 1979, 194; Dolphyne 1979, 116; 1976, 26). This conservative tendency may or may not be linked to the linguistic feature of using short sentences and breaks in speech; most Bono, perhaps as a result of the historical relations with Asante, speak the widely used Asante variant of Akan (Twi) as a "second language" (Arhin 1979, 9-10). The primary annual celebrations of the Bono-Takyiman are the Apos festival, usually inclusive of anti-Asante sentiments and celebrated between March and April during the sowing season, and the Foofie festival celebrated between August and October during the harvest season. The *Apop* festival is held usually in late March or early April and always begins on nkyifie and ends on foodwoo, according to the Bono (Akan) calendar (see Appendix I). The term apop derives from the verb, poo ("to reject"), and is a thirteen-day cleansing and (re)affirmative celebration that takes place in the Takyiman and Wankyi (Wenchi) areas of the Brong-Ahafo region. The *Foofie* festival is conceived as a period of reaffirmation of shared values, spiritual renewal, promotion of social cohesion and settling of disputes, and assessing and planning for the progress of the society. During this festival, rituals for the abosom and nananom nsamanfox (ancestors) occur wherein the blackened ancestral stools are purified once every three years at the Atweredaa River.

A highly sacred river that occupies an integral position in Bono (and Akan) spiritual-cultural life and practice is the Tano River, the longest river in Ghana and the only river whose source derives from within Ghana. The largest and oldest weekly market in Ghana also resides in the Bono-Takyiman area, where thousands of people from Mali, Burkina Faso, Niger, Nigeria, Togo, Benin, Côte d'Ivoire and elsewhere engage in commerce during the market's weekly schedule. The Takyiman market grew from a three-day market

cycle in 1970 to its current four-day cycle (i.e., Wednesday to Saturday) and averages about 10,000 people each week (Ameyaw 1990, 11). In the Takyiman area, women traders dominate the food trading activities. In the role of farmer, trader, and producer-seller, rural market women contribute to the growth of towns through trading activities, marketing, and rural food production (Ameyaw 1990, 1–3, 15). Women producer-sellers, who employ both female sellers in the market and male farmers, maintain market associations for specific crops or products (e.g., plantain) based upon the indigenous political structure. As rural women, they are challenged most by the government advocating self-sufficiency yet simultaneously focusing its resources on urban centers and incentives for male farmers (e.g., tractors, extension offices, bank credit).

The Bono-Takyiman area is mainly semi-deciduous forest, which changes quite dramatically to guinea savannah-woodland in the northern part of the *sman* (Warren 1975, 5). Commonly consumed foods include varied meats, avocado, papaya, coconut, mango, pineapple, sugarcane, breadfruit, plantain, banana, okra, sweet potato, beans, cocoyam, maize, peanuts, tomatoes, pepper, and varieties of yam and other food items. Cassava, a sparingly consumed crop of limited nutritional value, is among several (staple) crops dating back to 1500-1800 CE which West Africans rely upon. Other such crops include maize, groundnuts, varied yams, sweet potatoes, citrus fruits, tomatoes, onions, and tobacco from the Americas and Asia (Ogot 1999, 444). Most, if not all, residents of the Bono-Takviman area have year round access to fresh fruits and vegetables. Goats, sheep, chickens, cows (from northern Ghana), rare horses, occasional pigs, and dogs (common in hunting) can be found in the area. Every adult has a farm or garden as do some of the youth. The men primarily do the hunting, while women, who control the so-called "informal economy" of local trade and associations found in the market, usually do heavy manual labor.

Members of the same *abusua* or matrilineage tend to live in the same section(s) of town wherein the names of these sections are given for both the patrilineage and matrilineage. The architectural design of living quarters or compounds is continuous and square (Posnansky 1987, 21; Effah-Gyamfi 1979, 196; Warren 1975, 23). The Bono *abusua* includes the Akan matriclans—that is, the *Dyokoo*, *Aduana*, *Asenee*, *Bretuo or Beretuo*, *Asakyiri*, *Ekoona*, *Agona*, *Asona*—in addition to those based upon the streets and quarters of the Bono-Takyiman area. A particular family or clan may bear the name of a section or quarter of town, such as Nyafuman, which is also known as *komfokurom* ("*okomfoo* village") for its association with medicines and healing. The health and hygiene of many can be gauged by the very low consumption of sugary foods and desserts, bathing twice a day

(morning and evening), and a general abstinence from marijuana (wii). Mostly men smoke cigarettes (some with pipes) but a great deal of alcohol is consumed, especially by those who engage in spiritual work since alcohol (nsa) use is associated with aspects of this vocation—that is, alcohol-based medicines (i.e., bitters) are produced and alcohol is used almost exclusively in mpaes (libation). In the recent past, bosu (morning dew), adukuro mu nsuo (water), and nsafufuo (palm wine) were used for mpaes or nsuguo (libation). In more recent times, apetese (indigenous gin distilled from palm wine) and a European brand of liquor are used almost exclusively. For the Akan in general and the Bono in particular, use of the left hand is reserved for the bathroom and sexual intercourse, and it is still the case that "only heterosexual relationships are acceptable; celibacy, homosexuality and lesbianism are not socially recognized in Bono society and there are no words in Bono Twi for any of these concepts" (Warren 1975, 31). Body scarification and tattooing are not really practiced, except for an incision on the cheekbone filled with a black-powdered medicine (boto or moto) to prevent convulsions (esoro)—a phenomenon which kills many infants and children in the area—through a "cutting beneath the eye" ritual called aniasetwa (ani—eye; ase—under, beneath; twa—cut). 16 This "cut beneath the eye" was given to all Akan children and thus served as a cultural identifier. It is significant to note the other medicinal incisions at the joints and other parts of the body were made for subcutaneous administration of moto for healing and protective purposes.

The Bono, as well as all Akan, are matrilineal in that the processes of inheritance, in terms of stool (leadership) succession and marriage, are authenticated through the matriclan or mother's lineage. Thus, the manhemmaa (female leader of the nation) is usually the mother, aunt, or sister of the *omanhene* (male leader of the nation) who succeeds his wofa (maternal mother's brother) in that same position. The indigenous socio-political structure consists of leadership at the level of household (fie-wura—head of household), family (abusua panin—family or clan elder), village (*odekuro* or *odikuro*—village head), town or division of the oman (ohene; e.g., Krobo-hene), and nation (omanhene and omanhemmaa or *baahemmaa*). The *baahemmaa* or *baahemmaa* has absolute right of veto and final decision in the selection of the new manhene (Warren 1975, 43). Other integral roles within the indigenous Bono polity include the Krontihene/Akwamuhene (second in command and assumes role of *smanhene* in his absence), Adontenhene (lead warrior and leader of the blacksmiths), Twafohene (advance guard leader and shoots the first gun), Ankobeahene (leader of ohene's personal bodyguards and protects the town and the *phene*'s residence during war), Kyidomhene (protects the

rear during war), Afotuhene (advisor to the *smanhene*), Konkontwahene (in charge of choosing and training the new *smanhene*), Nkwankwaahene (in charge of the young men in the state), Akyeamehene (leader of the *shene's* orators and his assistant, the Adaatihene), Ahyiayemhene (in charge of Ofenso-Asante border), Mponoahene (in charge of the Wankyi-Bono borders with Banda), Baremhene (in charge of the royal burial ground), and Gyaasehene (in charge of the *shemfie*, the *shene's* residence, and the *shenkwa*, attendants of the *shemfie*). The current and recently installed Takyimanhene, Nana Oseadesys Akumfi-Ameyaw IV, succeeded Nana Osabarima Dotobibi Takyia-Ameyaw II, who made his transition September 26, 2003. 18

Peoples, including herbalists, belonging to the Wangara, Hausa, Yorùbá, Mossi, Gonja, Dagomba, Banda, Sisala, and Zabrama cultural groups all reside in the Zongo area or "stranger quarters" of the Takviman Township. The Hausa were the first to settle in the Zongo section of town and Takyimanhene Yaw Kramo formally established the Wangara-Hausa wards in the early twentieth century (Warren 1987 3; 1975, 5). Wilks (1961, 20) claims that the term nsoko, retaining its meaning from Bighu, became nzong (an Akan term with Hausa influences), hence, Zongo. After Takyiman reemerged as a major trading center, numerous African Muslims began to resettle in the area, and Takyimanhene Kwadwo Konkroma, Yaw Kramo, and Akumfi Ameyaw III all played pivotal roles in not only welcoming them but also establishing associations specific to each cultural group based on the indigenous Akan political structure and installing some as leaders (*shene*; e.g., Wangarahene) with authority over their own people as most settled in the Zongo quarters of the Takviman township (Warren 1987, 3). With the exception of the Dagarti (who generally claim Catholicism) and the Yorùbá (who are partially Muslim and partially indigenous in terms of spiritual or religious posture), most residents of the Zongo are Muslim. Zongo communities occupied by largely Muslim residents exist in Accra, the capital of Ghana, as well (Tucker 2002).

Established in 1978 as a separate district, the Bono-Takyiman *oman* forms part of the thirteen administrative districts of the Brong-Ahafo Region and is the largest indigenous polity linking the forest to the savanna and Sahel through Ghana's road network (Warren 1987, 1). Most of the villages and towns are located along the main roads of the district. The Takyiman Township is the capital of the Bono-Takyiman district, and though the District Assembly has more political authority than the Takyiman Traditional Council, it is due to the assembly being an embedded extension of the Republic of Ghana than a real part of most people's lives (see Appendix III). To the southeast is the Nkoransa District, to the northwest is the

Wankyi District, and to the northeast lies the Kintampo District. The southern boundary is shared with the Ofenso District of the Asante Region. The township is divided into the four wards of Tunsuase, Abanmu, Dwomo, and Ahemfie—the name of each ward reflect important Bono lineages distinct from the general Akan "clan" or abusua system—and the Zongo area that is partitioned into Wangara, Hausa, and Dagomba sub-sections. The heads of each distinct group within the Zongo deals with civil cases among the people under their jurisdiction, yet under the greater authority of the traditional council, and these leaders are chosen by members of these groups and confirmed by the Zongohene (leader or head of the Zongo ward) and the Takyimanhene (Warren 1987, 4). The Zongohene represents the Zongo area on the Takyiman Traditional Council and members of the Zongohene's council, which consists of heads of each cultural group, sit on a local area council. These so-called "ethnic associations" meet under its leadership to resolve conflicts and mutually support each other, and members have the right to remove the leadership if that person is not fulfilling the prescribed or expected duties and obligations of his office. A majority of those who reside in the Zongo ward work as traders, farmers, and wage laborers. Given the historical and peaceful co-existence between the largely patrilineal residents of the Zongo and the matrilineal Bono matters of inheritance and property may or may not be an issue (Warren 1987, 3).

The Bono-Takyiman district experiences both semi-equatorial and tropical conventional or savanna climates characterized by annual moderate to heavy rainfall. The major rains occur from April to July and the minor from September to October. The long dry season, which is highly pronounced in the savanna zone, starts in November and lasts until March. The average monthly temperature is about 86 degrees Fahrenheit and occurs mostly between March and April, and the lowest is about 79 degrees Fahrenheit and occurs in August. The relative humidity is highest (75% to 80%) in the rainy season and lowest (70% to 72%) during the rest of the year. Topographically, the Bono-Takviman district has two main relief features, namely, the highlands and lowlands. The highest point is about 1900 feet above sea level, which is found around Buovem in the central part of the district, while the lowest point is about 1000 feet above sea level, found around Nsuta in the southwestern part of the district. The district has essentially three main vegetation zones, namely, the guinea-savanna woodland located in the northwest, the semi-deciduous zone in the south, and the transitional zone that stretches from the southeast and west up to the north of the district. The district has one forest reserve called the Asubinia Reserve in the southeast that covers about 12.5 miles or five percent of the district's total land area. This reserve functions as a protective cover to

some of the major rivers that drain in the Bono-Takyiman district. The district is generally well-drained by three major rivers, namely, the Tano River to the south, and the Suben and Kar Rivers to the north. There are other relatively smaller rivers, such as the Brewa, Traifi and Fia, which also drain the district. The Tano River is dammed at Tanoso in the south of the district to supply potable water to some communities, such as the Takyiman Township, and serves as a source of irrigation to most vegetable farmers in the district.

The Takyiman Township accommodates approximately thirty-seven percent of the total population of the district. Takofiano and Kenten, which once were independent rural communities, are now suburbs of the Takyiman Township. Takyiman was the only urban settlement in 1960, but has grown exponentially judging from its population in the years 1921 (878), 1931 (2,254), 1941 (2,581), 1960 (8,755), and 1970 (12,068). Early figures of an estimated 6,000 inhabitants in the district in 1901 juxtaposed to figures from the latter part of that century reveal that the major settlements during this period experienced growth but certainly not to the extent of the Takyiman Township (see Table 2.1).

Since 2002, there are six or so settlements that could be described as urban, while the rest are rural. Bono-Takyiman and all of its major towns and settlements have electricity in addition to access to an airport at Sunyani

Tuble 2.1. Takyiman District Topulation Censuses for 1700, 1701, 1770, and 2000							
Settlements	1960	1984	1996	2000	2000	2000	
Takyiman	8,755	25,264	51,416	56,187	26,982	29,205	
Tuobodom	4,375	6,871	11,178	10,409	5,266	5,143	
Tanoso	1,894	4,972	6,740	7,757	3,750	4,007	
Aworowa	1,957	3,646	5,870	6,557	3,276	3,276	
Ofuman	2,002	3,471	5,069	5,657	2,896	2,761	
Krobo	1,326	2,081	5,540	3,588	1,680	1,908	
Buoyem	1,085	2,083	_	3,102	1,592	1,507	
Akrofrom	1,460	1,770	_	3,045	1,431	1,614	
Oforikrom	884	1,953	5,700	2,982	1,487	1,495	
Nkwaeso	755	1,373	_	2,110	1,037	992	
Nsuta	677	1,053	_	2,029	1,037	992	
Fiaso		547	5,320				

Table 2.1. Takviman District Population Censuses for 1960, 1984, 1996, and 2000¹⁹

(regional capital) that connects the Brong-Ahafo region by air to Tamale, Kumase, Accra and Takoradi. Health care facilities in Takviman consist largely of Ministry of Health units that include public and community health nurses, the Public Health clinic opened in 1969, a medical field unit, sanitary health inspectors, district medical officers, the Muslim Ahmadyvia Hospital established in 1971 and staffed by a Pakistani medical doctor, Holy Family Hospital founded in 1937 and administered by the Medical Mission Sisters, and Opoku Agyeman Specialist Hospital (Warren 1982, 86). The argument put forth in the 1970s and 1980s was, more or less, "the introduction of Western [and other foreign] institutions has not resulted in conflict between culture[s] or between "traditional" and "modern" segments of culture, but rather in accommodation" (Warren et al. 1981, 18; Warren 1978, 77). Warren's conclusion or his quest "to understand what was in the minds of many of the elders [and healers]" obscures the colonial attitudes toward indigenous healers still propagated and nurtured by the Ministry of Health, medical schools, and primary and secondary school curricula, ultimately, oversimplify the interaction between culture, indigenous medicine, health care facilities, and attitudes embedded in the ideology of social institutions (Assimeng 1999, 246; Warren 1997, 1; Nakuma 1994).

CONCEPTUAL OUTLINE OF THE BONO SPIRITUAL-TEMPORAL PERSPECTIVE

If culture and cosmology determine or are closely linked to health care systems and all illness and healing are culturally interpreted, then the recent call toward "an integrated approach to illness and health matters cannot bypass the problems of opposing world-views" or ways of making sense of the world (Craffert 1997, 8). The concentric phenomena of sickness, health, and healing are culturally elucidated and all—as parts of the same process of life and living—are situated in the cultural order of African societies (Bell et al. 2001; Rekdal 1999; Chipfakacha 1994; Feierman and Janzen 1992, 1; Fink 1990, 320; Mandeng 1984, 250; Appiah-Kubi 1981, 3). Therefore, the prevalent dichotomies of natural and supernatural, personalistic and naturalistic, knowers and believers, insiders and outsiders, disease and illness, and integration or separation all share a deep concern for the "diseased body" as a site of contestation between the foregoing antagonisms rather than sharing a heightened value of the composite human being and the configuration of family, community, and culture of which the person is an integral constituent. In other words, an appropriate understanding of the nature and dynamic of African medicine and healing makes it so that a firm grasp of a people's cosmology is inescapable.

Cosmology refers to a system or body of thought rising out of a people's history and culture that addresses issues of reality and creation, truth and value, meaning, and process, and that people's place in creation (Akoto and Akoto 1999, 281). A delineation of Bono (Akan) cosmology, in descriptive terms, is necessitated by the fact that this body of ideas and conceptions directly relates to the specialists of the Bono-Takyiman therapeutic system, who, by design, can also be considered specialists of the composite cultural system and its spiritual praxis. Bono cosmology is a "living" entity arising out of the process of culture development—which may be impeded but is continuous as long as people of that culture exist—and forms an experiential reference for Bono existence. As such, a descriptive approach is the most feasible so as to properly situate the essentials of Bono cosmological perspectives as well as the specialists who constitute a pragmatic, ideational, and spiritual expression thereof.

The Akan have historically conceived of the human being as "spiritencapsulated" rather than matter-animated; that is, the fundamental nature of the human being is spirit (Abraham 1962, 51). In its temporal existence, that spirit becomes a composite being encapsulated by way of several constituent parts which form the whole person(ality). To the Akan, a marriage is never complete until a child comes out of the union and, by extension, children are held in high esteem and demand. In fact, as Brempong (1996, 46) observed, childbearing is one of the strongest pressures exerted on individuals in Akan societies. Procreation among the Akan has ambiguously been presented as the "mixing" of the woman's blood and the man's spirit imbued with an okra (soul) from Onyankopon (the Creator). Various writers have historically been at odds on the constituent parts and the meanings associated with Akan conceptions of the human being (see Table 2.2). Using the criteria of cultural accuracy as well as consistency (and the lack thereof) among the writers cited in Table 2.2, what follows is a discussion to clarify the ambiguity which envelops Akan concepts of the human being.

The *onipa* (*onipa*—human being) is composed of specific yet interlinked elements that require some elaboration. At conception, one receives his or her *okra* (soul) and *honhom* (breath of life) from *Onyankopon*, in which the former is an immortal part of the Creator that encompasses one's *nkrabea* or *hyebea*, as well as his or her *kradin* ("soul name") after seven days inclusive of the day of birth. Thus, a male child born on a specific Sunday—based upon the indigenous calendar of nine cycles of forty-two days each—that child's first name or *kradin* will be "Kwasi" and he will be linked to the character of one of six Sundays, that is, either *fookwasi*, *nwonakwasi*, *nkyikwasi*, *kurukwasi*, *kwakwasi*, or *monokwasi* (see Appendix I). To the Akan, each *Eda* (day) has a *kra* ("soul") of its own imbued with specific

Table 2.2. Writers on Akan Concepts of the Human Being²⁰

Nkrabea			
Honhom		The <i>akra</i> is what makes one breathe or is what accounts for <i>bonbom</i> ("breath")	"breath of divine life," part of the kra
Saman	Srahman [saman] is what the sun- sum becomes at death	"Ghost" with physical form; sasa is invisible spiritual power of a vengeful person or animal	Sunsum transforms into saman at death
Ntoro or Nton		Male transmirted element or "spirit"; mtora and semen are the same. At death, it joins the group mtora	
Mmogya		Blood of the woman, which helps to form the physical body; at death, it becomes a saman ("ghost")	Mother is the giver of life
Sunsum	Spirit or "shadow" which becomes a ghost at death	Spiritual element synonymous with <i>ntorz</i> ; departs body in dreams and can be weak or strong	"shadow" or personali-ty influenced by planets
Author (O)kra Sunsum Mmogya	A.B. Ellis Soul or spirit in (1887 [1964]) humans which becomes sisa [sasa] at death	Soul that exists before birth which only humans possess; it is cleansed ritu- ally on day of birth; seven kinds linked to the seven days	From "moon goddess;" it is eternal and linked to fire
Author	A.B. Ellis (1887 [1964])	R. S. Rattray (1923)	E. L. R. Meyerowitz (1958)

(continued)

Table 2.2. Writers on Akan Concepts of the Human Being²⁰ (continued)

Author	Author (2)kra Sunsum Mmogya Ntoro o	Sunsum	Mmogya	ır Ntən	Saman	Honhom	Nkrabea
M. J. Fields (1960)	Spirit-life force via the father, and whose <i>kra</i> is same as the child; <i>kra</i> is also found in animals	Good or bad; Blood and departs the body fron body during the mothe dreams; male force that protects the family	Blood and body from the mother	Ntoro and kra used inter-chan- gea-bly, hence, paternal-based rituals with the kra			
W. E. Abraham (1962)	Guiding spirit; bearer of one's destiny; only humans have an <i>2kra</i>	Spiritual substance responsible for <i>suban;</i> educable; departs in dreams	Spiritual fac- Inheritable tor or basis unlike the 3k for abusua or and sunsum; clan through a group of the female is formed by the mtor2 and mmogya	ra 1s	Mmogya [blood] and/ or sunsum becomes saman at death		A particular mission to fulfill in life
K. Antubam (1963)	Soul from God invested with tiboa (con- science) ²¹		Material Ntoro-sunsun Component is the self or by way of the ego through mother the father	Ntoro-sunsum is the self or ego through the father		"Breath" that Destiny; is intrinsic to intrinsic to the <i>ɔkra</i> the <i>ɔkra</i>	Destiny; intrinsic to the <i>2kra</i>

Manifestation Purpose of sunsum; decree or honbom and mission are indiresiding in visible the abra			Immutable destiny; obrabo is process of actualizing the destiny on earth
Manifestation of sunsum; bonbom and zkra are indivisible			
	Mmogya becomes saman at death and await rebirth by way of the abusua		Animals and some plants have a kind of spirit called sasa
	Birth is a sign that the <i>mtoro</i> of father took care of fetus; child-father spiritual bond		Inherited characteristics; closely akin to sunsum and derives from the father
	Blood from mother and her lineage; mmogya and ntor2 enters the child at concept-tion	Blood from mother	Blood; material aspect of person and basis for ntonlabusua
The soul is the sunsum in corporeal world	Sunsum or ntoro comes from father; responsible for suban; perishes at death	From father; his sunsum molds the child; morosum link is essential	Intangible element that is necessary for <i>suban</i> (character); departs in dreams
J. B. Danquah Soul/essence of (1968) God with nkra or intelligence	Part of God that enters a child at birth; linked to life and one's con- science	Soul/small particle from God with "double destiny" and honhom	Soul; bearer of destiny or contains the <i>nkrabea-hysbea</i> ; immortal
J. B. Danquah (1968)	D. M. Warren (1973)	P. Sarpong (1974)	K. A. Opoku (1978)

(continued)

Table 2.2. Writers on Akan Concepts of the Human Being²⁰ (continued)

Nkrabea	Destiny from God; enigmatic; makes life difficult	Destiny
Honhom		Breath; tangible evidence of the presence of the <i>ɔkra</i>
Saman		
Ntoro or Nton Saman		Transmitted by father as inherited qualities; non-divine in origina-tion
Mmogya	Contributes to one's physical form	Physical element from mother as blood; soulbody unity
Sunsum	"spirit" from Contributes father; child to one's come under physical aegis of the form father's	Spirit; basis of one's personality; divine; active part of the <i>2kra</i>
(O)kra	Immortal; "spirit" from from God and father; child present on day come under of one's birth father's	Soul; life- imparting agent imbued with destiny and honhom
Author	K. Appiah- Kubi (1981)	K. Gyekye (1995)

appellations, attributes, and character. The kra of each εda is regarded as one of the seven qualitative "souls" of *Idomankoma Ibiadee* or the Creator, which themselves take the form of an *bosom* or one of the Creator's children and may be aligned with celestial bodies (Arthur 2001, 114; Ephirim-Donkor 1997, 64; Osei 1997, 27). In effect, the correlation between the souls of *Odomankoma Oboadee*, one's name, calendrical days, and the characteristics of the latter two speaks directly to Akan definitions of personhood within the context of a spiritual-temporal order (see Table 2.3). The idea of precisely named days embedded with meaning(s) is consistent with Akan notions that contextualize the process of naming, personality and character, and cosmology in the qualitatively larger symbiotic relationship of the spiritual and temporal, and the ways in which one informs the other. Hence, the first name in which one is given at birth is pregnant with a distinctive kra ("soul") from the Creator, general yet dominant qualities or characteristics, appellations, ritual observances, all of which underscore the meaning of the calendrical system as a temporal or cultural design for life and living.

On a person's (2) krada ("soul" day of birth), 2kra or "soul" washing rituals are held usually at rivers or streams that correspond to the various ntora

Table 2.3. Akan "Soul" Names and their Character

Onyame Kra	Obarima-Din	Obaa-Din	Nna	Suban/Mmrane
("The seven akra")	(Male names)	(Female names)	(Days)	(Character/ appellations)
Ayisi/Asi	(A)Kwasi/ Kwesi	Akos(u/i)a/ Esi	Kwasi(a)-da	Bodua (protector)
Adwo	Kwadwo	Adwoa	Dwoo(a)-da	Okoto (calm, unassuming)
(A)bena	Kwabena	Abenaa	Bena-da	Ogyam (good, benevolent)
Aku/Wuku	Kwaku	Akua	Wuku(a)-da	Ntonni (advocate, hero)
Awuo/Yaw	Kwao/Yaw	Yaa/Aba	Yaw(a)-da	Pereko (firm, courageous)
Afi	Kwafi/Kofi	Afia/Afua	Fi(a)-da	Okyin (itinerant, adventurer)
Ame(n)	Kwame	Am(m)a	Memene-da	Atoapem (valiant, heroic)

or nton groups, such as bosompo or bosompra, augmented by restrictions such as no palm wine before sunset, all white dress smeared with *hyire* (white clay) obtained from specific rivers, abstinence from certain foods and meats, and observance of the *bosom* associated with that person's day of birth. This periodic ritual was used to facilitate the rediscovery or clarification of one's hyebea ("mission, destiny"). Nkrabea and hyebea are sometimes used synonymously (see Selected Glossary). The Akan say, obi kra ne Onyankopon na obi nnyina ha (when one takes leave of Onyankopan, no one stands there), or Onyame nkrabea nni kwatibea (Onyame's destiny or the destiny Onyame [has for someone] is unavoidable). The hyebea, as the innate destiny or mission, is an understanding arrived at solely between the Creator and the individual. To the Akan, one chooses what one wants to become in the temporal before one leaves the spiritual. Although the Creator is seen as not being responsible for the "destiny" one chooses, it is possible to reverse one's chosen hyebea by appealing to the Creator (Brempong 1996, 47).²² To the Akan, everyone is born with a purpose or mission to be achieved and the *byebea* is realized as abrabə ("ethical ideal and existence") in the temporal world. Abrabə (əbra attitude, way of life, praxis; b2—living, physical existence) suggests a coming into this world with a sense of mission and an emphasis on the realization of that mission, since it is through bo (as "living") that one's obra or a way of life unfolds. However, the neutrality of the concept of abrabo further suggests that ethical existence is more implied—and realized through Akan culture rather than an explicit meaning of the concept, hence, the proverb, *Sfanteni* Kwamena se no nye abrabo wo ara abo ("The Fante person named Kwamena [Kwabena] said if your life is not good, it is you who lived it [and so there is no one else to blame]"). Ethical existence is regarded as both personal and communal whereas the actual living of one's existential mission or purpose is individual, but the community must safeguard its content. When disorder is produced by unethical existence, rituals are enacted for cyclic and cosmic balance and for the restoration of ethical existence through community participation. The hyebea is the gateway to abrabo and ethical life is "concerned with knowing the precise nature of the individual's purpose of being, the discovery of which may lead to the ideal existence. . . . The ideal life then is one of selflessness, motivated by a strong sense of purpose and governed by the right moral and ethical choices" (Ephirim-Donkor 1997, 4, 145). In effect, the elder who became an ancestor without fulfilling his or her hyebea would return to the temporal as many times as necessary to fulfill their mission. The elder who fulfills his or her hyebea would become an ancestor among the "evolved" or "elder" ancestors called nananom nsamanfoo.

Considering the various and conflicting ways writers have understood what constitutes a human being among the Akan (see Table 2.2), it appears an

Akan person (Dkanni) is ultimately an expression of Ddomankoma Dboadee (Beneficent Creator). In the temporal sense, that person is at once anchored in Asase Yaa (the earth that sustains and supports human life), the abusua abosom or maternal ("blood") family abosom, and the paternal ntora or nton abosom of mostly rivers and lakes (e.g., bosompra, bosommuru, bosompo). The Akan person's okra (imbued with nkrabea-hyebea), honhom ("breath of life"), and sunsum ("spiritual personality"), all divine in origination from *Odomankoma*, converge in the process of the conception with the blood (mmogya) and semen (ahobaa) provided by the mother (ɛna) and father (agya), respectively. The mmogya helps to form the honam (flesh) and nipadua (physical body) of the person, while the ahobaa (with its genetic material) and the paternal *ntoro* or *nton* shapes the *sunsum* of the child until puberty. where the latter's sunsum comes into its own. There is a direct correlation, therefore, between one's kradin, sunsum, and the bosom of the day on which one is born as well as the *bosom* of one's *ntoro* or *nton*. The *kradin* has its own spiritual-cultural observances, and both the paternal and maternal factors have specific taboos, ritual observances, fasts, and dietary restrictions in preparation for and in observance of sacred days for respective abosom of the paternal-*ntora* as well as the maternal-*abusua*. In fact, in the spiritual life of the Akan, dietary restrictions and fasting are also linked to the practice of akom (as in okomfoo or one who does akom), which has the denotation of "hunger" (*2k2m*) but the connotation of "making revelations" or "prophesizing" (nkm). In this scheme, the place and functions of the bosomfon within the abusua seemed to have been paralleled by the *skomfoo* within the *ntoro* or nton system of largely river and water-derived abosom, a perspective supported by the pursuit of order and balance in indigenous Akan society.

Both the *abusua* and the *ntoro* or *nton* systems are associated with *akyeneboa* ("totems") or specific animals which have taboos that restrict the killing of these animals. The Akan *akyeneboa* and corresponding character of the *abusua* include *Dyokoo* (falcon; patience), *Asona* (raven; wisdom), *Asenee* (bat; diplomacy), *Aduana* (dog; skill), *Ekoona* (buffalo; uprightness), *Asakyiri* (vulture; cleanliness), *Agona* (parrot; eloquence), and *Bretuo* (leopard; aggressiveness). The *mmogya* (sg., *bogya*; "blood") is synonymous with the *abusua* (matrilineage), hence, *mmogya-abusua*, since the *mmogya* comes from the mother's lineage and forms the physiological aspect of the human being.²³ The notion of matrilineal descent is linked to and derives from the Akan conception of the human being in addition to the idea that all children belong to the *abusua*; here, "belonging" does not connote exclusive right or possession. Akan society is mother-centered—the criterion to be an Akan is that one must have an Akan mother—and this social imperative anchors the child to the timeless notion of an original ancestress and her children.

The latter not only corresponds to the basis of the seven primary *mmusua* (matriclans) of the Akan but also to an equivalent group of stars that the Akan identify as the original ancestress (called *aberewa*, "the old woman") and her six or seven children.²⁴ *Aberewa*, in the form of the *bhemmaa* (indigenous female leader of the *bman*), is consulted in the process of political discourse when participants either find themselves at an impasse or having difficulty reaching a collective decision.

Since political succession and inheritance are determined by matrilineal consideration, an individual's wofa (maternal "uncle" who can only be the mother's brothers) and ena (aunt who is regarded as a "mother") form the inheritance group. The balanced relationship between the wofa (mother's brother) and his wsfaase (lit. "under wsfa"; nephew/niece) and the sewaa or agyawaa (father's sister) and her mma (children; father's children are her children as well) has been challenged by contemporary issues which have disrupted this harmony. In the recent past, both the wofa and sewaa—as agyawaa is used mostly in the Kwawu area—complemented each other in function though the wofa was given a little more weight than the sewaa. For instance, both could facilitate the process of the wofaase or father's children getting married, the sewaa was much closer to the children than the mother's sisters, the wofa had a much greater presence than the father in certain matters, and in indigenous court cases, both the wofa and the sewaa supported the child—not the father or mother of that child. In terms of social relationship, the child's wofa has rights of the socialization of the child, while the paternal father (agya) plays more of a protectorate role such as making provision for food and shelter.

In indigenous Akan practice, men were encouraged to continue to "inseminate" or have sexual intercourse with the expectant mother up until the seventh month to ensure a safe delivery. This same energy or perspective explains why, in part, the father (agya) is responsible for the child's conduct and character up until his or her puberty wherein the child's ntoro link or factor is established and mature enough to assume a greater role.²⁵ McCaskie (1995, 167, 314) noted that among the Asante ntora is often used as a synonym for semen (ahobaa) and that it defined "consanguinity in paternal terms, i.e. descent from a father . . . " In the womb of the mother, the child is also shaped by the mother's heartbeat, voice, diet, thoughts, spiritual disposition, and peace of mind or lack thereof. The sunsum and the ntoro or nton determine character (suban) and can be changed or modified by "training" and application, and can harbor negativity that transforms into illness if left unattended. The idea that a strong or heavy sunsum is expressed in the proverb, se wo sunsum ye duru a, əbayifoə ntumi wo (if your sunsum is heavy, the əbayifoə ["witch" or one who harbors negativity] cannot overpower you). At death, the physical body formed from the *mmogya* becomes a corpse or *efunu*

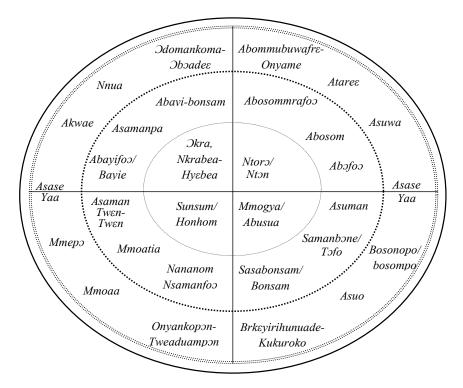


Figure 5. The Bono (Akan) Spiritual-Temporal Perspective: A Conceptual Outline.

that fades into Asase Yaa and each of the entities described earlier returns its respective sources of origin. The key to life and living for the Akan then is balance and fulfillment of the purpose or mission inherent in the whole person who is having a human experience in the temporal linked inextricably to the immaterial. This composite notion of the human being, however, does not exist as a unit unto itself but rather as an integral part of the Bono (Akan) spiritual-temporal perspective or way of making sense of the reality (See Figure 5.).

In the above conceptual outline, the differentiated circles correspond to spheres or layers of the Bono (Akan) spiritual-temporal perspective in terms of its primary constituents. The positional names of the varied circles (e.g., innermost circle) and the terms that appear within each will initially be bolded to guide the reader through this section. The outline is intended to be uncomplicated in order to better contextualize Akan cultural thought and behavior as well as provide the reader a qualitatively better understanding of the Bono way of making sense of the world at the conceptual level. The design of the conceptual outline is analogous to fundamental processes

within Bono cosmology and cultural praxis, which are circular rather than linear. One of the ways a well-developed <code>bosomfoo</code> or <code>bkomfoo</code> does <code>nsu-guo</code> (libation) in the Bono-Takyiman area is that he or she first pours one drop of the liquid substance in each of the four directions—namely, north, south, east, and west—and then proceeds to pour in (relatively) the center. Further, when an <code>bkomfoo</code> first enters into spiritual communion with his or her <code>bbosom</code> before or while dancing, he or she first points or throws <code>byire</code> (a white clay substance) above or to the sky and then acknowledges the four cardinal points. Additionally, the <code>bkomfoo</code> dances in a circle counterclockwise and relative to the drum section.

The innermost circle relates to Akan human conception, which should be interpreted as the human dimension situated within concentric and intertwined layers ("circles") of additional (and arguably greater) dimensions of reality rather than the human dimension positioned as the "center" of the perspective itself. Certainly, humans have agency, as evidenced by the Akan view that one *chooses* his or her destiny. That notwithstanding, the Akan also conceive of greater dimensions and cycles of reality that affect and are affected by the human dimension. The second layer (demarcated by small "dotted lines" forming a circle) relates to the primary non-temporal agencies that interact with the human dimension and which assume "temporal existence" (manifestation) through the human dimension and natural environment. Here, it should be made clear that accepted notions of time and space are relative if not meaningless in the Akan conception of the interplay between the spiritual and the mundane.

Among the Akan, there exist four categories of ancestors or nsamanfoo consummate with the understanding that not everyone who makes their transition from the temporal to the spiritual is or becomes an ancestor proper. The four general categories of "ancestorship" ultimately correspond to the extent to which one realizes his or her byebea through righteous living in the temporal as linked to the spiritual and ideational dimensions of life. Those categories are: 1) asamanpa ("good ancestors") usually who reside in the "sky" or hide in corners, but departed for asamando (abode of the ancestors); 2) asaman twen-twen (lit. "ancestors that wait or linger about") reside close to the earth due to some unfinished business and usually they scare but are incapable of harming those they encounter. This type of ancestors, most likely, did not fulfill their hyebea and had to "wait" because they are incapable of going to asamando; 3) samanbone (lit. "negative ancestor") or otofo ("lingering ghost") is a deceased person who had a violent death and/ or improper burial and, as a result, is usually bold and aggressive and often wanders. As Warren (1973, 52) noted, "[t]he spirit of a [person who committed] suicide was debarred from the [asamando], and it was eventually

reincarnated as *tofo sasa*, a person with a cruel murderous nature leading itself to the same end;"²⁶ and 4) *nananom nsamanfoo* (elder or "evolved" ancestors) are those which have achieved their *hyebea* (mission) and, as result, "crossed the waters" to *asamando* (Bosman 1967 [1705], 156; Smith 1967 [1744], 214). Akan stools are often tilted to the side when not in use to prevent stray and tired *asamanbone* or *otofo* from sitting on them. Should a person sit on one before either entity can escape, he or she may contract pains in the waist. It is the *nananom nsamanfoo* and the *asamanpa* who are often invoked in *nsuguo* or *mpaee* (libation) to help facilitate the provision of necessary resources, children, collective prosperity, good health, and long life. It is said that once the deceased, who has fulfilled his or her mission, is sent off from the mundane to *asamando*, he or she comes to a dock or shoreline, boards a raft or boat, and is taken across the waters to the place where the other elder or "good" ancestors reside.

The *mmoatia* (sg., *aboatia*; *mmoaa*—creatures, animals; *tia*—short) are not ancestors or perhaps "short creatures" but entities of the forest that reside, usually, on the top of the Odum tree, enjoy bananas, speak in a screechy voice, and are well-known for their ability to procure and transmit the knowledge of indigenous medicines. The mmoatia have their own akəmfoə and can either be an asset or a distraction (e.g., troublesome) to a community. Asuman (sg., suman -"talisman") consist of medicines and other ingredients to perform specific functions because of their design for individual use. For anyone other than that particular user, the power of the suman may not work. These asuman are usually made by and can be gotten from an *akamfoa*, *abosomfoa*, or *adunsinni*, and there have been cases where hunters find a suman (much like a "shrine") in the forest, typically. An *obofoo* is usually translated as "angel." Such a rendering is, however, foreign in belief and language and, therefore, I refer the reader to a description provided during the course of my conversation with Nana Kwasi Owusu. He stated, "Onyankopon gives each person an obofoo who helps that person to live, receives knowledge or wisdom, informs him or her how to make use of their environment to collect medicine or to use this or that, and always speaks and travels with humans. The photop communicates to one's spirit and guides it away from harm."27 Though the term has been (mis)appropriated and has became part of the Christian lexicon in Ghana, *abafoa* has at least three dimensions through, relatively, the same intonation (with 2 realized as 0), \(\hat{o}b\hat{o}!f\delta\) ("messenger" or "ambassador"), $\underline{\grave{o}}b\underline{\acute{o}}f\acute{o}$ ("creator or maker of something"), and $\underline{\grave{o}}b\underline{\grave{o}}f\acute{o}$ ("hunter"). The layered or nuanced meanings of *bbofoo*, specifically in the context in which Nana Kwasi Owusu spoke, suggest its broad meanings are inclusive of the ancestors, the Creator or his or her children (i.e., the abosom), and other

"messengers" that facilitate life, living, and learning. In fact, during Warren and Brempong's (1988, 138) district survey of Takyiman "religious shrines" in the late 1960s and early 1970s, they also found that *abafo* (pl. *abafo*) were "messengers" in that some of the "minor" *abasom* were *abafo* for the "larger" or principal *abasom*.

Writers often describe *sasabonsam* or *kasampere* as a fearsome creature of the dense forest and, generally, one will find this compound term interpreted as "the devil." The portrayal of *Sasabonsam Kwaku* is a forest monster possessing long hair, dangling legs, feet pointing in both directions, blood-shot eyes, sitting high on the branches of an Odum or Onyina tree, and working in concert with the *abayifoo* and *mmoatia*. That portrayal, however, is inconsistent with the idea that *sasabonsam* is solicited to detect and defeat the very evil with which it is thought to be associated (Rattray 1927, 28, 31). Rattray (1927, 27) defined *sasa* as the "spirit surviving after death" and *bonsam* as a "male witch." Yet, *sasa* is not just any spirit but rather the "negative or ill-reconciled spirit" of a deceased animal able to cause harm and *bonsam* is an acute evil; hence, *sasabonsam* is an acutely evil spirit that dwells in the deep forest and takes the form of a creature that can capture and endanger humans. For this reason, the forest-dwelling Akan have great respect for *sasabonsam* and the *mmoatia*.

Bayie ("witchcraft") is a power or energy (with intent) used positively or negatively, and writers often translate it as "witchcraft" (the act itself). Abayisem as well as the Fante ayen is also employed, and the former refers to "witchcraft" or (a)bayie matters, issues, and cases (nsem). According to Azzii Akator (1988, 12), bayie derives from the phrase ebeye yie ("it will be good or all right"); if this is the case, then we must reconsider the exclusive "witchcraft" connotation the term *bayifoo* (pl. *abayifoo*) seems destined to have. The phrase, according to Akator, is an optimistic utterance made to give hope and direction for one who needs to consult the *sbayifos*. In the Bono-Takyiman area, abayi-bonsam is the male "witch" who does or uses bayie, while obayifoo, a gender-neutral term that applies to either sex, is reserved for the female. The (female) abayifoo usually outnumber the abayi-bonsam, and the abode of the *bayifoo* is in the female line of the family where the most damage occurs among the *obayifoo*'s own blood relatives (Brempong 1996, 44). The idea that abayifo2 are powerless outside of their own clan, possess an organizational structure akin to Akan polities, and desire and feed on blood suggest that abayi is a metaphor embedded in, yet antithetical to, Akan social order, which is rooted in the abusua or mother-centered family that is synonymous with mmogya or blood (Rattray 1927, 28-29). One may never know who is an *abayifoo*, even the *abayifoo* themselves—as one may be born this way or do the work of an *abayifoa* unconsciously. Nana Kwasi Appiah argued that "witchcraft" is imbued with a capacity for positive ends, but it is the person's mind or the factor of intentionality that shapes *bayie* into something negative.²⁸ Confessions by *abayifoo* are usually made after they have been caught by one of many "*bayifoo*-catching" *abosom* called *abosombrafoo* (pl. *abosommrafoo*). If an *abayifoo* does not confess, he or she will be killed spiritually by the *abosombrafoo* after to a warning of some sort to elicit a confession.

In the Bono-Takyiman area, the *abosommrafos* are a type of *sbosom* that specializes in catching abayifoo, procuring medicines, and a range of other functions, in contrast to the Atana abosom, whose functions are vast but do not include catching and (spiritually) killing abayifoo. The bosombrafoo is an bosom that is an brafoo ("one who subdues"), who, in the indigenous socio-political order, serves as the *phene's* security force and (the indigenous state) executioner, hence, the "executioner" utility of the *bosombrafoo*. The *Atano abosom* are Tano River derived *abosom*, such as Taa Kora or Taa Mensa, which currently reside in nyawa or nyowa (brass basins; sg., ayawa or ayowa) and exist at the state, town, village, and family level. Taa Mensa is the state *bosom* for Takyiman and the *bosomfoo* for Taa Mensa is the *bosomfoohene* (leader of the *abosomfoo*). Ta or Taa is a contraction of Ta-no (the sacred Tano River), as in Taa Mensa, and Atano (sg. Tano) abosom were placed in clay vessels prior to the use of nyawa.²⁹ The Atana abosom are separated by function and location from the abosommrafoo, and both types of abosom are usually kept in different quarters or structures. Consequently, one will find the abosommrafox in conical-shaped houses on the outskirts of a village. Though most of the abosommrafo2 among the Akan are foreign in origin, the Bono do have an indigenous abosommrafo2 called Dbokverewa Kwaku. In the Bono-Takviman area, this *bosom* is well-known and respected, and regarded by most as the protector of the source of the Tano River.

The *abosom* are considered to be the emissaries, children, and *akyeame* of *Onyankopon* (the Creator). The *abosom* are usually regarded as "shrines" or "deities" (the power thereof), but these English cognates are culturally inaccurate. The term *abosom* does not mean, "worshipping a stone," but rather, since the Akan do not worship, "a thing that serve an unlimited, invaluable purpose" (*a*-noun prefix; *som*—to serve; *bo*—limitless, priceless, precious). To metaphorically relate the *abosom* to a rock implies permanency and resilience. Trees wither and die and water dries up, but a rock is enduring. In fact, many of the *abosom* in the Bono-Takyiman area are directly associated with mountains, caves, and stones in regards to their origin or abode. One usually finds the *abosom* enshrined in brass basins (*nyawa*), pot-like vessels (*kukuo*), or a cluster of medicines in the form of club (*akonti*). These items are the abode or shrine of the *abosom*

that serves as a temporal nexus through which an <code>okomfoo</code> or <code>obosomfoo</code> accesses, consults, and feeds the <code>abosom</code> and where the <code>abosom</code> reside on a transitory basis.

The third layer (demarcated by larger "dotted lines") relates to the sphere of the natural environment, the earth, and the Creator; the latter is realized as part of the expansive and unfolding process of creation itself, which may serve to explain why the Akan acknowledge first but almost never pour libation to the Creator, As manifestations of the Creator, the abosom reside in specific locales of the natural (temporal) environment, such as the ocean (bosonopo or bosompo), rivers (asuo), lakes (ataree), streams (asuwa), mountains (mmepo), forests (akwae), and trees and plants (nnua). Thus, the conceptualization of the Creator is one that is an integral part of creation and within all of creation, elements of the Creator reside. The Akan understand this to be fundamental and often taboo, and consider sacred many of the foregoing locales thereby (environmentally) protecting these locales as life sustaining sources. Mmoaa is a multilayered term that conveys meanings that range from microorganisms, germs, and insects to small and large species of animals (which are properly referred to as mmoa) that exist in the biological and natural environment. Though the ocean (bosonopo or bosompo), rivers (asu), lakes (atare), streams (asuwa), mountains (mmepa), forests (akwae), trees and plants (nnua), and mmoaa (microorganisms, insects, animals) exist in the temporal domain of Asase Yaa ("mother-like earth"), these entities are also a part of creation and, by extension, *Onyankopon* (the Creator). Other appellations for the Creator include Twe(re)duampon ("the tree which when leaned upon does not break"), *Odomankoma* ("the only giver of grace"), *Onyankopon* ("the only great one"), Tete Botan ("the ancient rock"), Abəmmubuwafre ("the one called upon in times of distress"), and Brekyirihunuadee ("the one who sees [behind] and knows all").

In the conceptual outline presented above, the vertical line in the middle of the scheme relates to the depths and heights of the spiritual dimension as represented by the Creator—indicated by the numerous appellations employed by the Akan—and the horizontal line across addresses the mundane plane as represented by Asase Yaa. Asase Yaa is conceptualized as a primary temporal expression that sustains and nurtures human existence, and is ultimately born of and linked to the spiritual dimension. The outermost bold circle relates to that part in the process of creation and the cosmos that is eternally vast and incomprehensible to humans. Here, the Akan are generally not obsessed with false knowledge, or theories to explain what they do not know or attempt to know as a synonym for hegemony and arrogance, but rather

find contentment in sure knowledge and the understanding that there is much they do not know.

CATEGORIES OF INDIGENOUS HEALERS

The Akan are very much concerned with order and balance. Akan society reflects this concern and Akan tradition, in all its dimensions, allows for the development of specialists or individuals with more than average competency and knowledge. Thus, one would not simply approach someone walking on the streets or on the way to farm with certain questions and expect a response equivalent to what those who specialize in such matters would offer. Those specialists can also be thought of as distinct "institutions" in their own right—due to the nature of their work and depth of intergenerational knowledge—though the following three certainly overlap in their day-to-day practice. The three specialists are the *odunsinni* (pl. *nnunsinfoɔ*), *okomfoɔ* (pl. *akomfoɔ*), and *obosomfoɔ* (pl. *abosomfoɔ*). Each group of specialists will be described here in the foregoing order.

The *odunsinni* (*dua*—tree; *sin*—part of; *ni*—one who) or "one who works with parts of a tree" uses herbal medicines to cure sickness and many *nnunsinfoo* specialize in medicines for particular diseases. *Nnunsinfoo* usually do not address spiritually related diseases and serious diseases; the *okomfoo* or *obosomfoo* often deals with these types of diseases. *Nnunsinfoo* are not attached to an *obosom* and usually do not engage in divination though some learn the ways of divination. Instead of an *obosom*, many have *asuman* (sg., *suman*), which are often used in the collection of medicine and to facilitate the healing process. Certainly, there are those who use their *asuman* for negative and malicious purposes. Most *nnunsinfoo* operate out of their homes and a few have established herbal centers. The terms *aduroyefoo* or *aduyofoo* ("one who makes medicine"), *oyaresafoo* ("one who cures"), and *nnunsinfoo* are sometimes used synonymously, particularly by older adults and elders.

One healer noted that "an <code>bkpmfop</code> is also an <code>odunsinni</code> since the <code>bkpmfop</code> also collects medicine." Nana Akosua Owusu was certainly correct, but unlike the pure <code>odunsinni</code> who may harm or kill, the <code>bkpmfop</code> is disallowed by their <code>bbosom</code> from engaging in such acts unless the intended person is caught as an <code>bbayifop</code> (one who does <code>bayie</code>, "witchcraft"), in which case the <code>bbosom</code> will handle the <code>bbayifop.31</code> As "the one who does <code>akpm,"</code> the <code>bkpmfop</code> is an indigenous healer who works with an <code>bbosom</code> as more of an attendant who is a specialist in <code>akpm.</code> The agent <code>(bkpmfop)</code> and principal <code>(bbosom)</code> structure, in which <code>Onyankoppn</code> is the ultimate source of the latter, is one found in Akan political, social, and spiritual discourse, and modes of transmission "involve the use of an agent (instead of the

principal) as the main focus of communication whether the principal is visible or unseen" (Yankah 1989, 13). Thus, the <code>okomfoo</code> or <code>obosomfoo</code> who uses <code>akom</code> engages in neither "Akan religion" nor a "possession dance," and inappropriate cognates of "religion" or "possession" demonstrate the extreme difficulty of translating <code>akom</code> into English. In descriptive terms, however, <code>akom</code> is both process and procedure unbounded by time or space, and is linked to the full range of rituals, medicines, spiritual entities, and specialists within the spiritual-cultural life of the Akan.

Okomfoo is a gender-neutral role where one knows the art of divination and is attached to an *bosom*. He or she may enter into spiritual communion with an *bosom* at any time and, therefore, the *bomfoo* is more mobile than the *bosomfoo*.³² It is perhaps this mobility that allowed this category of specialists to be used as an instrument of the state, especially in Asante, as Asanteman (Asante nation) was co-founded by Okomfoo Anokye (Kwame Frempon Anakye Kotowbere) and the prestige of the akamfoo increased over the more stationary *obosomfoo*. The role of the *okomfoo*, by contrast, is quite different in Bono society where the *akamfoa* is considered the junior and the *bosomfo2* the senior, and where the *bosomfo2* for the Bono-Takviman state obosom Taa Mensa has more authority than the Takyimanhene or the political leader of Takyiman. The female *skomfos* may never carry her *sbosom* (in a brass basin on her head) though she may engage in spiritual communion with that bosom and may inherit the bosom as the bosomfor does. Yet, the *akamfoa* cannot become an *abosomfoa* unless he or she is of the same matrilineage that possesses or "owns" the *bosom* in question. Those with abosommrafo2 ("executioner" abosom) are also akomfo2 since they can engage in spiritual communion at any time and their hair is usually kept in mpesempese (string-like locked hair), while the bosomfor have either closely trimmed hair or clean-shaven heads. The male okomfoo also engages in spiritual communion with an *bosom* and does not have to belong to the matriclan which "owns" the *bosom*; they become attendants to that *bosom* and cannot inherit the role of *shosomfos* should the existing *shosomfos* die. These akomfoo can leave their abosom and stop being specialists if they so desire. Those who inherit their *bosom* are bound by family obligations to continue their work (Warren 1974, 51).

The *shosomfos* must always be male and though it is theoretically possible for a woman to occupy this position, she would still be an *skomfos* since women do not carry a Tano River-derived *shosom* typically in brass pans on their heads. Inherited matrilineally, beginning with the original *shosomfos* of the same matrilineage who "owns" the *shosom*, the current *shosomfos* occupies an inherited position and represents that lineage as the *shosomfos*. The family appoints the potential *shosomfos* before he is

introduced to the family *bosom*, whereas almost any *abosom* may chose an *an akomfoo* at random. These *abosom* are usually Tana River-derived abosom, such as Taa Kora or Taa Mensa, which reside in nyawa (brass basins). An *abosomfoa* is also an *odunsinni* that addresses spiritually and non-spiritually related diseases, and he too knows the art of divination. If no successor to the position of *bosomfoo* is found, the *bosom* goes into dormancy and is tended by an *akamfoa* until that *abosom* chooses someone within the appropriate matrilineage. The *bosomfoo*, unlike the *bosomfoo*, enters into spiritual communion with his abosom only when the ayawa containing an *abosom* is placed on his head and the *akyeame* recites the appropriate incantation. The *bosomfoo* cannot be a specialist or custodian for an abosommrafo2 "shrine." Atana abosom are kept separate by function and location from the abosommrafoo, as one will not find a Tano bosom kept in the same abosomfie as an abosommrafoo like Mframa or Tigare, which reside in conical-shaped houses on the outskirts of a village. The exception, so to speak, is if the Tano bosom and the bosombrafoo had the same taboos then it is possible for both to cohabitate in the same compound, though in different rooms. Though most abosommrafo2 were foreign to the Akan, the Bono, as noted earlier, do have had an indigenous abosommrafo2 called Dbo2kverewa Kwaku (2602—rock, stone; kyere -to catch; wa—a way or an exclamation), and Nana Kofi Asemadu is its current custodian. Of Dbookverewa, it is commonly said, "if the rock catches you, it will get you!" This *bosom* has its abode in Traa, situated in a forested area close to the source of the Tano River, since, according to Akan drum texts, Obookyerewa protects the source of the Tano River and thus occupies a special role in Takviman and in Akan spiritual practice of the area.

Silverman's (1987, 275) review of oral and written records from the seventeenth century to the 1920s suggests that "religious" authority played a more significant role in Bono society than in Asante, and of the Atano *abosom*, "its strongest manifestation occurs among the central Bono, the region in which the tradition had its origins." Tanoso was an important training center for Asante *akomfoo*. Tanoso is also the home of the Ati Akosua *abosom*, the offspring of Taa Mensa (also known as Taa Kesee in Takyiman), who was regarded by the Asante in the nineteenth and twentieth centuries as the most powerful Tano *abosom* (Silverman 1987, 288). Rattray (1923, 200) claimed, to the contrary, that Asubanten was the father of Ati Akosua, who is the *akyeame* for Taa Kora, the highest *abosom* among the Akan located in Tanaboase. Nonetheless, there was a shift from the *tete abosom* (ancient Atana *abosom*) to the increased popularity of *abosommrafoa* ("executioner" *abosom*) in the late nineteenth century and first half of the twentieth century (Silverman 1987, 285). This shift corresponds to (a) the decline of Asanteman (Asante nation)

in the late nineteenth century and British colonial imposition; (b) instability in Akan society largely occasioned by colonial rule; and (c) the upsurge of what became the cocoa industry, which facilitated the rise and popularity of the *abosommrafoo*, the majority of which came from northern Ghana and Burkina Faso. The spread of the *abosommrafoo* parallels the spread of migrant workers who came from northern Ghana, Burkina Faso, and elsewhere.

In 1879, cocoa plants were successfully cultivated in the Akuapem area of the Eastern Region. The Gold Coast government took control of this industry by 1890. The cocoa industry's emergence led to not only sharp declines in palm and coffee products, but also occasioned one of the most crucial changes of the twentieth century in Akan (and Ghanaian) society. Thousands of farmers became prosperous and created tremendous income gaps between them and the urban professionals on the one hand, and subsistence farmers and underemployed migrant laborers on the other (Patterson 1981, 103). The outward expansion of the cocoa industry from the Akuapem area caused a migration of farmers who sought new lands for cocoa trees; cocoa regions depended on tens of thousands of migrant laborers who came from northern Ghana, Burkina Faso and elsewhere (Patterson 1981, 7).³⁴ The increase in the use of abosommrafo2, such as the Tigare 2bosom from Yipala in northern Ghana, parallels the increase in the cocoa cash crop that brought heavy social tensions as many farmers cultivated this crop and challenged the social structure that provided security for its members (Ventevogel 1996). 35 Major socio-economic changes usually alter a society's disease patterns, and the expansion of cocoa farming in southern Ghana provided a stimulus for opening roads and clearing forestlands for agriculture, which further facilitated the breeding of the mosquito that is the major vector of falciparun malaria (Patterson 1981, 1-4). The logic that industrialism, economic growth, and increased living standards produces better health conditions, as suggested by Patterson (1981, 8), is problematic and inconsistent. As Patterson (1981, 6, 9) himself notes, with urban growth there has been a decline in human life and health, and with higher incomes, consumers could choose nutritious foods or white bread, sugar, tea, tinned milk (for infants), and other foodstuffs of dubious value. The phenomena of deforestation and commercial lumbering, which began in the 1880s, allowed sunlight to reach pools of water creating favorable breeding conditions for malaria-carrying mosquitoes. Though these transformations present specific challenges to indigenous healers or their practice, the Bono have maintained an allegiance to their ancient Atano abosom despite the shifts in Akan society and spiritual practices, and still regard the *bosomfoo* as senior to the *bosomfoo*. The abosomfoshene for Taa Mensa has a position of authority above all individuals inclusive of the Takvimanhene, and the Bono in particular and the Akan

in general remain very much concerned with order and balance as reflected in the complementary yet distinct roles of its therapeutic specialists.

PROFILE OF PARTICIPANTS

Many indigenous healers within Ghana and across the African continent belong to various organizations. Several organizations and publications exist for propagating the work of indigenous healers and medicine; these efforts often lend themselves to issues confronted by indigenous medicine specialists, and their intended audience, across the African continent. The Médecine Verte ("Green Medicine") periodical published in Senegal since 1999 addresses issues such as the legal status of indigenous healers, cinema and indigenous medicine, and AIDS and AZT medications. The Traditional and Modern Health Practitioners Together against AIDS (THETA) is an organization based in Uganda that combines approaches from indigenous healers and biomedical doctors; members of Doctors Without Borders and the AIDS Support Organization of Uganda founded the organization (Engle 1998). The Association for the Promotion of Traditional Medicine (PROMETRA), which has over 450 "certified traditional healers," organized the first international conference on "traditional medicine" and HIV/AIDS in Dakar, Senegal in 1999 under the leadership of Erick Gbodossou, who is also the director of the Experimental Traditional Medicine Center in Malanga, Senegal. In the Ghanaian context, the Ghana Physic and Traditional Healers Association was originally incorporated as Ghana Physic and Traditional Healing Association under the Companies Code (Act 179) of Ghana August 25, 1969 for herbalists in Ghana. The name changed to Ghana Physic and Traditional Healers Association (GPTHA) February 15, 1973 to accommodate the varied indigenous healers beyond the herbalist (Warren et al. 1981, 5).

The organization was fraught by internal issues, especially those surrounding Dr. J. A. Nartey of Nsawam. Dr. Nartey, the first national secretary of the GPTHA, collected herbal medicines from healers intending to verify their potency and possibly profit from them (Warren et al. 1981, 6). Twumasi (1988, 24–25) argues the association failed because of the coalescing of varied healers representing distinct "subsystems" with disparate healing techniques. The Centre for Scientific Research into Plant Medicine has been accused of similar acts and was organized in 1974 at Mampon, Akuapem under the leadership of Dr. Oku Ampofo. It appears from one contemporary source that the center "remains active in encouraging healers to bring their preparations for testing both in the interests of safety and dosage and licensing products under strict safety regulations" (Agbovie et al. 2002, 2). The Ghana Physic and Traditional Healers Association (GPTHA) fragmented and later re-constituted itself

Table 2.4. Categorical Profile of Indigenous Healers

Name	Age	Type of Healer	Organizational Affiliation	Abusua ("clan")	Kurom ("town")
Afia Mframa	65	Okomfoo	GPTHA	Agona	Pomaakrom
Akosua Owusu	55	Okomfoo	GPTHA	_	Tanoso
Akua Sewaa	55	Okomfoo	GPTHA	Ekoona	Tanoboase
Atta Kofi	90	Odunsinni	_	Aduana	Nyafuman ("Kəmfokurom")
James Adampah	66	Odunsinni	_	Asona	Tanoso
Kofi Iddrisu	40	Odunsinni	Prince Ket	_	Kenten
Kofi Kumankoma	35	Odunsinni	GPTHA	Эуокоэ	Nyafuman ("Kəmfokurom")
Kofi Oboo	68	Odunsinni, Okyeame	GPTHA (until 1995)	Aduana	Nyafuman ("Kəmfokurom")
Kofi Owusu	51	Okomfoo	GPTHA	Agona	Pomaakrom
Kwabena Gyimah	55	Odunsinni	GPTHA	_	Nyafuman ("Kəmfokurom")
Kwabena Nyanko	20	Okomfoo	GPTHA	Bretuo	Krobo
Kwaku Gyan	130	Odunsinni	GPTHA	Asona	Mfante New Town
Kwaku Wiafe Kenten	32	Obosomfoo	GPTHA	Oyokoo- Dadiase	Oforikrom
Kwame Βεkoe	45	Okomfoo	GPTHA (Chairman, Takyiman branch)	Akinasi	Obooyawkurom
Kwame Mamadou	20	Odunsinni	Prince Ket	Non- Akan (Mossi)	Kenten
Kwasi Mensa	50	Odunsinni	_	_	Obooyawkurom
Kwasi Owusu	45	Okomfoo	_	Aduana	Seatwi
Yaw Agyei	37	Obosomfoo, Odunsinni	GPTHA	Akona	Nkoransa
Yaw Boakye	55	Odunsinni	GPTHA	Aduana	Takofiano
Yaw Mensa	54	Obosomfoo	GPTHA (Secretary, Takyiman branch)	Aduana	Nyafuman ("Kəmfokurom")

as the Ghana Traditional Medical Association (GTMA), though many still refer to organization as GPTHA. Many of the indigenous healers interviewed for this work are current or former members of GPTHA or GTMA, and a few either belong to no formal organization or have joined newly created groups in the Takyiman area. GPTHA will be used here rather than GTMA since the former acronym is still a current reference.

Using criteria outlined in chapter one for selecting indigenous healers, I endeavored to find and converse with a multi-layered and representative group as shown in Table 2.4. Three females and seventeen males ranging in age from 20 to 90—130 is treated as aberrant—institutionally represented one okyeame, three abosomfoo, seven akomfoo, and eleven nnunsinfoo, Since the institutions of nnunsinfoo, abosomfoo, and akyeame are largely or exclusively male production groups, the number of women healers in the gender-neutral role of akomfoo should not be alarming or interpreted as an issue of "gender disparity" or imbalance. In fact, as presented earlier, all akomfoo and abosomfoo are herbalists (nnunsinfo)) as well, which, if factored into the above tabulation, would only demonstrate the fluid or overlapping nature of the healers' work. Most indigenous healers had active membership with the Ghana Physic and Traditional Healers Association, and quite a few shared the same abusua or clan while dispersed in some of the same towns or villages throughout the Takviman district.

My first formal conversation occurred with Nana Kwaku Gyan at his home in Mfante New Town, Takyiman. The name of the town derives from the Mfantefoo (Fante people) who once lived there, though Nana Kwaku is actually from Ofuman. Nana Kwaku Gyan informed me that he was 130 years old—perhaps an exaggeration given the correlation between age, seniority, and high regard in Akan society—and he is an indigenous Bono of the Asona abusua. He is an odunsinni and a member of GPTHA, a group established through the efforts of the late Kwame Nkrumah.³⁶ Nana Kwaku Gyan explained that his grandparents, from whom he acquired and developed his medicinal skills, obtained their knowledge of healing while in Nsoko (Nsawkaw) and later moved to Ofuman. During the interview, Nana Kwaku Gyan referred to Nsoko as a central place where he derived his medicinal knowledge. Nana Kwaku Gyan welcomed me and even gave me some mətə (composite black powdered medicine) for my protection prior to the interview, and I was extremely impressed by the combination of his knowledge and humility. After the interview, he escorted me into a room where some of his materials were located and, through a brief demonstration, showed me a rock that functioned much like a magnet (after it was prepared to do so).

Nana Yaw Mensa, also known as Ayiso Donkor, is the *wofase* (nephew) of the late Nana Kofi Donkor as well as the late Nana Donkor's successor as the *bosomfoo* for the family *bosom*, Asubonten Kafina. Asubonten is a river in old Nyafuman, a constituent township linked to the ancient Bono capital of Bono-Manso. Asubonten Kafina is the core obosom located in Nana Kofi Donkor's compound; this Tano-derived *bosom* speaks the "old Twi" or proto-Akan language and is the source of a series of Asubonten abosom. Asubonten (asú—river, body of water; bo—created; tene—straight) generally means a river, but it is actually a "river that was created straight in which others may join but it still continues straight." I spoke with Nana Yaw Mensa at his home in Nyafuman, Takyiman; the area where his compound resides is also known as *Komfokurom* (indigenous healer's village). Over the years, I have shared this same compound with Nana Yaw Mensa and his family while in the Bono-Takviman area. Nana Yaw Mensa is 54 years old and an indigenous Bono of the Aduana abusua. He is a bosomfor for Asubonten Kafina and several other abosom, and an active member of GPTHA who serves in the capacity of secretary for the Takyiman branch.

While in Nyafuman, on different occasions, I interviewed Nana Kwabena Gyimah, Nana Kofi Oboo, Nana Kofi Atta, Nana Yaw Agyei, and Kofi Kumankoma. Nana Kwabena Gyimah, a 55-year-old odunsinni who developed his competencies through the late Nana Kofi Donkor, is a member of GPTHA. Nana Kofi Oboo (Oboo Tufour) is a 68 year old odunsinni and the *pkyeame* for Asubonten Kafina; Nana Obop is an indigenous Bono of the Aduana abusua, and he too developed his abilities under the guidance of the late Nana Kofi Donkor. Nana Kofi Atta passed in the summer of 2005; he was a 90 year old Asante of the Aduana abusua. Nana Kofi Atta was an *odunsinni* who specialized in male issues. His grandparents migrated from Asante, precisely from Tikrom near Kumase, and settled in Takyiman. Nana Kofi Atta developed his specialties under the late Nana Kofi Donkor and he did not belong to any indigenous healing association before his transition. Nana Yaw Agyei is a 37 year old Bono of the Akona abusua, which is actually known as Breman in the Nkoransa district where the Akona clan are found. Nana Yaw Agyei was an *bosomfoo* for his family *bosom*, but is now an *odunsinni* and a farmer. It appears he had some challenges within his abusua (family), and since the *bosom* belongs to his family, he ceased to occupy the role of *sbosomfos*. We did not discuss the events that led to him no longer being the bosomfoo of this family. Nana Yaw Agyei is a member of the Nkoransa branch of GPTHA. Kofi Kumankoma, a 35-year-old Bono of the Dyokoo abusua, is an odunsinni, a member of GPTHA, project manager for the Bonoman Resource Center for Indigenous Knowledge (BRCIK), and a son of the late Nana Kofi Donkor.

Nana Kwasi Owusu of Seatwi, like others I met at or through healers associated in some way with Komfokurom, is a 45-year-old Asante of the Aduana abusua. After developing his healing competencies under the late Nana Kofi Donkor for seven years, Nana Kwasi Owusu graduated as an okomfoo and settled in Takviman where he became intimately associated with Nana Kofi Donkor in a rather informal association. Nana Kwame Bekoe of Obooyawkurom (lit. Oboo Yaw's town) is a 45-year-old Bono of the Akinasi abusua, and Nana Bekoe is not only an *akamfoa* but also the chairperson of the Takyiman branch of GPTHA. I came to develop very high regards for Nana Bekoe. As an *skomfos* who is dedicated to his work and *abosom*, he represents some of the exceptional qualities of that institution. Nana Kwasi Mensa, also of Obooyawkurom, is a 50-year-old odunsinni and the wofa (maternal uncle) of Nana Kwame Bekoe. Nana Kwasi Mensa had no association with any indigenous healing association. Nana Afia Mframa of the Pomaakrom (Apotadee) is a 65-year-old Bono of the Agona abusua. Nana Afia Mframa is an *skomfoo* of the Mframa *sbosom*, a member of GPTHA, and a relative of Nana Kofi Owusu, whom I will speak about shortly. Nana Akosua Owusu of Tanoso is a 55-year-old Bono, an okomfoo, and a member of GPTHA.³⁷

James Adampah of Tanoso is a 66-year-old Bono of the Asona abusua, and an odunsinni who acquired his knowledge of medicine from his family. He is not a member of GPTHA but rather a local healing group whose origin or state of affairs is unknown. Nana Akua Sewaa of Tanoboase is approximately 55 years old and considers herself a Bono and Asante of the Ekoona abusua. Nana Akua Sewaa is an okomfoo for one of the abosom kept in the same room as Taa Kora and she is a member of the Kumase branch of GPTHA. Nana Akua Sewaa was once a Christian who fell into spiritual communion with an *bosom* and, thereafter, became an okomfoo. Nana Akua Sewaa was very much concerned about the perceptions and disrespect of those of non-indigenous "religious" systems. Nana Akua informed me that many Christians and Muslims speak negatively about the indigenous healer's work and ridicule the indigenous African spiritual system as not a positive or worthwhile vocation for one to pursue. Nana Akua Sewaa, with certainty, noted, "if this work was not good I would have stopped being an okomfoo. I have the belief that this [spiritual system] is very good, [for] Onyankopon created all of us and whatever Onyankopon created is good." Nana Kofi Owusu of Pomaakurom (Apotadeε) is a 51 year old Bono of the Agona clan.³⁸ Nana Kofi Owusu's family migrated from Denkyira about 200 years ago and came to Takyiman. Nana Kofi Owusu is an akamfoo of Mframa and several other abosom, and a member of GPTHA. His main abosom are Mframa, the elder *bosom*, and Bogyako, who is an *bosombrafoo*.

Nana Yaw Boakye (Issifu Bombay) of Takofiano is a 55-year-old Bono of the Aduana abusua, and a practicing odunsinni who has a membership with GPTHA. Nana Yaw Boakye was born in Bombay where his father fought in World War II; Nana Yaw's father transmitted his healing knowledge to him before passing. Nana Kwaku Wiafe Kenten of Oforikurom (Ofori's town) is a 32-year-old Bono of the Dadiase and Dyokoo mmusua (sg., abusua). The Dadiase are a smaller clan under the larger Dyokoo abusua. Nana Kwaku Wiafe Kenten is an *bosomfoo* for Druye, a river-derived *bosom*, and a member of GPTHA. Dkomfoo Kwabena Nyanko of Krobo is a 20-yearold Bono of the Bretuo *abusua*. He is an *akamfoa* and a member of GPTHA. Kwame Mamadou of Kenten is a 20-year-old Mossi from Burkina Faso who was born in Takviman, though reared in Mossi country (i.e., Burkina Faso). He is an odunsinni who works with a partner, Kofi Iddrisu. Kofi Iddrisu is a 40-year-old Bono who apparently did not know his clan when asked. Kofi Iddrisu is an odunsinni who studied under Boafo Opon (Oppong), an elephant hunter. Both Kofi Iddrisu and Kwame Mamadou operate a thriving herbal center that provides indigenous medicines and related services. The two are members of the Prince Ket (healing) association.

HEALERS' PERSPECTIVES, CONTEXT OF INDIGENOUS HEALING AND PRACTICE

In contextualizing this study, it became necessary to frame specific questions, mostly in the first category of questioning, to solicit information that would provide an appropriate setting with requisite considerations. On the question of what is the natural or optimal environment for humans to live and develop, a majority of the healers had a distinct preference toward a forest-village context—that include rivers, mountains, trees, and other elements associated with a natural environment—because of the conduciveness of that context and its ability to greatly facilitate their healing practice. Nana Kwaku Gyan captures this inclination well: "As far as my work is concerned, I want forests and trees to be around me and not to destroy the whole place. I prefer to be in a village so that I can find the medicine for my practice; Accra [the capital city] would not be conducive." Several indigenous healers, who directly associated the forest-village environment with conceptions of human beingness, disease, and medicine elaborated on the idea that the forest-village context was the most natural environment for human development.

Onyankopon (the Creator) created humans to come and live on this physical earth, and then make use of the environment, especially, the trees, to treat diseases and so forth. Onyankopon created humans on

this earth and asked humans to use the leaves to treat diseases, made animals and had humans use them as food as humans are the most superior of all the mammals. As soon as one is born into this physical world, then the condition of sickness is also attached to that person, that is, humans are liable to get sick.³⁹

Onyankopon gives each person an obofoo who helps that person to live, receives knowledge or wisdom, informs him or her how to make use of their environment to collect medicine or to use this or that, and always speaks and travels with humans. The obofoo communicates to one's spirit and guides it away from harm.⁴⁰

The two healers who stated a preference for a city environment, such as Accra or *aburokyire* (foreign, abroad), did so for reasons related to economics and certain urban features; otherwise, both associated the natural environment of humans to the coolness of the forest-village context, mountains, trees, and various bodies of water. Unrelated but significant perspectives, of which there were several, revealed a nostalgic or reflective moment wherein these indigenous healers contrasted the present and past condition of the forests and how difficult the phenomena of deforestation, forest fires, and exhausted bodies of water (of cultural and spiritual significance) has made their search for and use of certain medicines. One indigenous healer informed me that the Bono people at one point lived (further) in the forest, but as the forest receded, they moved closer to the savanna area. 42

Some writers such as Rattray (1923, 1927) and Warren (1974, 1975, 1986) assigned the term Onyamesom (onyame—"God"; som—to serve) to what they perceived as the "religious" practices and institutions of the Akan. The term som or esom is a concept of service, broadly defined and employed, which some have used in the "religious" context, such as in the construction of "Onyame-som." The term Onyamesom appears to be more the conceptual relic of foreigners who, through familiarity with the Akan (Twi) language, constructed "Onyame-som" to accommodate their notions of "God" and the "worship" thereof. The term Onyamesom is pervasive, as a term that has come to define Akan "religion," but inappropriate by virtue of the fact that the Akan do not worship nor do they have a word that encodes the varied meanings and (mis)uses that foreigners ascribed to the term "God." In seeking to address the dual concerns of appropriate terminology and context, I sought to probe all the indigenous healers interviewed about a relatively rare and little known "call-and-response" phrase that spoke to indigenous notions encompassing what the Akan do in their spiritual life and practice. Though all my participants were able to elaborate

on the literal meaning of the phrase, Nana Kofi Kyereme appeared to be the only one who really knew its meaning beyond literal denotation. The phrase (a)kom pan ye adee pa literally means, "ancient or old akom is a good thing." According to Nana Kofi Kvereme, (a)kom-pan is a saving or call that refers to both a "good cloth" and the "old akom." Ades pa (a thing that is good) is the response to the call that also became the name of the association established sometime before 1957 for Bono-Takyiman akomfoo. This phrase appears to be the closest indigenous conception to what some might refer to as "religion," notwithstanding that the term religion is clearly limited in its ability to act as an appropriate reference to Bono (Akan) spiritual life and practice much less speak to the fullness of the spiritual-temporal veracity that exists among the Akan. At another level of meaning, the phrase (a)km pan ye adee pa is symbolic of Bono (Akan) culture, tradition, and spirituality because the phrase, in the form of a cloth, contains the analogy of an ancient cloth that is worn, washed, and passed on from one generation to the next without it fading. In other words, Bono (Akan) culture and tradition is analogous to the meaning embedded in this cloth metaphor and for the specialists of the indigenous medicinal system. the spiritual-temporal work that they do is a thing that is good (adee pa).

In the minds of many healers, the so-called supernatural was natural and the dichotomy often established by theoreticians and other academics is an artificial one that has no real meaning in the life and practice of the people but more so in the minds of those who organized reality in adversarial or antithetical terms. Indigenous healers were asked to define the meaning of the phrase (a)kom pan ye adee pa and the results were very consistent if not repetitive. All of the responses elaborated on the notion of goodness in relationship to the varied layers of akom and the larger cultural construct of which it is a part. Rattray (1927, 42-43) observed on ceremonial days, the *skomfowa* (lit. "small skomfoo" or initiate) must fast all day since, according to one of his informants, if an okomfoo or okomfowa is full, he or she will not hear the voice of their obosom,44 Moreover, the *akamfowa* is admonished not to drink, gossip, quarrel, fight, go out with peers at night, never to command or enjoin solemnly his or her bosom to kill anyone, and must salute his or her elders appropriately (Rattray 1927, 43). Nana Kofi Owusu argues that if a healer does not have the proper knowledge that healer cannot adequately teach his or her *skomfowa*, and this is why the work associated with *akom* or *akom* studies is never ending. The idea is that an *akamfowa*, even after the kamkuma "test" to "graduate" to an *akamfoa*, cannot learn everything about akom at one time (even with the help of a facilitating okomfoo) since it is necessary to advance one's self by learning about and through akom.

Thus, *akom*—as process, procedure, and tradition—exists to facilitate life and living in the temporal as a sacred phenomenon rooted in creation and the Creator. *Akom*, in the sense of interpreting or categorizing it, functions much like the Dagara concept of *yielbongura* ("the thing that knowledge cannot eat"), which "suggests that the life and power of certain things depend upon their resistance to the kind of categorizing knowledge that human beings apply to [almost] everything" (Some 1994, 9). A representative perspective on the practice and meaning of *akom* or *(a)kom pan ye adee pa* is as follows.

Composite Definition of (A)kom Pan YE Adee Pa

- Good Bono akəm is good;
- A good practice of akom brings goodness as a reward;
- It is the reputation of a good *akomfoo* which remains after his or her death;
- The practice of akom saves lives;
- It is something good because *Onyankopən* gave us [Bono healers] this opportunity to be healers; if it was not good, *Onyankopən* would not give it to us;
- It is the name given to the Bono akəmfoə association;⁴⁵
- It is an *akamfoa* that does good to expand his family and to be notable and respected for his or her healing work;
- It is the ability to do akom very well and to heal diseases;
- It is something we use to protect human beings;
- It is an *akamfoa* who can save people's lives (*gye nnipa nkwa*) and use the abosom to right or settle a matter for the better;
- It is *nkonam* ("powerful in medicine") and the ability to do good work;
- It helps people in health and through divination;
- *Akom* is something *Onyankopon* created to help human beings living on this earth to use to help humans, save human life, and to do good work;
- *Akom* is work that is done for the whole nation so that the nation might benefit from *akom* for something to develop or go well;
- It is an *akamfoa* who is able to cure diseases and help people with their challenges;
- It is the ability to use akom to do good work;
- It is the good work that the *homfoo*, odunsinni or healer might do; and
- It is the ability of an *akamfoa*, who is in spiritual communion with the *abosom*, to divine or discover and facilitate things to go well.

Good (1994, 66, 70) argues that biology is within culture, and disease is fundamentally or exclusively biological. Those who study herbal medicine in Ghana take the position that "[d]iseases occur when [humans] deliberately or inadvertently disturb the balance of [physical and immaterial] forces," and that "[m]ost recent authors agree that causality is the main criterion for disease classification. . . . [though ideas] on disease causation are subject to change" (Wondergem et al. 1989, 49). To the Akan, γadeε (γaw—painful; adeε—thing) refers to "something that is painful," as well as its synonym yares, both of which include but go beyond the biological connotations of disease. Morphologically, yare ("to be sick") easily becomes eyare ("sickness"), eyare-dom ("epidemic"), oyare-foo ("sick person"), yare-susow ("to be an invalid"; obubuafoo, "invalid"), ayare-sa ("act or art of healing"; lit. "the cutting way of sickness"), and ayare-sa-bea ("place of healing"; bea is a locative marker here). Conceptualizations of sickness or disease, most often regarded as synonyms, appear in descriptive terms, as was the case with (a)kom pan ye adee pa. The following, therefore, represents a collective perspective on yaree anaa yadee (sickness or disease).

Composite Definition of Yaree Anaa Yadee (Sickness or Disease)

- Something negative that has come into the body;
- Something one contracts and without medicine that person can die;
- Something not considered a matter of high priority because Bono people have knowledge to control or cure it;
- Something to be taken seriously, something to be afraid of for if one does not work hard against it then one may die from it;
- Something that is marked by a person changing from their normal state to another state in that his or her system has changed;
- Something that may require [a healer] touching [the affected area] to diagnose the problem and confirm whether or not the patient has a disease;
- When a person comes to a healer and complains this part or that part is not well;
- When someone comes to a healer and complains about an illness, the nature
 of that disease or illness may be spiritual in terms of cause and treatment;
- A disease; disease is when someone is sick and there are so many kinds of disease;
- Someone's complaint:
- Something that will come and that a person is liable to get while living and growing;
- Someone who is sick; meaning, their personality has changed;

(continued)

Composite Definition of Yaree Anaa Yadee (Sickness or Disease) (continued)

- When a patient comes or when someone complains; a person who has changed from their normal position to something else either spiritually or physically;
- When someone's soul, physical and mental being has been affected and caused by spiritual or other factors;
- A phenomenon that does not mean one thing;
- When someone complains, which indicates that a patient has a disease; and
- When it comes to a person, that person does not feel like they are living on this earth.

The factors that account for sickness or disease causation include asuman ("talismans"), mframa ("wind"; a reference to airborne allergens or bacteria), bad food, too much alcohol, overeating, tabooed food, abonsam (evil and/or evil doers), people, spiritual factors, poor hygienic practices, offending one's elder, bayie ("witchcraft" or the power thereof), life situations, and germs and parasites. In essence, these factors subsume social, environmental, temporal and spiritual realities in terms of the entities or occurrences that facilitate the phenomena of disease or sickness in all its dimension and scope. By way of example, the signs or symptoms of one or several factors include (a) boils on the neck, (b) a reduction in the size of one's face, (c) inability to speak normally, (d) weakness, (e) inability to eat or to be punctual in one's tasks, (f) fracture, (g) weak joints, (h) protruding or abnormal stomach, and (i) inability to walk or see properly. One or a set of factors that account for the recognition of the sickness can cause a multiplicity of sicknesses observable through the foregoing symptoms. Common types of sicknesses include, but are not limited to, ti yares or atipaes (headache), asenam (infant and children's disease), ⁴⁶ yafunu yareɛ (stomach disease), kwata (leprosy), ⁴⁷ ɛdam (mental disease; madness), nkora vares (children's disease), ananosono (children's disease), 48 esoro yaree (convulsions), nkonkon (cough), nseeye (skin disease), and mmubuiie (paralysis, stroke), and osekye or ntoburo (measles). Table 2.5 lists common, yet descriptive categories of sickness or disease.

Yaree, yaree pa, yaree hunu, honam yaree, and nyarewa are essentially synonyms that reference a shared idea but remain distinct in terms of the encoding of each sub-category which shares notions of "natural" or "ordinary" disease. Rather than one category with no distinction, I created a "set" based upon those distinctions articulated by my respondents. The varied and sometimes overlapping categories of sickness or disease often require the indigenous healer to hwehwe mu, that is, to look carefully to find

Table 2.5. Categories and Descriptions of Sickness-Disease

Category	Description	Respondents (N=20)
Sunsum yaree, Sunsum mu	Spiritually derived disease which includes <i>bayie</i> ("witchcraft"; see glossary for fuller meaning); Disease in or of the spirit and is often described as a disease that comes back again and again after taking medicine for it	18
Yareɛ	A naturally caused disease that is not	6
Yareɛ pa	difficult to cure and is referred to as a personal or ordinary disease; minor,	5
Yareɛ hunu	natural, or ordinary disease. Honam	2
Honam yareε	(ho—self or body; nam—flesh) is a natural disease confined to the	2
Nyarewa	human body	1
(A)bonsam yareε	Evil disease or disease caused by evil; usually difficult to cure	3
Aduto	Disease caused by <i>Aduto</i> (<i>adu(ro)</i> — medicine; <i>tõ</i> —to cause to fade, wither, to burn or roast with heat); the nature and effects of the "medicine thrown" and stepped on by its victim depends on the intent behind the use of <i>aduto</i>	1
Nkora yareɛ	Children's disease	1

out the cause(s) of the specific illness and its course of treatment. Bono healers recognize and address inherited diseases as well as a range of other disease categories (see Table 2.5). The most notable or frequently referenced disease category is that of *sunsum yaree*. Though it is often translated as "spiritually derived disease," a more descriptive rendering would reveal how Bono healers actually conceptualize this phenomenon. *Sunsum yaree* is regarded as a disease or sickness that can be contracted through sexual intercourse with another person's wife, spiritual means, *bayie*, *abayifoo*, snakes placed in a person's abdomen, evil doers, talismans or *asuman*, *aduto*, hatred, revenge, and cursing someone by way of an *abosom*. Aduto minor disease types are not difficult to cure and are synonymous with the patient citing the sickness or the symptoms thereof on their own, stomach pains, offending one's elder (of which making an apology is the medicine), malaria,

challenging and varied life circumstances, germs and parasites, and headaches and fevers. In effect, any disease cured by a medicine or several medicines in a short period can be considered a minor or ordinary disease, whereas those that take longer are potentially serious or spiritually related diseases, such as infertility, which can be both minor and serious. ⁵⁰ There was overwhelming consensus that *sunsum yaree* requires, depending upon its duration and severity, a great deal of spiritual effort in order to eradicate it. *Sunsum yaree* is often a reoccurring disease that is persistent and relatively unaffected by treatments that consist of plant medicines alone. Most indigenous healers say that hospitals are unable to cure this category of disease, and though not all *sunsum yaree* leads to death, it can certainly destroy the personality of societal members and ultimately the personality of the nation.

Many inhabitants of the Bono-Takyiman area, including hospital workers, admit that *sunsum yaree* is best examined and treated by the *odun*sinni or okomfoo and the abosom. This admission supports the view that biomedicine is limited in cases of chronic conditions (e.g., strokes, heart disease) as major causes of morbidity and death, as well as in instances where the pattern of the disease changes. Given the character and modes through which sunsum yaree manifest, it is not surprising that most indigenous healers addressed this category of disease with more frequency and in more depth than other categories of diseases (see Table 2.5). According to those healers, sunsum varee is not easily identifiable as is, for instance, a swollen limb, and is often difficult to diagnose and understand how it came about. Since the same swollen limb may not be the result of particular foods consumed or work-related injury but rather the physiological manifestation of the effects of spiritual agencies or the malicious intent harbored by certain people. Some patients, who are afflicted with a form of sunsum yaree such as bayie, are said to grow lean or become deformed inside and unable to provide the indigenous healer with some sense of what has happened to them. According to Nana Akua Sewaa of Tanoboase, if a person's okra (soul) does not agree with the bayie, then it makes him or her sick because of the energy of the *bayie* being stronger than that person's spirit. Hence, the proverb, se wo sunsum ye duru a, əbayifoə ntumi wo (if your sunsum is heavy or strong, the *bayifoo* cannot overpower you).

The idea that "sickness is sickness but there are different kinds of sickness" is indeed compatible with the notion, "there is no difference between yaree pa [natural or personal disease] and sunsum yaree," since exotic dichotomies of "natural" and "supernatural" diseases make little to any sense in the Akan world of healing and wholeness. ⁵¹ In other words, these ideas, which appeared in quotations, express a consistent understanding that says the so-called supernatural is in fact a natural part of reality, and disease

is disease. However, since there are varied categories of disease, those categories presuppose several modalities of treatment or approaches to healing. By way of example, the inability to sleep is described as both *honam yaree* and *sunsum yaree*, though as *sunsum yaree*, the inability to sleep can develop beyond that state to insanity or another form of mental disease. This is where divination becomes operational as a procedure to discern if the patient has a spiritually or non-spiritually related disease and, if so, what type, how best that type can be treated, who should be involved in the process, and when and where the necessary healing work should be done. In this process, according to Nana Kofi Owusu of Pomaakrom, "we the *akəmfoə* will pass the matter through our elders, the *abosom*, by way of consultation to help me to cure the disease. [We] the *ɔkəmfoə* or the healer cannot say that [we] healed the disease but the patient will inform the healer that the problem has been solved. This way, the patient knows he or she has been healed."

Indigenous healers were asked if there existed ways in which they defined the causes, medicines, and prevention strategies related to disease or sickness. Almost all of the respondents focused on disease causation and to a lesser but equal extent on medicine and prevention. Table 2.6 is a summation of those responses and outlines some of the key concepts and practices relevant to disease causation, and medicines and prevention strategies employed.

Table 2.6. Selected Notions on Causation, Medicines, and Prevention

Illustrative Notions of Disease Causation

- If a person is living without sickness, they cannot grow since sickness helps a child build their immune system for adolescent, adulthood, and later on in life; disease helps the senses to grow by virtue of early exposure and adaptation.⁵²
- *Bayie* ("witchcraft") can be used to procure disease as well as give it to another person.
- When a patient's disease appears to be beyond the healer's control, he or she consults the *bosom* he or she is associated with to find out the actual cause(s).
- Sources of sickness includes *nsuo* (water), chemically infected foods (through insecticides) *sunsum* ("spirit"), food left unattended, *mframa* (wind, air), defecating by river banks and unprotected waterways, *aduto* (negative medicine), dislike and revenge, cursing someone, flies, jealousy, *bayie*, lack of proper hygienic care, cleanliness where one sleeps, *ɛfi* ("dirt"), not enough air (to breathe), disrespect, inappropriate behavior (according to what is culturally acceptable), proximity of toilet to kitchen area, and abuse of elders.

Table 2.6. Selected Notions on Causation, Medicines, and Prevention (continued)

Illustrative Medicinal Usages

- Medicines are generally administered by way of herbal baths, oral ingestion, and enemas.
- Some healers place medicine on their eyes as a diagnostic tool to "see" the actual disease.
- Spiritually potent medicine can be obtained and used to transmit disease through spiritual means or the air to punish someone; *asenam* is an example of a disease that targets the inborn child of pregnant woman. It is said that the same person who confers *asenam* onto another also has the medicine to cure it. Such an act—of causing a problem and then coming to the rescue with the cure—is regarded as a very negative way to generate money.
- It is said that the *abosom*, when one is asleep, helps him or her to gain knowledge of medicine and how to use medicine to prevent diseases.

Illustrative Disease Prevention Strategies

- Preparation of food should not be done near one's toilet or where bath water resides since these places harbor disease.
- Cleanliness helps and protects human life.
- *Mɔtɔ* (a composite black powdered medicine) is also used to prevent harm.
- Fiagoro are herbs used to prevent guinea worms.
- *Abennuro* ("palm medicine") is a palm nut soup prepared with medicine and used for pre-natal care from the first to the ninth month of pregnancy. After the child is born, treatment with medicines in the form of herbal baths continues as a preventative measure so that the child gains physical strength (*ahoɔden*).
- In the past, as the locally reckoned year ended or as the dry season approached, the elders consulted the *abosom* to find out what epidemic or outbreak of disease was forthcoming and how it might affect children and adults. Efforts were then made to protect the people from such diseases by having each household provide eggs for a ritual that served the purpose.

Discussions on the concepts and categories of medicine, sickness, and healing imply a perspective on the constitution of knowledge itself. Often, in academic discourse, there exists a disjuncture between the conceptualization and currency of knowledge and belief. "Belief as it is employed in anthropology," according to Good (1994, 17), "does indeed connote error or falsehood." Supposedly, "cultural others" believe or possess "belief systems"

while Europeans and their ideological progeny know or have "knowledge systems." These "knowledge systems" codify and re-present the "cultural other" as "believers" or "folk scientists" and codify the anthropologist as academic missionary to rescue them from themselves as well as represent these "others" as they would want to be represented. The above conceptualizations linked to medicinal and healing knowledge can only be viewed in terms of the nature of Akan knowledge, specifically, the construction of knowledge and wisdom by indigenous healers. Knowledge or wisdom in Akan society is not the property of elders or an individual, and there is a clear recognition that each member of society has access and an opportunity to acquire both. Conceptual evidence for this recognition is archived in proverbs—such as "a wise child speaks in proverbs" and "if an elder does not possess anything else he or she possesses an accumulation of advice"—and Akan society allows for the development of specialists or those whose wisdom or knowledge is far greater than general members of that society. How indigenous healers interpret what is knowledge and what is wisdom, particularly as it relates to medicinal or healing knowledge and wisdom, can be discerned from the composite definitions for both nyansa (wisdom) and nimdee (knowledge).⁵³ The collective ideas concerning nyansa and nimdee are as follows.

Composite Definition of Nyansa

- Nyansa is something Onyankopon created for humans and a person or child is born with nyansa, though children need to develop the ability of using nyansa;
- *Nyansa* is older than *nimdee*; it is obtained from one's parents, and respect for them allows for the transmission of *nyansa*; and
- Nyansa is described as (a) the idea to plan to do something; (b) the energy used to think; (c) the know-how used to apply knowledge and, when knowledge is applied, to acquire nimdee; (d) something that is learned before nimdee; (e) something that makes one think and think again before reacting or responding; (f) a special

Composite Definition of Nimdee

- Something one needs to search for and that can be acquired from someone else;
- Something a person is not born with, but is acquired;
- The knowledge of how to go about what one plans to do and *Onyankopən* can help one to learn this, particularly, *nimdee* related to spiritual and healing work;
- Know-how, *adwuma* (work) that is done or work one learns to do;
- Mmataho, which refers to the act
 of attaching or joining one thing to
 another, suggests nimdeε is attached to
 nyansa;
- Something that is heavier or more substantial than *nyansa*;

(continued)

Composite Definition of Nyansa (continued)

gift from Onyankopon; (g) the ability or capacity to use the mind to do or create; (h) prior experience as expressed by the proverb nea wahunu bi pen se yekyiri ("the one who has seen or experienced it always says we taboo it [but those who have not seen it will say it is not taboo]"); (i) a prerequisite to nimdee; and (j) an expansive sense of how to do something.

Composite Definition of *Nimdee* (continued)

- The plan of how to make or create;
- Someone with knowledge who is able to make a contribution (with that knowledge);
- Something one goes to learn; and
- The specificity of how to do something. *Nimdee* is also related to the term *adwene* (thought, thinking), which is described as the ability or sense of thinking, but there is a distinction between *nyansa* and *adwene*.

Almost all of the indigenous healers interviewed agreed—with the exception of one who qualified her response—that in fact there was a distinction between nyansa (wisdom) and nimdee (knowledge).⁵⁴ The one exception stated, "nyansa and nimdee is one thing because you always apply nyansa for nimdee. You might have nimdee about how to cure or treat [a patient] but if you do not have wisdom about how to apply this knowledge then it does not move [i.e., work] well."55 Both nyansa and nimdee, according to Nana Kwaku Gyan, have their own functions and are akin to the fingers of a hand, which differ in size and height but have their own specific utility. In terms of the procedural relationship between wisdom and knowledge, it was expressed that wisdom is older than knowledge; without wisdom, one cannot acquire knowledge. This, logically, made sense in that it was consistent with the interpretations derived from all respondents. However, it appears that knowledge is considered heavier or more substantial than wisdom for reasons that one is born with the capacity for wisdom but knowledge has be learned and developed, and thus it grows, accumulates and becomes "heavy" because of one's journey through life. "Wisdom," according to Nana Kofi Oboo, "is the ability to use the mind to plan something of benefit [to another person or the nation] while *nimdes* is the question of knowing how to do something."

During the course of my formal conversations, responses to two questions associated with notions of righteous and unrighteous conduct revealed that indigenous healers had a very firm conception of indigenous standards or ethics for indigenous therapeutic practitioners. Recall the developmental period for the <code>pkomfowa</code>, wherein he or she

is acquiring the practical, ethical, and conceptual dimensions of the healing vocation, and his or her prohibitions and overarching guidelines for conduct. The *okomfowa* was consistently admonished not to drink, gossip, quarrel, fight, go out with peers at night, never to command or enjoin his or her *obosom* to harm or kill anyone, and too salute his or her elders appropriately (Rattray 1927, 43). Compare these "standards"

Characteristics of a Corrupt or Unrighteous Indigenous Healer

- An *akamfoa* or *adunsinni* that does not do *akam* very well and is unable to withstand external forces that may question or weaken the ability of a healer to do *akam* work;
- One whose *nneyee* (actions, behavior) is poor, whose *suban* (character) is poor, and whose attitude toward patients and those around him or her is also poor;
- One who provides medicine that does not cure and refuses to give medicine to treat patients who cannot afford the medicine;
- One who sleeps with someone else's wife, deceives, does not give due respect, and is ill-tempered;
- One who does not have medicinal knowledge but pretends to do so and provides the wrong medicine;
- One who is poorly trained or lacks training as an indigenous healer, and is regarded as a *hunantete* (unrighteous healer);
- One who attempts to disgrace or harm another indigenous healer in his or her attempt to spiritually commune with an *obosom* or to do *akom* work very well;⁵⁶
- One who is greedy (for money), overcharges, uses his or her knowledge for killing and other malicious acts, and gets drunk sometimes while she or he has clients;
- One who keeps an unclean working and living environment (e.g., medicines are kept near a restroom);
- One who has or uses spoiled medicine, usually due to improper care and preservation techniques; and
- One who does not allow his or her patients to tell others the good (or bad) job they have done but rather uses advertisement, whether on the radio or by making signboards, to market their service.

Characteristics of a Honorable or Righteous Indigenous Healer

- One who provides good medicine and never charges too much; in the past, money was collected after the treatment and recovery;⁵⁷
- One with good conduct who treats patients with courtesy and care;

(continued)

Characteristics of a Honorable or Righteous Indigenous Healer (continued)

- One who provides medicine that works well and whose clients speak well about his or her practice in public, and thus is able to get more and more clients;
- One who is able to cure, help people, facilitate things through the *abosom*, divines with accuracy and to whom post-treatment patients come back to give *aseda* (thanks; monetary and non-monetary payment for service rendered);
- One who volunteers his or her service and is able to help a patient who is poor;
- One who is not greedy; an honest or truthful person, and one in whom others have great confidence;
- One who refers a patient to a good healer after figuring out that the problem is beyond his or her control or ability; and
- One who does not prefer money to the life of the patient.

or characteristics with those shared by the indigenous healers. The latter are outlined above in two categories and each category contains several converse statements found in the other.

In this chapter, I provided an historical setting that situated the Bono in the historicity and culture of the Akan without undermining the cultural elaborations engendered by and specific to other Akan societies. The representative perspectives addressed herein certainly have implications for other Akan societies, and since the Akan are at least the cultural nucleus of Ghana, those implications affect health and healing in the larger Ghanaian society. The conceptual outline of the Bono (Akan) spiritual-temporal perspective was an illustration of essential concepts that underpin Akan approaches toward life and living, and employed by indigenous healers and participants of the indigenous therapeutic system. Support for the existence and utility of such a conceptual framework exists in the healing and environmental perspectives of healers; definitions and categories for sickness or disease; an indigenous definition of the Akan spiritual system described as akom pan ye *adeε pa*; overwhelming reference to the spiritual (as linked to the temporal) as the ultimate source of sickness and medicine; the distinction between wisdom and knowledge as well as the qualification of both; and the standards of conduct established and employed by indigenous healers.

The standards of conduct and the distinctions between one who is knowledgeable and one who is wise, or both, appear to be complementary in that the two allow for or provide the basis by which to establish a system of accountability within the indigenous therapeutic system. As in all vocations, there are those who are committed to their "calling" and approach that calling in a righteous manner, and there are those who are less than legitimate

and therefore misrepresent the vocation they claim to be a part. Given the standards of conduct, the distinction in constitutions of knowledge and wisdom, and the varied categories of indigenous healers and their functions, the dynamics and potentialities of the indigenous therapeutic system (as represented by the Bono) offer a transparent picture of the system itself and its invaluable role in addressing issues of health and healing in Ghana. For too long, this and other indigenous knowledge systems have been misrepresented, ill-conceived, and simply not presented on their own terms in the literature (despite intentionally using indigenous concepts) and, as a result, the knowledge produced on those systems is more the "inventions" of anthropologists, historians, and ethnographers. It is certainly interesting, in the last two decades, how indigenous knowledge has been "discovered."

Chapter Three

Aduro: Indigenous Conceptions of Medicine

For one thing, the healer devotes [him or herself] to inspiration. [He or she] also lives against manipulation. . . . If I'm not spiritually blind, I see your spirit. I speak to it if I want to invite you to do something with me. If your spirit agrees it moves your body and your body acts. That's inspiration. But if I'm blind to your spirit I see only your body. Then if I want you to do something for me I force or trick your body into doing it even against your spirit's direction. That's manipulation. The healer is a lifelong enemy of manipulation. The healer's method is inspiration.

—Ayi Kwei Armah, The Healers, 80

INTRODUCTION

In the general scope of what is considered medicine, each disease or disorder is regarded as mutually exclusive from another, yet each disorder is presumed, but rarely proven, to have unique pathophysiology (Scalding 1996; WHO 1992). Medicine is thus defined as the science of diagnosing, treating, preventing or alleviating disease and other damage to the body or mind, and encompasses treatment by way of drugs, diet, exercise, and other non-surgical means. In the practical arena, medicine is considered an agent, such as a drug, used to treat disease or injury, or more broadly, something that serves as a remedy or corrective measure in the biomedical or social sphere. In the indigenous domain, the pervasive definitions of indigenous medicine are that of "shamanistic" practices or beliefs, including ritual practices or sacred objects, believed to manipulate natural or "supernatural" powers or serve as a precautionary or remedy. Disease, which medicine is called upon to address, is viewed as an impairment of health or a condition of abnormal

functioning resulting from various causes and characterized by an identifiable group of signs or symptoms. Morbidity is a synonym for disease.

If disease is an impairment of health, then what is health? Health is commonly defined as freedom from disease, pain or abnormality whereby one is sound or whole in body, mind, or soul. Here, the conception of soul is interchangeable with mind. If the foregoing reflect fundamental conceptions of medicine—viewed as the common denominator in the equation of restoring or maintaining health—accepted by general scholars and biomedicine practitioners, the question then becomes what is "medicine" to indigenous healers of Takyiman?

INDIGENOUS CONCEPTIONS OF MEDICINE

Ghana is one of several countries covered by the Guinea-Congolian rainforest, and the forest zone represents approximately thirty-four percent of Ghana's total area while 200 or so forest reserves account for twenty percent of this zone (Abbiw 1990, 1). The forest not only protects watersheds, catchment areas, animals and crops, but also provides timber, fiber, rubber, fuel wood, chewing sponges, teeth cleaners, binding materials, pestles, poles, wild fruits and vegetables, honey, drinking water, beverages and wines, latex, gum, resin, beads, musical instruments, minerals, and poisonous and medicinal plants (Ibid., 5-21). When confronted by the question of what is "medicine," indigenous healers provided insightful, yet concise responses that complemented each other. The lack of incompatibility represents greater conceptions held by indigenous healers, and is, therefore, the threshold for future investigations on appropriate interpretations related to the content and context of indigenous medicine. The general term for medicine is aduro, which is a multilayered concept that does not relate to herbs or plants solely but to a range of organic and non-temporal elements. The composite definition of aduro is (a) root medicine wherein the root is the most significant or potent medicine from which the potential (leaves) grow; (b) ahaban (herb, leaf); (c) bene (cooked in the sense of being built or prepared medicinally; power in medicines; cooked with medicine); (d) medicinal plants, roots, bark; (e) someone who is spiritually "well-cooked" (i.e., powerful); (f) something Onyankopon created for humans to cure and treat diseases, and protect against illness; (g) ntini nhini (medicinal roots); (h) anything used for curing, preventing or treating disease; and (i) ahama (creepers or vines) that Onyankopon has blessed with powers to enable healers to cure sickness and other life challenges. Proverbs such as aduro ye ahama (medicine is a creeper or vine) and aduro ye bene (medicine is wellcooked) illustrates some of the above conceptions.

79

	Leaves	Root	Herb	Plant, Tree	Bark	"Bene"	Fruit
Healers (N=20)	10	7	5	4	3	2	1

Table 3.1. Indigenous Healers' Classification of Medicine by Frequency¹

Table 3.1 illustrates the ways in which indigenous healers classify (physical) medicines. Significant as well were terms other than aduro employed to mean "medicine" or a form thereof. These terms include 1) benefoo (person that is well-cooked with medicine and has a high degree of medicinal knowledge); 2) bene (well-cooked, medicinally and/or spiritually); 3) odunsinni (person who deals with medicinal roots); 4) ahaban (herbs and leaves); 5) nyankomadee (the act of doing things through spiritual means that appear miraculous); and 6) aduw (talismans limited to certain powers). In the Takyiman area, one may encode the quest for certain types of medicine by saying, "I am going to aduroso," which is simply another way of saying he or she is going to obtain a suman, abosommrafoo medicine or simply to consult abosommrafoo.² Frequent (translated) statements corresponding to the classification and composite definition above included, "we use leaves as food and medicine," "we use roots to make medicine," "medicine is prepared from fruits," and "what we do is medicine." It appears self-evident that "there are so many definitions for medicine" and that "the meaning of medicine does not mean one thing," though what actually accounts for the varied levels of meaning and the "distinctiveness" of Bono medicine is another question.⁴ Table 3.2 contains coalesced responses of healers to the question of Bono medicines and its uniqueness or lack thereof.

The factors of geography and language play a significant role in characterizing medicine that is germane to the Bono-Takyiman area. As Kofi Kumankoma stated, "Bono medicines are a mixture of both savanna and forest medicinal plants used for curing diseases and have power from the libation poured to support the treatment. For some treatments, the patient has to consult the *abosom* (through the *abosom* oo *abosomfoa*) and make some sacrifices to help the treatment." Certainly, ecology and location play a greater role in the characterization and meanings assigned to what constitutes medicine, but, within the context of ecology, there are also local geographical distinctions where one might find some medicines in Tanoso but not in the Takyiman Township. It seems, however, that indigenous healers are aware of this discrepancy and know where to find medicines not readily accessible in their particular locale. Indigenous Bono healers, generally, are mobile; meaning some travel and study medicine in places such as Burkina Faso, Ivory Coast, Mali, and elsewhere. Kwame Mamadou, himself a Mossi

	Language	Location (Forest or Savanna)	Usage or Medicine Type	Medicine Is Not Unique
Healers (N=20)	5	11	1	3
Key state- ments related to each factor	1) The way the medicine is called differs from place to place, (Akan) society to society 5 2) It is the language or the name given to a particular plant that makes Bono medicine unique 3) Every medicine has its name	1) Bono medicine is unique as a result of Bono society being located between the forest and savanna 2) Bono medicine is unique as a result of the climate and vegetation, that produces special medicines 3) The Bono area has easy access to medicine from both the savanna and the forest 4) Each place has its medicines used for healing	1) The medicine and methods are unique in contrast to those from other places 2) The way the medicine is collected; there is a special way to do this, which includes washing the medicine before it is used 3) The way the Bono prepare medicine makes it unique and more effective in healing diseases faster ⁶	1) It does not make a difference. Every medicine is medicine. Bono medicine is not unique from other [Akan] medicines since we do the same akom

Table 3.2. What Indigenous Healers Say Account for Bono Medicine's Uniqueness

from Burkina Faso, reaffirmed the foregoing observation by stating, "some indigenous healers go far to acquire [their] knowledge of medicine."⁷

Indigenous healers were, for the most part, unrestricted in movement and availed themselves of several ways of learning and mastering medicinal knowledge. These options included one's family, another person who is knowledgeable, apprenticeship, and general service. Based upon my observations and interactions, it is not difficult to confirm the assertion that healers use more savanna-derived than forest-derived medicines as a result of the latter containing more power from their exposure to the sun, nor the claim that many patients from northern or southern Ghana use medicines from the Bono area. From the data, as well as my interactions and observations, medicinal leaves and roots, in

Table 3.3. Medicines, Parts Used, Ingredients, and Diseases Addressed

Name of Medicine(s)	Part(s) of Medicine			At	unc	leε	Ayaresa (lit. "cut away disease"; healing; diseases cured by a singular medicine or a combination of medicines)	
	L	В	R	S	P	G	L M	
Ababuruwa ⁹					√	√		Ahohoo (swellings), ti yaree or atipaee (headache), boyerew or abofono (stomach sickness, nausea, heartburn), anididane or anidanee (backwards turning of uterus), babaso (chronic gonorrhea; venereal disease), yamkuro (women's stomach sores or ulcers), child/chronic infections, post-labor pains
Авовэтта								siakwan (infertility), babaso (chronic gonorrhea; venereal disease)
Abugyentia								Kətewuiε (impotency)
Adubena ¹⁰		1			1			Odoo (dysentery), yafunu yaree bi (diarrhea), yafunu yaree (stomach disease), mmogyadodo (blood, high blood pressure), ti yaree or atipaee (headache), ayamtim (constipation; derived from esoro, "convulsions"), "dirty" womb
Adubrafoə			1		1			Ayamtim (constipation), nseeye (skin disease), otwa or etwire (epilepsy), edam (mental disease), sukom mmoraso (dehydration)
Afonoə, afodoə ¹¹	V		1				1	Babaso (chronic gonorrhea; venereal disease), ahohoo (swellings), mmubuiiɛ (fracture, paralysis, palsy)
Agyenna- wuro ¹²	1		√		√	V		Ti yaree or atipaee (headache), mmubuiie (fracture, paralysis, palsy), nkyenyamu (waist pains), ayamtim (constipation derived from esoro)
Ananse bonto								Sdss (burns)
Asako								Insufficient data

(continued)

Table 3.3. Medicines, Parts Used, Ingredients, and Diseases Addressed (continued)

Name of Medicine(s)	Part(s) of Medicine				At	una	leε	Ayaresa (lit. "cut away disease"; healing; diseases cured by a singular medicine or a combination of medicines)
	L	В	R	S	P	G	L M	
Asengyera ¹³			1		1	1		ahohoo (swellings), anididane or anidanee (backwards turning of uterus), boyerew or abofono (stomach sickness, ulcer), siakwan (infertility), abotutu (arthritis)
Awedeaba								ahohoo (small swellings on the skin),
Awobε ¹⁴			√		1	√		ahohoo (swellings), siakwan (infertility), kyima yareε (menstrual disorder), babaso (chronic gonorrhea; venereal disease)
Besemankoma			$\sqrt{}$					Otwa or etwirε (epilepsy), sunsum yareε (spiritually-related disease)
Badeε, badia		1	1					Akoma yareε (heart disease)
Borəfere, borəferemma ¹⁵	1	V	1	V				Worms (especially in children; possibly adinam, "tapeworms"?), pepuda or atiridiis (fever), ben or ahəəyaa (pain, ache), babaso (chronic gonorrhea; venereal disease)
Duanwonsini			√		1	√		Babaso (gonorrhea; venereal disease), siakwan (infertility), ɛsoro (convulsions), ti yareɛ or atipaeɛ (headache), ahohoɔ (swellings)
Duforε ¹⁶	1					1		Yam samfosamforo (stomach pains), ¹⁷ ti yareɛ or atipaeɛ (headache), ɛsoro (convulsions), ayamtim (constipation derived from ɛsoro)
Gyamma	1				1			Afabo (sterility, dysmenorrhoea, painful and abundant menstruation), pepuda or atiridiie (fever), siakwan (infertility), anididane or anidanee (backwards turning of the uterus), post-labor pains
Hwεdeε ¹⁸			1		V			Insufficient data

(continued)

Table 3.3. Medicines, Parts Used, Ingredients, and Diseases Addressed (continued)

Name of Medicine(s)	Part(s) of Medicine			Ai	tunc	leɛ	Ayaresa (lit. "cut away disease"; healing; diseases cured by a singular medicine or a combination of medicines)	
	L	В	R	S	P	G	L M	
Kankano, brempe ¹⁹	1		√		1	1		Nsane (infections), ben or eyaw or ahəəyaa (pain, ache), anididane or anidanee (backwards turning of uterus)
Kokonisuo ²⁰					1			Afuruhye (swollen stomach), ahohoo (swellings; feet swellings)
Kəkəwa ²¹					V		√	Ahohoo (swellings), boyerew or abo- fono (stomach sickness, nausea, heart- burn), leg pains
Konkoroma	√		1		V	1		Babaso (chronic gonorrhea; venereal disease), siakwan (infertility), ɛsoro (convulsions), pepuda or atiridiiɛ (fever), sunsum yareɛ (spiritually-related disease)
Korəbaa ²² (Mahogany or redwood)		V			V	V		Babaso (chronic gonorrhea; venereal disease), siakwan (infertility), ɛsoro (convulsions), afuruhye (swollen stomach), ahohoo (swellings; feet swellings), ɛfi (dirt; impure blood or blood contamination)
Kotodweben			1					Anididane or anidaneε (backwards turning of uterus)
Kotokusaa- bobe ²³								Ayamtim (constipation derived from esoro), nseeye (skin disease), otwa or etwire (epilepsy), edam (mental disease), nkudada or akisikuru (chronic sores), urination problems, dehydration
Kyerebenten			√					Babaso (chronic gonorrhea; venereal disease), ahohoo (swellings; swelling around the thigh), pepuda or atiridiie (fever)
Namprane								Anididane or anidaneɛ (backwards turning of uterus)

(continued)

Table 3.3. Medicines, Parts Used, Ingredients, and Diseases Addressed (continued)

Name of Medicine(s)	Part(s) of Medicine			At	tuna	leε	Ayaresa (lit. "cut away disease"; healing; diseases cured by a singular medicine or a combination of medicines)	
	L	В	R	S	P	G	L M	
Nkanaa								Babaso (chronic gonorrhea; venereal disease), ahohoo (swelling around the thigh area)
Onyame dua	V						1	Abohoo (swellings), boyerew or abo- fono (stomach sickness, nausea, heart- burn), leg pains
Ode								Insufficient data
Odom		1	1					Insufficient data
Otiε, εtiε		1			V	1		Yafunu yareε (stomach disease), abotutu (arthritis), kookoo (piles), ahotutuo or ɔkwaha (rheumatism)
Sabrabese ²⁴			√		√	\[\text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \text{ \qq \qua		Afabo (dysmenorrhoea, painful and abundant menstruation, sterility), post-labor pains, siakwan (infertility), esoro (convulsions), efi (dirt in the stomach and body), babaso (chronic gonorrhea; venereal disease), nkyenyamu (waist pains), ayamtim (constipation derived from esoro)
Samandua, sesadua			√		V	√		Efi (dirt in the stomach and body), worms, mucous, anididane or anidaneε (backwards turning of uterus), post-labor treatment
Sensan (a type of grass)								Nufu yareε (breast disease)
Sorəno ²⁵ (Dawadawa)	V	V	1		V		V	Pəmpə (boil often on the throat), 26 esoro (chronic convulsions), menem-kuro (sore throat)
Supua		1						Nkyenyamu (waist pains), afam yaree (disease where the fetus is stuck to the wall of the womb), back pains
Toantini			√				1	Ntini mu yareɛ (problems associated with the vein or blood vessel)

addition to the ingredients of various peppers and ginger, are primarily used (see Table 3.3; Abbiw 1990, 125). Beyond the segments of plants and herbs, the skin and parts of some animals (e.g., crocodile, tiger, and hippopotamus) are also employed in medicinal preparatory and healing processes. The atundes (ingredients) are combined with a medicine to enable the medicine(s) to work more effectively and the additives or nneema ("things"; sg., adee) such as shea butter are necessary because without such items the medicine will not work. Moto is a composite matter made of several medicines burned into a black powdered medicine and can be applied to small incisions made in the skin, eaten with food, or indigested by itself.8 Medicines are commonly prepared and administered by way of tinctures, infusions, concoctions, decoctions, extracts, vapor or stream baths, enemas, poultices, nasal drops, and medicinal baths with or without other ingredients (Abbiw 1990, 125; see Appendix IV for pharmacological glossary). In addition to a composite medicine, such as moto, singular medicine and complementary medicine are used; the complementary medicines are different medicines synergistically combined to produce a greater "medicinal treatment." Table 3.3 outlines the medicines used by name and part(s) as well as the *atundee* (ingredients) and diseases addressed those medicines. The capital letters L (leaf), B (bark), R (root), S (seed), P (pepper), G (ginger), and LM (lime) represent parts of medicines and ingredients used, respectively. Types of peppers such as hwentia, fam-wisa, and soro-wisa in addition akekaduro (ginger), atwades (lime), gyeene (onion), and awedeaba (spices) are the most frequently used ingredients which accompany a singular medicine or a set of medicines. The lack of check marks for several medicines in Table 3.3 indicates that that information was not forthcoming by way of interviews, observations, rituals, and informal conversations.

One *odunsinni* conveyed to me four general categories of diseases, namely, diseases that destroy the personality, kill, deform the body, and that are transmitted. Judging from my composite data pool, there are, however, broader and overlapping categories of diseases. Those disease categories include:

- 1) bayie yares ("witchcraft" diseases, also referred to as sunsum bayie) typically result from "bad" medicine in one's food, jealousy, the work of abayifoo, and bayie that is either inborn or acquired;
- 2) **sunsum yare** (a disease born of or through spiritual means or disease at the spiritual level), among other causative factors, resulting from cursing someone through the use of an *ɔbosom*;

- 3) *nka no kwa yareɛ* is when a person is inflicted with a sickness without any obvious or perceivable cause, but with the understanding that *ayareɛ nka no kwa* (disease or sickness does not touch or affect him or her for no reason), efforts are usually made to probe this type of sickness or disease more thoroughly;
- 4) *aduto* ("negative type of [roasted] medicine") is usually transacted between two people, which may be the response to having sex with someone else's wife, and where the disease is contracted through harmful or "roasted" medicine on which the victim steps or comes into contact;
- 5) **abodee yaree** (nature disease) is caused by *efi* (concept of "dirt" that includes all bodily wastes), polluted water, insects (e.g., flies), an unclean environment, polluted air or the wind (e.g., air borne diseases), and contaminated river water;
- 6) *aduane yaree* (food disease) derived from bad food, drinking alcohol, consuming tabooed foods, spoiled leftovers and uncovered foods;
- 7) *mmoaa yaree* (germs, bacteria, microorganisms) are associated with sexually transmitted disease and gutters, eating where garbage is close by, wearing unwashed clothing (for several days), eating without brushing one's teeth, germ-filled living conditions, not covering a small child very well when it is windy, and lack of proper hygiene;
- 8) *duabo yaree* (cursing) refers to a disease caused by cursing someone;
- 9) **honhom yares** (breath of life), outside of the context of the meaning that appears in parentheses, this refers to diseases borne of an unidentified "kind of spirit"; and
- 10) *oman yaree* (social disease) is used to refer to those diseases which derive from negative social acts, such as stealing or offending one's parents, which can result in psychological illnesses. Here, the medicine may consist of confessing, apologizing, or both in addition to returning the stolen items, in the case of theft.

The types of medicines detailed either prevent or cure these varied categories of disease in a corresponding manner; meaning, all medicines outlined thus far concurrently address diseases that fall within several of the above categories. According to indigenous healers, the ways medicine prevents and cures diseases in terms of how medicine works once it

encounters the human body are multiple. To them, after the medicine has been taken, the medicine diffuses into the blood through the veins, and the blood takes the medicine everywhere in the body to prevent or cure the disease. In other words, once the medicine reaches the body through the stomach or enters the skin through bathing, it diffuses into the blood and moves to all parts of the body to fight or protect against the sickness in question.²⁷ When applied to the body, the medicine passes through the skin and fights against the sickness or kills the germs that caused the sickness. "To prevent certain diseases like malaria or fever, medicine is collected, boiled, and a concoction is prepared and drunk to address initial symptoms."

Allow me to offer an analogy shared by Nana Kofi Oboo. In his mind, sickness or disease looks like the bladder or innermost component of a soccer ball and when one places medicine in or on this bladder, the medicine penetrates inside and deflates it, thus bringing out the disease, germ or illness. The ability of the medicine to penetrate and effectively address the disease means that the *mmogya* (blood) has accepted the medicine, and that the medicine is very potent. There are some medicines that are used to fight against a particular sickness, and if the sickness remains like the ball (still inflated) after those medicines have been applied, then the medicine(s) cannot cure the disease.²⁹ What becomes apparent are indigenous notions of how blood works, which is linked to the idea that blood not only facilitates the intent of the medicine but also serves as an indicator of certain diseases. Here, one indigenous healer's recognition of diseases through the working of the blood will suffice: "for excessive blood or hypertension (mmogya mmoroso), the blood passes through routes (in the circulatory system) and if it is not able to go to one point and come back, this results in akoma yares (heart disease). This also means that there is dirt (contamination) in the blood because one does not have good medicine to help clean it "30

Other ways in which medicine works include taking enemas and drinking medicine as a measure of preventative care. Since every disease has its method of treatment, medicines are commonly administered through baths, drinks, enemas, body applications, and nasal drops. Adhering to taboos associated with each medicine also facilitates prevention and cure. For the purpose of prevention, certain medicines themselves serve as a taboo to negative forces, making it impossible for those forces to cause *sunsum yaree* or disease at the spiritual level. It was expressed to me that medicine taken orally starts to work as soon it reaches the stomach and, as a rule, medicines should be prepared the same way each time. In the case of a swollen stomach, for example,

medicine that is drunk removes sickness (or the cause thereof) out of the stomach leaving the patient free from the disease. Yet, there is the general caution that an overdose can make one sick again. Though many indigenous healers are aware of foreign medicines, as well as scarce medical institutions throughout the country, most shared the position that *abibiduro* (indigenous African medicine) is strong enough to cure diseases or sicknesses completely.³¹

In view of the vast quantity and types of medicines and medicinal combinations employed in the healing or preventative process, the question becomes why and how do indigenous healers choose certain medicines over others? It was expressed that one disease may require an assortment of medicines or a specific medicine for treating the disease, and some medicines work faster than others do depending on the type or personality of the patient. If initial medicines are ineffective, then the indigenous healer will use others. Depending on the efficacy of the successful medicine(s), the healer will know and choose the one that cures the disease. If the medicine is strong enough to cure a disease, the body has to receive or accept the singular or composite medicine. If the medicine does not work well, which means the body was not receptive to it, then one has to change the medicine (though not necessarily the method).³² Moreover, based on the experience of the indigenous healer or patient, the indigenous healer will know which medicine is most effective given the prior ineffectiveness of it and other medicines or treatments employed.

Granted each indigenous healer trusts the medicine he or she uses and that there is a uniqueness to each patient's disease, there is the "person-specific" notion that each person has a sickness unique to that patient (which may be the same "general" sickness affecting another patient) and each sickness has a corresponding medicine. By examining the nature of the complaint or disease of the patient, the indigenous healer knows which medicine to prescribe based on the knowledge of choices of medicine and/ or supplementary ingredients available. Some indigenous healers, who first diagnose the patient and then administer the medicine, may not, however, initially prescribe medicines depending upon the severity or mildness of the disease. If a patient shows no improvement with one medicine, then that medicine is changed to a more effective one based on the latter's demonstrated ability to improve the situation. The notion that an indigenous healer has to use the medicine he or she knows is best for the patient's body, mind, or spirit is based on the demonstrated capacity of that medicine, which can be discerned from the proverbs, aduro gye honam (medicine accepts the body) and aduro ye nnam (medicine is sharp and able to cure or cut the disease down).

Table 3.4 Names and Frequency of Medicines Spoken of by Healers

Aduro (medicine)	Frequency	Aduro (medicine)	Frequency
Kankano/Brɛmpɛ	4	Sorəno (Dawadawa tree)	1
Hwentia (Ethiopian pepper)	4	Asengyera	1
Sabrabese	4	Awedeaba	1
Akekaduru (ginger)	4	Samandua/sesadua	1
Duanwonsini	4	Awobε	1
Fam-wisa (black pepper)	3	Gyamma	1
Soro-wisa	3	Kyerɛbenten	1
Kəkəwa	2	Otiε/Etiε	1
Kotodweben	2	Abugyentia	1
Авовэтта	2	Эde	1
Ababuruwa (Sonokodiatia in Nkoransa)	2	Kotokusaabobe	1
Gyeene (onion)	2	Adubrafoə	1
Agyennawuro	2	Badeɛ/badia	1
Atwadeε (lime)	2	Эdum	1
Besemankoma	2	Abεnnuro	1
Borəfere	2	Namprane	1
Asako	1	Sensan (type of grass)	1
Konkoroma	1	Ananse bonto	1
Ѕириа	1	Toantini	1
Afonoə/Afodoə	1	Korəbaa (mahogany)	1
Nkanaa	1	Dufore	1

Given the considerations of ecology and geography as factors in the characterization of medicines, it is common that some diseases require either forest- or savanna-derived medicine. Some of the healers interviewed held that savanna-derived medicine were more effective, since this type of medicine receives a lot of energy from *awia* (the sun). Moreover, they stated that medicinal plants collected from the savanna area often brought success that translated into *nkonimdee* (honor). The latter assertion was, more or less, confirmed by the types of frequently used and effective medicines employed by indigenous healers. In fact, "[s]ome Kuranko medicinal specialists [in Guinea] claim that, on balance, plants 'under the sun' in savanna have more potent energy properties than those growing in forest shade, even if they are

of the same species" (Fairhead and Leach 1996, 184). Using Table 3.4 as a guide, the most frequently used medicines employed by distinct indigenous healers (with their ecological place of origin in parentheses) were *kankano* or *brempɛ* (savanna and forest), followed by *sabrabese* (savanna) and *kɔkɔwa* (savanna), and then (in alphabetical order),

- 1) ababuruwa (savanna)
- 2) abugyentia (forest and savanna)
- 3) adubena (forest and savanna)
- 4) *afodoɔ* (savanna)
- 5) agyennawuro (forest)
- 6) akekaduro (forest and savanna)
- 7) *ananse bonto* (forest and savanna)
- 8) asako (savanna)
- 9) asengyera (savanna)
- 10) badia (savanna)
- 11) besemankoma (savanna)
- 12) borəferε (forest and savanna)
- 13) duanwonsini (forest and savanna)
- 14) *duforε* (savanna)
- 15) *hwedeε* (forest and savanna)
- 16) konkoroma (savanna)
- 17) kotodweben (savanna)
- 18) namprane (savanna)
- 19) onyame dua (forest)
- 20) odom (forest)
- 21) $\varepsilon t i \varepsilon$ (forest)
- 22) sensan (forest and savanna)
- 23) sesadua (savanna)
- 24) supua (forest)
- 25) toantini (forest)

It must be noted that a few indigenous healers were apprehensive about sharing this type of information; some of their (translated) responses included, "I cannot mention that medicine," "I cannot tell you unless I take you to the forest," or "there is no specific medicine I use frequently for a particular disease, since each sickness has its own medicine." I respected and appreciated their hesitation and was, overall, extremely thankful for each healer sharing his or her time and ideas.

During the course of my interviews, a theory of medicinal efficacy emerged, precisely, the reasons why indigenous medicines worked or did

not work. The ideas indicative of reasons for why medicine does not work are outlined as follows:

- 1. The indigenous healer does not know the actual type of illness;
- 2. Patient misinforms the healer about his or her illness or does not disclose the actual disease;
- 3. The patient's body does not accept the medicine, thus requiring the use of another medicine;
- 4. The medicine is not good for the particular disease in question;
- 5. *Mmogya mpε* (the blood does not like or agree with the medicine), in which case the medicine is changed to another;
- 6. The power of the medicine is contaminated;
- 7. A taboo associated with the medicine is not adhered to and the power thereof ceases to function as it should;
- 8. The medicine is spoiled by virtue of improper usage or inappropriate combining with other medicines;
- 9. The indigenous healer does not know what to add to make the medicine work more effectively;
- 10. The indigenous healer does not use quality or good medicine for the disease;
- 11. The indigenous healer uses the wrong type of medicine or medicine that has spoiled;
- 12. The indigenous healer has a negative mind (e.g., a mind contaminated with greed, money);
- 13. The indigenous healer overcharges the patient by not following the rules associated with the medicine in terms of the payment amount;
- 14. Patient attempts to perform as healer, observing and imitating use of a medicine without proper knowledge or skill;
- 15. The medicine is not well prepared; and
- 16. The indigenous healer is a fraudulent person professing to know how to cure when he or she does not.

It is significant to note, across these responses, the notions that every medicine has its function and that a medicine should be changed if it is inappropriate were stubbornly consistent. Furthermore, the composite underlying principle drawn from all interviews is that if a medicine can effectively address a sickness, the blood accepts that medicine. There exists a triune fundamental premise of medicinal efficacy which essentially states that every medicine cures if used correctly, that one must adhere to the instructions and rules associated with a medicine, and that a patient must not

be overcharged or incorrectly charged for healing work. Finally, once the medicine works (possibly after a change to one that does work if the initial medicine is unsuccessful), the patient-indigenous healer relationship moves into a post-treatment phase that is largely contingent upon the health of the patient as articulated by that person.

All the indigenous healers spoke of a common scenario where patients are, in fact, the ones who confirm recovery—in terms of being able to perform a task that their illness prevented prior to the prescribed treatment and thereby demonstrate agency in the healing process. In other words, "when you give a patient the medicine they will compare their state before and after, and they and you will see the changes (for the better) by their ability to do things they were not able to do before the treatment."33 When a person is sick, he can measure his strength. After taking the medicine and it works, he can also determine whether he has returned to his "normal position" of health and wellness. Indication of his past and present ability to function independently will let the indigenous healer know that the patient is now healthy.³⁴ In effect, according to indigenous healers, "we the healers cannot tell the patient that they are healed; it is the patient who will tell [us] that they are healed."35 Among indigenous healers, there is also the understanding that one should not rush the recovery process and some indigenous healers have recommended either a conservative period of two to four weeks for periodic "check ups," while others advocated that patients be allowed to make those periodic visits every few days or a week until they nya ahooden (get strength, energy; cured). If they are not well, then the patient should continue his or her treatment.³⁶ As a part of the post-recovery process, preventative measures and work are done since abayifoo ("witches") or whatever form that kind of negative energy assumes generally wait until a person has recovered before they attack (again). The abayifoo assumes the person's defense and, by extension, the protection of the abosom are diminished since he or she is no longer receiving treatment.³⁷

In terms of recovery and cost, some treatments require *ntoasee* (lit. "that which is thrown down"; down payment), which, in most cases, is not monetary but rather stipulates the collection of a chicken, eggs or other items to help facilitate the healing process. *Aseda* ("give thanks") is the concept of post-treatment payment for services rendered. In the process of *aseda*, one returns to the indigenous healer to convey to him or her that the medicine has worked, and provides payment in the form of eggs, chickens, *sika* ("money"), gin (for libation), and other items if necessary. Many patients, as a form of *aseda*, will often say, "Nana, today, the pain or problem is gone," or *Nana*, *enne*, *me ho ye* (Nana, today, my body/self is good). *Aseda* is an integral part of the post-recovery and preventative care process.

In sum, there exist in practice two notions which say that every medicine has a function and that medicine should be changed if inappropriate, three fundamental premises of medicinal efficacy and about the healing process, and a concluding phase of post-treatment, which, in reality, reintroduces or continues the cycle of healing and preventative care.

93

CULTURAL-LINGUISTIC AND BIO-CHEMICAL ANALYSIS OF MEDICINES

The medicines listed in Tables 3.3 and 3.4 are those articulated by indigenous healers as their most effective and frequently used medicines. I collected samples of all of the medicines with the exception of one or two that were difficult to locate at the time of my stay in and relatively beyond the Bono-Takyiman area. I attempted to have these samples screened as medicinal plants through a process that involved identifying each plant botanically, completing a thorough search of botanical literature, a phytochemical examination, and biological screening in animals. I was unsuccessful in this ambitious endeavor due to limitations in time and financial resources. Nonetheless, such an undertaking could contribute to the development of "value-added" research into plant medicines as well as allow for truly collaborative efforts with indigenous healers in the production and valuation of knowledge grounded in indigenous perspectives.

What follows then is a cultural-linguistic analysis in addition to data (when and where available) derived from a search of the botanical literature that contextualize the properties and functions of medicines collected with indigenous healers. ³⁸ This section outlines the most frequently used and effective medicines from the perspective of whole plants and constituent parts which address specific and overlapping diseases, and demonstrates the utility of Akan morphology in terms of revealing the meanings of medicines often embedded in cultural understandings. The format for each entry includes indigenous (Akan and African, if available) and botanical family and plant names—with African names in italics—followed by the cultural-linguistic and bio-chemical characteristics of each plant medicine.

Ababuruwa, sonokodiatia (Akan)

Ababuruwa (aba—seed of a plant; buru—ferment; wa—small) derives from phrase aba-no-boro-wo ("the seed of this plant can ferment in you or make you intoxicated"), and this plant is also called sonokodiatia ((ɛ)sono—elephant; kɔdi—go eat; tia—short) in the Nkoransa district adjacent to Takyiman. Sonokodiatia bears fruit that leans over because of it weight and, therefore, the tree becomes "short enough for elephants to eat its fruit." This

savannah plant grows to about ten feet and its leaves have a sweet scent, while the black root has a deep brown color as one penetrates the root. Smelling the root usually makes a person sneeze especially when the root is dry. The internally sweet yellow fruit is used for *yafunu yaree* (stomach ailments), though overeating the fruit will make a person sick. The root, complemented by the addition of other medicines, is used for *ahohoo* (swelling), *ti yaree* or *atipaee* (headache), *boyerew* or *abofono* (stomach sickness), *anidiane* or *anidanee* (backwards turning of uterus), *babaso* (gonorrhea; venereal disease), child and chronic infections, post-labor pains, stomach sores in women, and sores inside the head which may cause mental challenges.

Abobomma, aboboma, abuboma, saa-bonfere (Akan); sumkum, sunsu(n), walisa, sumkuo, sunkung(o) (Malinké); dokumi, dukum(i/e), (n')dukuhi, (s)dukunbe (Fula or Fulfulde); sunsun gbenin (Maninka); àbo (Yorùbá); gwándàn dààjiì, jééjì (Hausa).³⁹ Annonaceae—Annona senegalensis

Abobəmma (a—it; bə—to create; mma—offspring, children) bears fruits for a long period; in other words, "it creates (young) children," and thus the plant is also used to treat infertility. Abobəmma is a savanna plant that bears wild but sweet fruits that both humans and animals consume. The fruit resembles a small, yellow and round "sweet apple." The stem is usually black because of fire during the dry season. The root is soft with a white interior and pleasant odor, while the exterior is black. The wood is also very soft, its leaves are light green with fine blades, and the skin of the fruit appears to be thick. This medicine is prepared or administered as both a concoction and decoction for siakwan (infertility) and babaso (chronic gonorrhea; venereal disease). Abobəmma complements other medicines as well.

Abobomma is a shrub or small tree with grey to black bark, thick and smooth, cracked into sections when old, more or less hairy twigs, large broadly ovate leaves with prominent parallel lateral nerves below, yellow waxy flowers with small, triangular sepals and syncarpous orange-colored fruit. Branchlets and young foliage occur sometimes with dense hair. The flowers are small, yellow-green or pale yellow, while fruits are globose or ovoid, fleshy, smooth greenish-yellow, sweet (similar to pineapple) with many small, hard, oblong black seeds. This small tree is abundant from the savannas of tropical Africa to Transvaal, Swaziland, Zululand, and in open woodland and grassland (Neuwinger 1996, 47). It is primarily used for diarrhea, gastrointestinal diseases, diseases of the joints, sterility, wound treatment, snakebites, and as a diuretic, and secondary uses include coughs, fevers, abdominal pains, intestinal worms, venereal diseases, and leprosy (Neuwinger 1996, 49; Irvine 1961, 4–5). Chemically, the plant is still little known though high toxicity was found in experiments with guinea pigs,

rats, and snails (Neuwinger 1996, 51–52). Pharmacologically, the plant is "valuable in treatment of malaria," hemorrhoids, tumor (cell lines) inhibition, liver damage, and burns; it also has antibacterial, antifungal, anathematic, sporicidal, and psycho-pharmacological sedative activity (Ibid., 52).

Abugyentia (Akan)

Abugyentia (a—it; bu—to break; (e)gya—firewood or deadwood; tia—short) is a small plant that grows to about two and a half feet tall. As a medicine, abugyentia is broken into "short" pieces that contain a "fire" (power) within them, hence, "break firewood short." It grows in the forest and savanna normally under ankaa nnua (orange trees). The plant bears small, black seeds and the skin has a bitter taste. This medicine is prepared and administered by way of tinctures and bitters, often as a stimulant for male potency. Abugyentia is also a complementary medicine that supports the efforts of other medicines, frequently to cure kətewuiɛ (impotency).

Adubena, krahyire (Akan); səngbala (Maninka); amùjé (Yorùbá). (Possibly) Hyperciaceae—Harungana madagascariensis

A savannah tree that grows to forty feet or more and the collected bark contain a reddish fluid; the bark is brown and serves as hardwood. Tree is used to make indigenous guns, that is, the wooden part of that weapon. Also known as *krahvire*, the tree's bark and root are often used, particularly for ailments such as *yafunu yareɛ bi* (diarrhea), *yafunu yareɛ* (stomach disease), mmogyadodo (high blood pressure), ti yaree or atipaee (headache), ayamtim (constipation), and for a "dirty" womb. Among the Yorùbá, adubena is referred to as amùjè ("drinker of blood, dragon blood's tree") with which the Ifá odù "ògùndá ado (ògùndá ìwòrì)" and song or incantation, má mu èjè mi, amùjè má mu èjè mi ("do not drink my blood, drinker of blood, do not drink my blood") are associated (Verger 1976, 20-21). Found in old clearings and secondary forests, adubena is common from Senegal to Cameroon. A medium-sized tree up to thirty-five feet high whose sap is red and watery (similar to palm oil), the tree appears yellow when the outer bark is removed. The wood is pinkish yellow. The root is used for jaundice, while a root and bark decoction is employed for dysentery, bleeding, piles, stomach troubles in the Sudan, diarrhea in Zimbabwe, and chest complaints and dysentery in Ghana (Irvine 1961, 140-141).

Adubrafoo (Akan); києтокиєто (Maninka). Euphorbiaceae—Mareya micrantha

Adubrafoo (*adu(ro)*—medicine; *brafoo*—one who subdues; "executioner") or "executioner medicine" is a forest tree used in spiritual baths and enemas.

Some say its name derives from its poisonous nature or properties (Irvine 1961, 243). The root is used primarily in the form of baths and enemas. There are two types of this tree: The mother is called *ahiafosamina* ("poor person's soap"), which is used for producing soap, enema, and timber; the other is called *(a)homatere* ("vine that spreads") and is regarded as a spiritual vine that responds to human cries in the dense forest. Both types are used for spiritual baths and activities as well as for *ayamtim* (constipation), *nseeye* (skin disease), *otwa or etwire* (epilepsy), *edam* (mental disease), and *sukom mmoraso* (dehydration).

Distributed from Guinea to the Congo Basin in closed and secondary forests, this tree is easy to find in secondary forests and grows up to fifty feet in height with soft wood, large and shiny leaves, and small yellowish or whitish flowers. Harvested in dry and wet seasons, the fruits are small and red with three nutletts; however, the bitter leaves and fruit are strongly purgative even poisonous. The antidote is red palm oil. Adubrafoo is a well-known poisonous plant with medicinal properties as well as a verdant purgative and local anesthetic. The stems are used for yam poles, the root forms a remedy for animal bites and stings, the bark for crawcraw, the leaves—bitter and considered poisonous—are used for gonorrhea, leprosy, and pains such as stomachaches and constipation (Irvine 1961, 243–244). The leaf is used for stomach pains, constipation, snake bite, poisoning, catharsis; twig-stem for leprosy, trypanosomiasis; root for stomach pains, constipation, snake bite; the fruit is used as a purgative and as an emetic, and for chest pains, gonorrhea, local anesthetic, rheumatism, and post-partum situations (Ayensu 1978, 132–134).

Afonoo, afodoo, ofodo (Akan); dioto, diodo, diulo, ndjuru joto, doto, and jdoto (Malinké in Senegal, Ivory Coast, Niger, Mali, Gambia, Nigeria, and Sierra Leone); alal, alali, alehi, and diontu (Fula in Senegal, Mali, Guinea, Niger, Gambia, and Nigeria); ipçtà (Yorùbá). Polygalaceae—Securidaca longepedunculata

The term *afonoo* corresponds to a person finding something pleasant and too much of that "pleasantness" causing the same person to suddenly dislike it. Botanically, the pleasantness refers to the scent of the plant; meaning, from a distance the plant has a delightful smell but once a person gets close, they soon regret or reject it. In fact, it is said that one can actually spoil fresh eggs by putting a small piece of *afonoo* by the eggs (in which the color of the egg changes). *Afonoo* is a savanna plant that grows into a small tree. The tree has small, greenish-yellow leaves, its trunk is about seven to eight inches in diameter, and the color of its skin is teal or light yellow. The skin of the root is soft but thick and has a strong mint-like

fragrance. The skin of the root is used for herbal baths, enemas, and spiritual baths. The leaves are used for *ahohoo* (swellings), while the root is also used for *mmubuiie* (fractures, paralysis, and palsy).

Afonoo is a beautiful flowering shrub or tree, six to thirteen feet high, with a thin trunk, erect branches and leaves. The branchlets are soft and hairy, bark is light grey, and flowers are bright purple, fragrant, and in terminal clusters. Roots are yellow in section and, when exposed, emit an intense odor. When the plant is cut, it emits an equally intense aromatic smell. The bark and twigs provide excellent fiber, though the plant is very difficult to cultivate. Afonoo is a common savannah tree found also in open forests and usually on sandy ground (Neuwinger 1996, 743). A legendary medicinal and poisonous plant in Africa, the roots are used the most. The root or root bark are most often used for rheumatism, backache, headache, toothache, earache, chest and stomach pain, eye diseases, worms and parasites, venereal diseases, inflammations, malaria, sleeping sickness, fever, coughs and colds, leprosy, epilepsy, and as a drastic purgative and emetic (Ibid., 746). The seed oil is a rich source of fatty acids, while the leaves and roots contain saponines, tannins, and sterols (Ibid., 748). Pharmacologically and toxicologically, "[t]he saponines [of the roots] are to be regarded as the toxic principles" (Ibid., 749). The toxicity of the leaves, taken orally, is noticeably less than that of the roots and bark stem. Alcoholic extract of the dried powdered roots inhibits inflammation and is effective against (some types of) eczema, psoriasis, multiple sclerosis, and against snake venom (Ibid., 751). The plant is used for snakebites in Zimbabwe; headaches in Nigeria and East Africa; and epilepsy, antidote, and general body pains in Nigeria and Ivory Coast (Gelfand 1985, 286-287). In Botswana, this medicine is used for tuberculosis and the prevention of so-called "witchcraft" (Hedberg 1989, 208). The leaf is used for venereal disease and snakebite; the root for sneezing, syphilis, gonorrhea, rheumatic pains, headache, malaria, leprosy, sleeping sickness, fainting, as a diuretic and as an anti-convulsive; and the seed for fever, rheumatism, and febrile pains (Ayensu 1978, 218-220).

Agyennawuro, gyiadawuro (Akan). Mimosaceae—Calliandra portoricensis

Agyennawuro (a—it; gye—get; nna—days; wu—to die) is a plant or tree that is very difficult to die. If one cuts down this tree, it grows back in a "few days and refuses to die." The plant is found around cocoa farms in forested areas and secondary forests; birds and animals eat the seeds of the tree and deposit them as fertilizers for the land. The root is prepared and administered as an enema, while the leaves are used for fractures.

According to Appiah-Kubi (1981, 155), the leaves of *agyennawuro* are used for "fits" in which the pounded leaves are prepared in a mixture for enema and, thereafter, leaves are smashed in one's palm to make liquid used as nasal drops. *Agyennawuro* is indigenous to Central America, Ghana, southern Nigeria, and common in the Caribbean and along the Atlantic coast of tropical America.

Akekaduru, akakaduru (Akan); atalę̀ (Yorùbá); cittáá mai yáàtsáa (Hausa). Zingiberaceae—Zingiber officinale

Akekaduru (a—it; keka—bite-bite; (a)duru—medicine), commonly known as ginger, has a taste that bites and, as an ingredient used with a host of medicines, "it is a bite-bite medicine" in terms of potency (i.e., very strong). This medicinal plant is also used in Salvador, Bahia (Brazil) and goes by the popular name, gengibre (Zelia de Almeida 2003, 208). Cultivated in tropical zones, akekaduru has a genus of eighty-five to a hundred species and "rhizomes of this species are the gorge of commerce" (Castner et al 1998, 134; Hyam and Pankhurst 1995, 537). The plant has two kinds of aerial erect stems—one flowering with pointed leaves and the other with flowers—and oval shaped flower petals with a yellow-greenish center. Consisting of un-scraped and scraped rhizomes, ginger is cultivated throughout Ghana and available in markets, and is often used as an appetizer, antiemetic, carminative, flavoring agent, febrifuge, galactogogue and for coughs, joint pains, and indigestion (PRSPI 1992, 62, 64). Harvested in the wet season mostly, the rhizome is used for coughs, chest and stomach pains, boils, haemorrhoids, and whooping coughs. In the Ivory Coast, akekaduru is used with ananse bonto as an eve bath for treating cataracts (Ake Assi 1983). In Zimbabwe and East Africa, this medicinal plant is used for coughs and abdominal pains (Gelfand 1985, 286).

Ananse bonto, anansa dua (Akan); igi iréré, abo rere (Yorùbá). Leguminosene—Cassia occidentalis

Ananse bonto (Ananse—spider; bonto—tobacco?) is a savanna herb. Ananse bonto has a mint-like scent and grows to about four feet high. Often used to treat *ohye* (burns), the medicine is applied to the burn to extract the water from the affected area. The leaves have the ability to absorb water as well as help to heal the wound. This medicinal plant is also used in Salvador, Bahia (Brazil) and goes by the popular name, fedegoso (Zelia de Almeida 2003, 208). An active principle of ananse bonto is the oil (anthraquinone) of chrysophanic (Abbiw 1990, 120). The roots and leaves of the herb are employed as a diuretic, laxative,

tonic, abortificant, and for asthma, jaundice and kwashiorkor (Ake Assi 1983)

Asako (Akan). Ampelidaceae or Liliaceae—Cissus populnea

Asako (asa—he or she scoops; ko—fight) is a slimy plant and, therefore, one "fights to scoop" it. Asako is used when okra, another slimy vegetable, is difficult to find during the dry season of January to April. Asako is a vine that climbs a tree and it grows in savanna areas wherein the vine is used as a vegetable as well as a medicine. Bono (Akan) eat the fresh leaves, which have a slimy texture as well. Among the Yorùbá, asako is referred to as ààjà ("a bell") of which the Ifá odù "ìwòrì gòsun (ìwòrì ìròsùn)" and song or incantation, kìí bá omo rè jà ààjà kìí bá omo rè jà ("it does not fight with a child, a bell, it does not fight with a child) are associated (Verger 1976, 18-19). Asako is found in savannas from Senegal to Sudan, Uganda, and Ethiopia. The stem is pale and woody up to three inches in diameter, while the flowers are cream, and fruit is purplish black with a bloom nearly one inch long. The root and bark or macerated stems form a slimy solution in water, and the roots are used for sore breasts and as a male aphrodisiac among the Yorùbá. A stem decoction is used for venereal diseases, the roots (pulped young) for edemas, a leafy decoction to reduce intestinal pains, and the plant forms part of a remedy used for yellow fever and jaundice (Irvine 1961, 486-487).

Asante-Akan gyeene (Akan); albúsà mai go, sááfáá mai gora (Hausa); àlùbósà (Yorùbá). Liliaceae—Allium ascalonicum

Gyeene (gye—to get, receive; ɛnnɛ—today) is an onion or shallot that is very common, so much so that many do not bother to grow this plant; ironically, however, those same persons are always in need of it. Hence, "get it today" is a reluctant response to those in need of onion, knowing they will need it tomorrow or another day. The neutral term of onion is amampamu ("everything you can put it inside"), since onion is versatile and can go with soups, stews, or medicines. This medicinal plant is used as well in Salvador, Bahia (Brazil) and goes by the name, cebolinha branca (Zelia de Almeida 2003, 206).

Asengyera, asenkyiya (Akan); keri, gara (Kru in Liberia and Ivory Coast); oriloje, owe (Yorùbá). Ebenaceae—Diospyros canaliculata

Asengyera (asem—word, issue, matter; gye—to get, receive; ra (from nyinaa)—all of us) has its own history. The "words that all of us received" were in fact the complaints (asem) of people in the historical past, who ate stale and toxic foods and were shown this medicine as a result. The

people's words or complaints (asem) facilitated the discovery and use of this medicine and, as a first aid resort, asengyera was able to cure them. There are two types of asengyera: the male variant is called nini, while the female variant is bedee. The specific use of each variant depends on the disease. Asengyera is a savanna plant that has a big, thick truck depending on where it grows. The leaves are yellow, and purple between the stem and leaf; the leaves have smooth blades, while the bark is thick and the wood is hard. The root is used for herbal bath, boyerew or abofono (stomach sickness or infections), siakwan (infertility), and abotutu (arthritis).

A part of a genus of 475 species, this tree grows up to forty-five to sixty-five feet high, and sometimes is also a shrub of nine to thirteen feet, with smooth, hard, and brittle black bark and many small branches bending to the ground (Hyam and Pankhurst, 1995, 157). These species are useful timbers. The flowers appear mostly in clusters on the branches and main stem. The yellow fruit pulp is oily and caustic, and applied to the skin it causes a burning sensation. The leaves are oblong or elliptic-oblong and its tip is rounded with a short narrow triangular point at base. Asengyera is common in lowland rain forests, high outlying forests and savannah zones, and distributed from Liberia to Cameroon, Angola, and the Congo. The bark is greenish-black with vertical fissures bright and yellow, twigs are purplish brown, leaves are smooth, dark-green above and pale below, and male flowers appear in clusters while the females are often solitary with longer stalks than the male. The wood is hard and heavy, and a bark extract is poisonous and blistering (Neuwinger 1996, 436-437; Irvine 1961, 578). Chemically, many species of asengyera "contain more or less high concentrations of saponines and tannins," wherein the leaves "gave positive reactions for quinines, saponines, tannins, and sterols, negative tests for alkaloids and flavonoids" (Neuwinger 1996, 437). An active principle is the naphthoguinone of plumbagin (Abbiw 1990, 121).

Atwadeε (Akan); qsàn wéwé (Yorùbá). Rutaceae—Citrus aurantiifolia

Atwadee (a—it; twa—cut; adee—something) or the lime has a tingling sensation that bites when it is chewed or sucked. The juice of atwadee "cuts" as an astringent, and a piece of stick rather than a knife is used to puncture the lime since, to some indigenous healers, cutting a lime with a knife lessens its power. The lime is often used for spiritual work. A native of Southeast Asia, this plant is widely grown and cultivated. The rind yields oil of lime by extraction and the root-bark is a good febrifuge. A bark decoction is effective against gonorrhea and related disorders. The root and leaves are used for headaches, dysentery, as liniment in fevers, as an internal refrigerant, and juice-derived substance is used widely in West Africa as eye drops.

The plant or parts are also used as a mouthwash for sore throats, a cleanser or stimulant of wound surfaces, skin diseases, and the eradication of crablouse; the cut lime is applied to the temples for headache (Irvine 1961, 493).

Awedeaba, Awedeεaba (Akan); kissi-lomkoo (Maninka); ariwo (Yorùbá); gújíyár dan miya (Hausa). Annonaceae—Monodora myristica

Awedeaba (awe—it reduces; (a) $de\varepsilon$ —(some) thing; aba—it is small, young seed) is a medicine that "reduces the small swelling" on the skin (ahohoo); as an active ingredient, it is also used as a preservative for food and medicines. Awedeaba's seed is round and its shell is hard, while the interior is soft. The tree or spice has a pleasant almost lemony scent. Among the Yorùbá, awedeaba is referred to as ariwo ("noise") with which the Ifá odù "òkanran sòde (òkanran ogbè)" and song or incantation, ariwo rere n'ilé awo, ariwo omo wé wé ariwo rere n'ílé awo ariwo're ("happy noise in the house of the Babalawo, noise of a little child, happy noise in the house of the Babalawo, happy noise) are associated (Verger 1976, 24–25). Common in evergreen and deciduous forests, and distributed from Liberia to Cameroon, Angola, and Uganda, this tree grows up to eighty feet high and has a girth of four feet. The bark is thin and smooth, twigs are blackish, foliage is thick, leaves are drooping and pale green when young and the flowers are large, pendant, fragmented, and calyx red-spotted. The fruit is green and suspended on a long stalk with numerous seeds embedded in whitish sweet-smelling pulp. The flowers are employed as decorative elements and the seeds as aromatics; sold all over West Africa as a spice, awedeaba forms a common ingredient in African medicines (Irvine 1961, 13). Medicinally, it is used in applications for sores, guinea worm, constipation and stimulant with palm oil, and chewed and rubbed on the forehead to cure migraine headaches (Hyam and Pankhurst 1995, 326). Moreover, awedeaba is used much in preparations for enemas and, with guinea grains, for swellings (Irvine 1961, 13).

Awobε (Akan); àkomu (Yorùbá); kumci, májírìyár kúrmìì (Hausa). Euphordiaceae—Phyllanthus muellerianus

Awobe (awo—to give birth; $b\varepsilon$ —them) is a reference to the sharp, multicolored fruit that the plant births or bears in bunches. Awobe is found in the forest and savanna; it is a plant with small encircling and sharp protruding thorns, and is also used as a chewing stick. As an enema, the root is ground on stone, ginger is added, and then the medicine is administered. Otherwise, the root can be boiled and then taken orally. As a savanna plant that grows as tall as five feet high, it bears small fruits of several colors such as red, brown, green, dark-brown or red, and black (when the plant is

eroding or damaged). The stem is used as a chewing stick to clean the teeth. The root is used for *ahohoo* (swellings), *siakwan* (infertility), *kyima yareɛ* (menstrual disorder), and *babaso* (gonorrhea; venereal disease).

Found in deciduous and secondary forests, and widespread in tropical Africa, this glabrous shrub and woody climber is usually of ten feet with recurring thorns. The flowers are greenish-white, fruits are numerous, red, turning black, and can be eaten. The leaves are occasionally cooked with food or a part of soups; clear, drinkable water can be obtained from the stems, and the leaves also contain black dye for fibers. The root is used for dysentery, an infusion of root and leaves is used for eruptive fevers in children and gonorrhea (in Sudan and Ivory Coast), and the leaves are used in (vapor) baths for genital organs and as pelvic decongestive. A bark decoction is used for throat troubles, mumps, and fevers. A root decoction is used for anemia, while the stem is employed for toothaches, a leaf decoction for urethral discharge, and the leaves and palm fruit are made into soup are used by pregnant Akan women for post-delivery (Irvine 1961, 247). The leaf is also used for wounds, skin eruptions, as an eye lotion; the twig-stem as an aphrodisiac and for mumps, fever, throat troubles, paralysis, toothache; and the root for gonorrhea, severe dysentery, and eruptive fever in children (Avensu 1978, 134-136).

Besemankoma, besimankuma, saa-borofere (Akan). Araliaceae—Cussonia barteri

Besemankoma (be-shall, will; se-say, tell; me-me, I; (a)nko-alone; ma—to give, let) is a savanna tree whose wood is soft with vertical lines and a rough white skin. The tree also has light-green leaves. The story associated with its name derives from forest fires, when the young tree wonders why the old tree (mother) had a different skin color (black), the young asked, "mother, why are you so black?" The mother then says, "wait and you will know." Due to the child's eagerness to know why, the mother replied, "tell me alone what you want to know since you have something on your mind." Hence, this proverb, which implies the foregoing story, besemankoma ne oni . . . twen na wo behunu ("voung besemankoma and its mother . . . wait and you shall see"). The root is used for spiritual baths, epilepsy, and spiritual strength and protection. The tree produces a wax that can be used as incense; the dried wax is called apunnuro (smoke medicine). Frankincense is burned with apunnuro to chase away negative energies or spirits. The wood is used for carving ladles (bebeta) for soup and various kinds of spatulas. Found in savannah forest and sometimes in villages from Sierra Leone to Ghana, this tree of up to twenty-five feet high with a round, spreading, and low crown has a thick and corky bark often

blackened by fire. The leaves are grouped near the ends of thick twigs, flowers are sessile in clusters of pendulous spikes each six to twelve inches long and greenish-white, and the fruit is obovoid and whitish. The wood is a dirty white, brittle and soft. Lotion is made from the leaves for washing epileptic children; a decoction of roots and stems is used for painful menstruation, and a leaf decoction is used for constipation and as part of a massage for epilepsy (Irvine 1961, 574).

Ddadaε, obadeε, daddies (Akan); sire (Maninka); igi use, of on (Yorùbá); bamboo, bamboo, dunk, and kwame (Hausa). Bombacaceae—Adansonia digitata

 $Odade\varepsilon$ or $Odade\varepsilon$ ((0)Dd—child/woman; Odeset and $Odade\varepsilon$ —something) is a savanna tree with rough, black skin and bears red and black fruit for the consumption of birds rather than humans. The bark and root are used for heart pains, wherein the root, heart and chest of a tortoise, and honey are prepared into moto (a composite black powdered medicine). This medicine is used in conjunction with other medicines, and, by itself, is used to address akoma yares (heart disease) and issues related to pregnant women. *Odadee* or *obadee* is found in dry coastal regions, savannah forests, in the open country, and often near villages in tropical and sub-tropical Africa. Odadee or obadee is a large tree up to sixty feet high and its girth extends to sixty feet, while its branches are short and stumpy, leaves are few, bark is often purplish, and flowers are large, white leathery and pendulous on long stalks. The fruits of odadee or obadee grow up to nine inches and are usually covered with short greenish-brown hair full of small, round, black seeds embedded in white acid pulp (Irvine 1961, 185-188). The fruit is known as kwakuoηkateε ("monkey's groundnut"). Nearly all parts of the tree are useful. The pulp and the seed are edible and both are used as food and drink. A bark cloth is made from the bark in West Africa. The root is used medicinally, while the leaves are used for kidney and bladder troubles, inflammation, prevention of fevers, dysentery, genito-urinary conditions, and as a lotion for headaches and swellings. The seeds are a febrifuge and a decoction of roasted seeds cures dysentery. The active principle of *phadee* is the alkaloid of adansonin; this is used as an antidote to the poisonous seed in some species of strophanthus and arrow poison (Addiw 1990, 119).

Borofere, boroferemma, borofere, buruku-mani (Akan); yirien (Maninka); sigù, igi ibépę (Yorùbá); gwándà (pl. gwándóójíí) (Hausa). Caricaceae—Carica papaya

Borəfere (borə—abroad, foreign; fere—fruit, usually a melon) or pawpaw (papaya) grows in forest and savanna areas, farmlands, and secondary forests.

The plant, leaves, barks and roots are used medicinally. Both the fresh and dry leaves are used. The fresh leaves help to reduce pain, while the dry leaves are used for fevers. Other medicines are added to this plant to heal pain related to the womb; the root is also used with other medicines to treat gonorrhea. *Boroferemma* are the "children" (seeds) of the pawpaw (*borofere*); either ripe or unripe pawpaw can be used. In the Candomblé tradition of Brazil, this medicinal plant is known in Portuguese as *mamão*, and the syrup from the male flowers is used for chest colds, while a tea from mature leaves is used for rheumatism (Voeks 1997, 176–177).

A genus of twenty-two species, borsfere is known commonly as papaya or melon tree and it contains extracts of "papain" (Hyam and Pankhurst 1995, 90; Castner et al 1998, 32). Consisting of dried matured seeds and other morphological parts, this cultivated plant is found in home gardens and farms, sometimes spontaneously. Borofere is easy to find around villages and is harvested in the wet and dry seasons. The root, leaf, unripe fruit (latex, papain), and ripe fruit are used (PRSPI 1992, 120). The milky juice (latex) of the unripe fruit is used as an anthelmintic, galactogogue, oxytocic, amoebiasis, as well as a cosmetic. The ripe fresh fruit is used as a stomachic, carminative, and digestive. The roots and leaves are used as a diuretic; the leaves are employed as a styptic and in wound dressing (Ibid., 122). The tree, seed, and leaf are used for jaundice, skin ulcers, coughs, malaria, depressed fontanelle in Zimbabwe, warts in Tanzania, as a purgative in West Africa, for kookoo (piles) in Ghana, edema in the Ivory Coast, and toothache in the Democratic Republic of Congo (Gelfand 1985, 290). The active principle is the proteolytic of papa-yotin (Abbiw 1990, 120).

Duanwonsini, duawonsi (Akan).

Duanwonsini (dua—tree; nwonsi/nwansi—sneeze; ni—this is) is a forest and savanna plant whose root has a light-green color with lines. This small tree, however, does not bear fruit and grows to about six feet high. The "sneeze tree" or tree that makes one sneeze is effective against headaches and swellings. It is administered as a nasal drop for swellings, and the root is used when the medicine is applied to the body. Duanwonsini appears in some of the botanical literature as a synonym for samandua when, in fact, they are two different trees, though both may be closely related species. This situation is merely another instance where botanical classifications differ from indigenous classifications. For example, a plant named "children's plantain" has four types with the same indigenous name, but to the healer or knowledgeable child there is little conflict in identifying each type, given that the plant's typology is based on criteria of use or function,

whether a particular type bears fruit or not, or which plant is male and which is female.

Duforε (Akan). (Possibly) Mimosaceae—Entada pursaetha

Dufore is an uncommon tree found in sacred forests or next to "shrine" houses, and some put a little gold on the ground where the expected tree will grow. A little salt to the stem, however, will kill it. This tree grows to fifteen or twenty feet high with leaves that shed during the period of harmattan—wherein the dry and sometimes cold wind from northern Ghana makes its presence known. Dufore can grow by riversides for it stores water in the trunk. The leaves are used for spiritual baths and cleansing, and the leaf is also used with akekaduru (ginger). Dufore comes from Gyaman, the former state and present town at the border of western Ghana and the Ivory Coast.

Fam-wisa, wisa pa (Akan); ataare (Yorùbá); goriya, cittáá (kumfa) (Hausa). Zingiberaceae—Afromomum melegueta

Fam-wisa (fam-ground; wisa or yisa-pepper) is a medicine or type of pepper commonly used in the Takyiman area, and other areas throughout Ghana. In the Candomblé tradition of Brazil, this medicinal plant is known in Portuguese as pimento da costa and in Yorùbá ataare; the plant is associated with the Orișa Eșù or Alágbára (Elegba) and the seeds are sold in Bahia from Nigeria (Voeks 1997, 190–191). Among the Yorùbá of Nigeria, fam-wisa is referred to asobùró dúdú ("black upright") with which the Ifá odù "òtura mèyè (òtura òfún)" and song or incantation, bá mi bùró're mi wa obùró bá mi bùró're mi wa ("may my goodness come, obùró, may my goodness come) are associated (Verger 1976, 56-57). Cultivated in farms and home gardens of the forest region, the matured dried fruit and seeds are sold in local markets (PRSPI 1992, 65). The whole part is used as an aromatic stimulant, antirheumatic, adjuvant, and for coughs, bronchitis, and dyspepsia. Harvested in wet and dry seasons, the seed is used for wounds, numbness, anemia, and is often cultivated and found in tropical Africa. An herbaceous plant growing in tufts, its leaves are narrow, flowers almost without a stark, and have small blackish-brown seeds that are aromatic and prickly. The fruit is used for boils, rheumatism, and bone fractures, while the root is employed for chest pains. The active principle is the resinous body of paradol (Abbiw 1990, 119).

Gyamma, agyamma (Akan); dyisan (Maninka); búmbámí (Hausa). Euphorbiaceae—Alchornea cordifolia

Gyamma (gya—left (behind); mma—offspring, children) is a reference to its fruits and seeds as the "children left behind." When the plant flourishes

or extends its "bushiness," the fruits are found at the stem rather than at the top. This plant makes it difficult to find its fruits because the stem is not visible from the outside; the stem is inside the extended shrub. The plant does not allow any other plant to grow underneath it either. The proverb gyamma kusuu, ko ase kohwe (lit. "gyamma overgrown in woods, go under [and] go look) means that it is difficult to know from the outside whether this plant bears fruit or not. This proverb and the plant itself are used to characterize a person who waits until he or she gets close to an object or person in order to truly know it or that person. Gyamma is used medicinally for infertility and menstrual pains; its leaves are used for fevers. If it is added to bankye or cassava (i.e., pounded with cassava), gyamma changes the color of the cassava to light-purple or red and the toxicity of the gyamma is reduced. Another proverb says, yesane gyamma ho kətwaə kotokora ("we return back to the gyamma tree to go cut for a weeding tool"). Kotokora is a weeding tool or a stick used with a cutlass to hold the grass while weeding one's farm, garden, or lawn area.

Consisting of the fresh or dried leaves, gyamma is found in secondary forests, usually near water or moist, marshy areas. Gyamma is easy to find in forest, savanna, and in the open edge of forest, and is widespread in tropical Africa and distributed from Senegal to Angola (Irvine 1961, 211). A multi-stemmed, almost climbing shrub or small spreading tree up to fifteen feet high and with a one foot girth, it has leaves that are broadly ovate and cordate, flowers that are greenish-white and often dioecious well below the leaves, and fruits that are greenish. 40 Its black dye is used for fabrics, pottery, calabashes, leather, and as an ink ingredient; the red fruits are used to trap birds. A widely used medicine in West Africa, the roots are used for jaundice, leprosy, snakebites, and the bark is used as stomachic. The stem, bark, root, and fruit are also used as an antidiarrheal, spasmodic, and rheumatic (PRSPI 1992, 7). Juice from the leaves is used for ringworm; the powdered leaves are used for wounds and yaws treatment. The root is antiprotozoal (attributed to alchornine), and the crude extract is antimicrobial (Ibid., 9). The root, fruit, and seed from the herb is used for coughs, chest pains, fractures, and boils.

Harvested in dry and wet seasons, the root, leaf, twig, and seed from the tree or shrub is used for whitlow, stomach ulcer, jaundice, fracture, wound, chronic wound, skin disease, yaws, fever, and ringworms. It is commonly used for venereal diseases; as a decoction, it is used as a wash for urethral discharges, while a decoction and infusion of leafy-twigs with lime tonic act as a purgative for women in Ghana and leaf decoction is used for dysentery, menstrual pains, and fevers. The powdered leaves are used for ulcers and wounds (curing them rapidly), and the acid-tasting fruits

as laxatives (Irvine 1961, 211–212). The bark or root is used for broken bones in which the bark is pounded—along with three other plant barks—and the affected area is anointed. The leaves of the same plants are collected, ground, and used to bind around the affected area until it is cured (Appiah-Kubi 1981, 153). The leaf is also used for dysentery, gonorrhea, conjunctivitis, venereal diseases, menstrual pains, fever, febrifuge, abdominal troubles, and as an enema for the stomach; twig-stem for malaria, as a stomachic, for diarrhea, sores, venereal diseases, cough, piles, leprosy; the root for jaundice, snake bite, venereal diseases, dysentery, leprosy, toothache; and the fruit for ringworm and as a laxative and poultice (Ayensu 1978, 117–121). Gyamma can also be used with *adedenkruma* (castor oil plant) leaves for rheumatism (Appiah-Kubi 1981, 156).

Hwedeε (Akan); moloko (Maninka); (k)yambama (Hausa). Gramineae—Pennisetum purpureum

Though the precise or relative etymology is uncertain, there exist two types of this plant or grass. One is *ahwedee*, which is sugar, and the other is *hwedee*, which grows in both savanna and forest areas. In the forest, this grass grows or takes over when trees fall or cannot grow. *Hwedee* grows rapidly and up to fifteen to twenty feet high. Wherever it grows, the land becomes or remains very fertile, since it introduces nitrogen into the soil. The root is used with a pepper for curing diseases such as fibroids and infertility problems.

Hwentia, hwenetia, hwenteaa (Akan); kanin (Maninka); eerù (Yorùbá); à góógè, kímbáá (Hausa). Annonaceae—Xylopia aethiopica

Hwentia (hwene—nose; tia—pointed, long) is a pepper; when added to a medicine in the form of nasal drops, it produces sneezing that causes one to hold their nose, which looks pointed and long while sneezing. The shape of hwentia also resembles a long, pointed nose. It is an active ingredient in many medicines. Hwentia consists of dried mature fruits and occurs in fringing and deciduous forests, and clearings; it is sometimes cultivated in home gardens and available in markets. Hwentia is easy to find and is harvested in wet and dry seasons. Distributed from Senegambia to Gabon, this straight-stemmed tree up to sixty feet high has a smooth bark that is gray-ish-brown and odorous when freshly cut. The flowers are greenish-white to golden-brown when open, the tree's fragrant fruit, red at first, turns dark-brown or black and is slender and cylindrical, hence, its name "slender nose" (Irvine 1961, 23). The seed and fruit are hot to the taste and sold in markets as a spice and substitute for pepper. The wood is white, fairly hard, and heavy, while the bark is scented.

The plant is used to assist the action of other remedies. The root is used for cough medicines; the bark for bronchitis, dysentery, biliousness; and the leaves for rheumatism and as an emetic. The poultice of fruit and leaves are used for headache, and the fruit and seeds are used as a restorative after childbirth (Irvine 1961, 24). Stem bark and root bark are also used as carminative and as a stimulant, and additive to other remedies; extract has antifungal and broad-spectrum antibiotic action due to Xylopia acid (PRSPI 1992, 150, 152). Xylopia are tropical, primarily African, evergreen trees or shrubs. The seed, fruit, bark, and tree are used for stomach pains, malaria, wounds, and arthritis. The leaf is used for rheumatism, headache and as an emetic. The twig-stem, fruit and seeds are used as a stimulant and carminative; the bark for bronchitis and dysentery; the root for cough and cancer; and the fruit for female fertility, headache, and biliousness (Ayensu 1978, 41–44). The active principle is the fat and resin of avoceine, rich in protein (Abbiw 1990, 119).

Kankano, brεmpε, kankanu, bramprε (Akan); dundu (Maninka); ìgíyàà (Hausa). Rubiaceae—Nauclea latifolia

Kankano (nkanka—termite; (ε)no—mother) is a tree that does well around termite hills. Termites like to travel on the side of this tree. The term kankano also derives from kekano (ke-ka—bite, bite; (ε)no—(grand)mother in this context). Kankano is used with women who have stomach pains after delivery, hence, the saying, and "if it (stomach) bites you, drink this (medicine)." Yet, the actual name of the tree is brempε (brε—fatigue; mpε—not to look), and since this tree is common, "one should not get fatigued looking for it." Brempε can be easily located in the savanna area. Kankano or brempε consists of dried transversely sliced and chopped roots, and is common in the guinea savanna as well as occurring in the grassland savanna. The fruit, leaf, and stem bark are used in the form of a tonic, antipyretic, diuretic (on smooth muscle), cytotoxic (leaf extract), antibacterial, and febrifuge (PRSPI 1992, 105, 107).

Found in savannah and savannah forest from Senegal to Angola, Congo, Sudan, and Uganda, this scandent or straggling shrub (in savannah woodland) or small spreading tree rarely reaches over twenty feet high. The bark is rough, the leaves are glabrous and obovate, the flower heads are white and sweet-scented (sought by bees) with red, fleshy shallow-pitted fruits that are edible, and sweetly acid pulp with numerous seeds embedded. The root is used as diuretic for venereal diseases, constipation, stomach complaints, wounds, sores, gastro-intestinal disorders, fevers, rheumatism, and cough; the fruit is used for piles, dysentery, colic, and women's ailments (Irvine 1961, 694–695). The leaf also addresses measles, fevers, diarrhea,

dysentery; twig-stem is effective for indigestion and general weakness, as a tonic, febrifuge, and for wounds; the root is used as a tonic and for nausea, biliousness, coughs, toothaches, gonorrhea, urchitis, leprosy, malarial fevers, and gastro-intestinal problems; and the fruit for piles, female disorder, and dysentery, and as a diuretic, stomachic, and colic (Ayensu 1978, 226–228).

Kokonisuo, akokoninsuo, aninsu, sisire (Akan); sere, kesa, sulasuma (Maninka); òrúwú (Yorùbá). Bignoniaceae—Spathodea campanulata

Kokonisuo (kəkəə)—red; ani—eye; nsuo—water) refers to the water that has strayed into the eye making it red; this tree is also called sisire. Growing in both forest and savanna areas, the big tree maintain its leaves throughout the year and has red and yellow flowers in which the bulb contains water. Children often play with the bulbs and squeeze water out of it. The bark is a little soft and the outer layer has "dead skin." Known as the African tulip tree, it is widespread in tropical Africa extending to South Africa, found mainly in secondary forest, and fringing forest. Widely cultivated as an ornamental, drums and sticks of spiritual significance are made from the wood of this tree (Neuwinger 1996, 258; Irvine 1961, 739). This tree of approximately seventy feet with a bole of thirty-one and a half inches in diameter has short branches and a compact rounded crown, and is easily recognizable by its conspicuous flaming inflorescence comprising large orange-red bellshaped flowers with orange-vellow margins. The flowers and buds have an unpleasant smell, while the leaves are imparipinnate with four to eight pairs of opposite leaflets and yellow-green maturing to dark-green.

The plant is used in an array of indigenous medicines in southern Cameroon, Togo, Benin, Nigeria, Gabon, Congo, Zaire, Burundi, and Rwanda (Neuwinger 1996, 259-260). The bark infusion is used as an enema for backache; bark-pulp for edemas, skin diseases, sores; and the bark is used in Ghana for dysentery, as a stomachic, and as a dressing for ulcers and skin disease (Irvine 1961, 739-740). A leaf decoction is used as a poison antidote and for gonorrhea, while a bark decoction is used for kidney trouble, swellings, skin complaints, and for piles (with the bark of Etie) in the form of bitters (Appiah-Kubi 1981, 156; Irvine 1961, 740). The flowers are also used for ulcers and wounds; the leaf for gonorrhea, wounds, lotion, urethral inflammation; and the twig-stem for sores, constipation, stomach troubles, kidney problems, guinea worms, backache, skin disease, dysentery, ulcer, and edema (Ayensu 1978, 63-64). Chemically, alkaloids, tannins, caffeic acid, quercetin, a new dihydroxylated sterol, and spathodol were found in the leaves; the stem bark contained tannins, ferulic acid, vanillic acid, atranorin, and mixture of sterols and pentcyclic triterpenoids (Neuwinger 1996,

260). The flowers contain anthocyanins, while the fruit gave positive tests for saponines, tannins, polyphenols, and glycosides. Pharmacologically and toxicologically, exact proof of plant's toxicity is pending and quercetin has relatively strong inhibitory activity in vitro against the malaria organism *Plasmodium falciparum* and inhibits the growth of human malignant cells derived from the intestinal tract (Ibid., 260–261).

Kəkəwa (Akan)

Kɔkɔwa (kɔkɔ—red; wa—small) is referred to as a "little red" rather than a pure, red tree. Kɔkɔwa is a savanna tree that grows in the northern part of the Bono area; the tree grows to about ten feet high in fertile soil, the skin is reddish-brown, and the wood is hard. The Bono use it to support ɔpam, which can be of any other tree and is the name of the kɔkɔwa variant without branches or with few branches and no leaves. Types of ɔpam include ɔpam (Macaranga heterophylla or huritilan), ɔpam kɔkɔɔ (Macaranga barteri), ɔpam kɛseɛ or kokuroko (Macaranga spp.). It remains unclear as to whether or not ɔpam or ɔpam kɔkɔ is a variant of kɔkɔwa since ɔpam kɔkɔ, for instance, is a sixty feet tree usually by itself and is supported by prop roots. The roots are reddish in color and, in medicinal form, are used in conjunction with other medicines.

Konkoroma, okonkroma, konkroma (Akan); kissi-bilalolo (Maninka); òrúwo (Yorùbá). Rubiaceae—Morinda lucida

Konkoroma (konkoro—to force to swallow; ma—to give, get full) refers to the bitter taste and thus the need "to force to swallow when given" (this medicine). In actuality though, konkoroma has a mild taste. This savanna tree of eight to ten feet tall has small green leaves, rough blades, and an eyeshaped root that is golden-yellow. It does not shed its leaves, though the older brown leaves do fall; the tree bears small black fruit that birds like to eat. The skin and bark has a scaly texture (like a crocodile) and the wood is soft, but not difficult to break. The root is used in conjunction with other medicines, especially, in bath form to fight against sunsum yaree; the leaves are used for pepuda or atiridiie (fever).

In most types of forest country, such as fringing forest and flooded areas, this tree is distributed from Ivory Coast to Angola, Congo, Sudan, and East Africa. A medium sized tree that has the potential to grow up to fifty feet, it has broadly elliptic to broadly ovate leaves that are often dark-purplish or black when dry. The flowers are white and fragrant, fruit-heads are lobed and black, and the wood is yellow but darkens to yellow brown, open-grained, fairly durable and resistant to damp conditions, termites and other insects. The roots yield a yellow dye, the bark yields a red dye, while

the leaves yield a green dye. A decoction of the bark of the root or stem with spices is used as an enema for fever, constipation, piles, and dysentery. The bitter root is used for gonorrhea, leaves for purifying the blood, and a decoction of the root and bark for chest medicine and pains. A decoction of the root and leaves are used to prevent abortion, for malaria as well as bad forms of jaundice with hemoglobinuria and haematuria. The plant is used as an antidote in poisoning, dysentery, and leprosy; a bitter leaf decoction is applied to a woman's breast in weaning her infant (Irvine 1961, 687–688).

Korobaa, korobaa (Akan); loko (Ewe), kuka (Mamprussi); koka, koko (Mossi, Nankani, Dagarti); (j/d)ala, dial(o/a), jallo (Malinké in Mali, Guinea, Senegal, The Gambia); kail, kahi, kay(e/é), dalehi (Fula in Mali, Niger, The Gambia, Guinea, Senegal, Cameroon); yala, ogano (Maninka); igi òganwó (Yoruba); mádààcíí (pl. mààdààtáí) (Hausa). Meliaceae—Khaya senegalensis

Korobaa (koro or koro—one, single; baa—branch) is a forest tree known commonly as either mahogany or redwood. Often used as a timber, the bark is used medicinally for spiritual baths and is drunk in the form of bitters. This medicine works in the blood vessels, cleans the blood, and is included with other medicines as a concoction. Consisting of dried stem bark and present in a fringing forest, especially near streams, and gregarious in the savanna, this tree is cultivated as an avenue tree in many towns and cities (PRSPI 1992, 89). The whole plant is used for loss of appetite and the leaves for headache; other uses include that of an haemostatic, febrifuge, analgesic, anticonvulsant, antimicrobial, antipyretic, anthelmintic (human and veterinary), and antiemetic (Ibid., 91). Widespread from Senegal to Uganda in forest or plantation, East Sudan, in savannah woodland, especially by streams and forest margins, the tree grows up to fifty to ninety-eight feet high with a relatively short but thick stem, leaves are unevenly sized, with blackish flowers, fruit capsules, and winged seeds. The bark, bark stem, leaves, and whole plant are also used for convulsions, anemia, arthritis, and headaches. The tree has a wide dense round crown with evergreen dark foliage; the bark is very bitter, silver-grey, dark-grey or brownish with small reddishtinged scales (Neuwinger 1996, 609). Korbbaa plays a very important role in West African human and veterinary medicine and is extensively used in West Africa as a bitter tonic and a fever and malaria remedy (Ibid., 609). Regarded as a tonic and strong purgative, Korbbaa is also used for vomiting, gastro-intestinal problems, scabies, chickenpox, dermatoses, ulcers, wounds, venereal disease and leprosy (Ibid., 610). Chemically, the plant is characterized by a great number of bitter triterpenoids, meliacins (or limonins), sterols, coumarines, flavonoids, and fatty acids (Ibid.). Pharmacologically

and toxicologically, the stem bark is antipyretic and active against chronic dysentery and diarrhea (Ibid., 612).

Kotogyebεn, kɔtɔgyebεne (Akan); sindyan (Maninka); araho, màrgáá (Hausa). Fabaceae (also known as Leguminosae)—Cassia sieberiana

Kotogyeben (koto—to squat, kneel; gye—receive, get; ben (from the cowhorn, akoben)—reference to the "akoben" shape of the root) looks as if its "knees are on the ground" and, because of its deep and difficult roots, one has to "squat and receive [i.e., remove] the soil to see its roots." Kotogyeben is a forest and savanna tree. In the forest, it grows tall and has a thick trunk, while in the savanna it only grows into a tall tree. The tree bears yellow flowers from September to March and has long but hard fruit with solid black seeds. The wood is very firm and its leaves are shaped like the leaves of an orange tree. The bark has a tough, gray skin. This medicine is used in conjunction with other medicines and is known to facilitate the strength of a person.

Belonging to a genus of approximately thirty species, this tree is found in the savanna forest, thickets, and secondary (closed) forests, and is distributed from Senegal to Cameroon, extending to Sudan, Uganda, Congo, and East Africa (Hyam and Pankhurst 1995, 93-94). On a tree up to fifty feet high, the leaves are often purplish and hairy with young leaflets in up to nine pairs, elliptic or oblong, while the flowers are pale-yellow, fruits are cylindrical (sometimes slightly bent), and seeds are small and shiny brown. The large yellow flowers are very beautiful, the sapwood is white, heartwood is very hard, close-grained, heavy, yellowish or pinkish becoming dull red or brownish. A root-bark infusion is a strong diuretic and used as an aphrodisiac; strong doses are used against gonorrhea and for expelling tapeworm. A root decoction is used for stomach troubles and as a purgative; the root is widely used, generally, with other medicines, for scrotal elephantiasis, leprosy, as a diuretic in venereal diseases, and for dysentery and piles in Ghana. The powdered bark is used for gonorrhea in Ghana, and the yellow pulp of the fruit is used as a laxative (Irvine 1961, 289-290).

Kotokusaabobe, kotoku-saabode (Akan). Aristolochiaceae—Paraistolochia promissa (syn. Aristolochia flagellate)

Kotokusaabobe (kotoku—shape, bag [from Malinke kotokuo]; sε—resembles; aborɔbε—pineapple) is a vine that "resembles the shape of a pineapple" and is found in forest and savanna areas. It has green leaves and its root is crooked with a yellowish-red color. The medicine is used for treating chronic sores and urination problems, in addition to ayamtim (constipation), nseeyε (skin disease), otwa or etwirε (epilepsy), εdam (mental disease), and sukəm mmoraso (dehydration). Common in closed forests and

Aduro 113

distributed from Ghana to Cameroon, this evergreen woody climber grows up to thirty feet high with oblong-elliptic three-nerved leaves that have an acute base. The flowers are sessile on old wood and grow along the whole length, whitish or dirty yellow on the outside with purplish-brown blotches, lined with white hairs. The plant produces fruit up to one foot long (Irvine 1961, 39).

Kyerebenten, kyerebeteni (Akan). Rubiaceae—Amaralia bignoniiflora

Kyerεbenten (kyerε—to show, tell; ben—(from abεn, "horn") "horn-shaped"; ten—split it once) refers to a cured yareε (sickness); the idea is that when one is "shown" or "told" about this medicine, the medicine "splits" (cures) the yareε the first time through the use of the root. Kyerεbenten is found in secondary forests (mpɛm; mpε—do not look; mu—in). Mpɛm connotes, "do not go and pursue this land because it has been claimed (i.e., it is being used)." The medicine is used as a complementary medicine and the skin of the root is applied to the body for fevers and bodily weaknesses. Common in closed forest and distributed from Sierra Leone to Nigeria and Sudan, this climbing shrub of up to thirty feet high has obovate-elliptic leaves, pink flowers turning red and then orange, which are tubular and five-lipped at top, united at the base only. The fruit is red and crowned by a calyx; the fruit is also eaten raw. The plant's fibrous stems are used to tie up fences. The pounded leaves are rubbed on the body for pains and the mucilaginous seed covering is chewed for cough and heartburn (Irvine 1961, 655).

Namprane (Akan). Rubiaceae—Gardenia ternifolia (syn. Gardenia jovistonantis)

Namprane (nam—meat, flesh; pra(ne)—to be swept) is a small savanna tree that is sacred and, therefore, used in spiritual baths and activities. Its appellation, eseremudua namprane (eesre—savanna; mu—in; dua—tree), literally means, "meat-to-be-swept tree in the savanna." Though there are variations from place to place, two weeks before a significant festival day, entrance to abode of some ntoa abosom—a type of abosom similar in function to the abosommrafoo—is not permitted by way of placing branches of namprane at the doorway of the abosomfie ("shrine house"). It is said that ntoa has gone to the "sky" or "north" and so no one can enter the abosomfie.

Namprane is found in the grass savanna, savanna, and savanna forest, and is distributed from Sierra Leone to Cameroon. It is a small shrub-like tree up to fifteen feet high with intertwining branches, short and very hard twigs that are strong as stout thorns, powdery young bark, few leaves, and sweet-scented and cream or white flowers (dark yellow when fertilized).

The fruit is oblong to elliptic, not ribbed, pericarp fibrous; the fruit is eaten in the Sudan and Bono area of Ghana. The wood is very hard, light-yellow or pale-reddish, and it or the tree's branches are placed on roofs. It is a very bitter tasting plant used medicinally for horses and cattle. The root is used for leprosy and rheumatism in humans. A cold root decoction is used for restoring strength; bark is used as an operating medicine for asthma and syphilis; leaves are used for syphilis, as a liniment for itch, and an antidote for arrow poisons (Irvine 1961, 675).

Nkãnaa (Akan); mbiri, balam, kundie, barinbarin, mokokoama, mokrodoma (Malinké in Mali, Senegal, Guinea, Ivory Coast); tembel, gorey, borel, cami, sihmuuhi, tambihi, cam(b)e (Fula in Senegal, Burkina Faso, Niger, Nigeria); mushagawuwe (Shona); mowana (Setswana). Euphorbiaceae—Flueggea virosa

Nkanaa is a savanna plant that grows to about four or five feet tall and has small leaves and a light skin. The bark is brownish when scraped, and the tree grows mostly in red soil (Asase kokoo), especially near anthills. This medicine is used as a decoction and a concoction for swelling around the thigh area and for gonorrhea. According to Neuwinger (1996, 495), nkanaa is a "dense, many-branched shrub, sometimes a small spreading tree up to about [twenty feet high], although more commonly [seven to ten feet], evergreen and deciduous." The stem is approximately three inches in diameter, the bark is smooth and grey-brown, and the flowers are fragrant and greenish-yellow without petals in clusters in the axils of the leaves. Widespread across tropical Africa and South Africa, wooded savanna and transition forests, nkanaa is one of Africa's great medicines since the tree is repudiated to be a cure-all that is so effective it is usually used by itself (Neuwinger 1996, 495). Indigenous uses include malaria, (bloody) diarrhea, venereal disease, pneumonia, coughs, fever, asthenia, gonorrhea, constipation, aphrodisiac, schistosomiasis, female infertility, epilepsy, convulsions, stomachaches, abdominal pains, and snakebites (Ibid., 496–497). Used for heart palpitations and for venereal diseases, this medicine is known in Setswana as mowana (Hedberg and Straugård 1989, 132). Chemically, it is a rich source of alkaloids of unusual structure and, toxicologically, the root has shown to be the least toxic plant part (Neuwinger 1996, 498). Pharmacologically, the root bark showed weak hemolytic activity; a high level of in vitro antifungal and strong antimalarial activity (Ibid., 499).

Ode(e) (Akan); kokunyε (Maninka). Octoknemataceae—Okoubaka aubrevillei (syn. Octoknema okoubaka)

Aduro 115

Ode (2—noun prefix; de, di—to take, to eat) is a sacred tree in many Akan areas. There are many inexplicable narratives associated with this tree. The mmoatia live by it and the bones of birds are found usually under ode from flying underneath the tree. Its fruit has a round shape and a yellow color when mature. Though it appears animals eat the fruit, it remains difficult to explain whom actually "eats" or "takes," as the name ode connotes. Ode is used for spiritual activities, such as the preparation or making of asuman and herbal baths, and it is also a complementary medicine. It is necessary to throw salt or an egg at this tree and then request permission to cut off pieces of the bark for medicinal purposes—this practice is very common in Akan medicinal protocol. Found in closed forests, locally gregarious, and distributed from Ivory Coast to Ghana, this tree of up to ninety feet high with a ten feet girth has a slight buttress, a thin bark with a pale brown slash, ovate-oblong leaves, and greenish small flowers on spikes up to six inches long on older branchlets. In the Ivory Coast, the tree is considered a powerful "spirit" which no other tree can grow near. It is powerful medicine against leprosy and serious syphilitic troubles, and people wash their bodies with ade bark infusion to protect themselves from (certain) diseases (Irvine 1961, 475).

Odom, odom (Akan); tali (Maninka). Caesalpinaceae—Erythrophleum suaveolens

Odom (2—noun prefix; dom—donate, aid, help) is a forest tree that is held in high regards. The bark and root are used for spiritual baths, while the root is used to make asuman. Odom is a hardwood tree that is a source for timber. Odom is distinct from Odum (oak; Chlorophora excelsa) though the former may act as a substitute for the latter. Widespread in tropical Africa from woodland savanna to moist semi-deciduous forest, especially in moist deciduous forest, the species of Erythrophleum are considered very poisonous, especially the bark; in fact, the entire tree is very poisonous (Neuwinger 1996, 303-307; Irvine 1961, 302). A large shady tree up to a hundred feet with a ten feet girth, odom has a large dense crown and widely spreading branches, often with buttresses at the base, thick and rough (though sometimes smooth) bark with lenticels in vertical lines (Neuwinger 1996, 300–301). The fruit remains on the tree often for a full year, while the leaves are dark-shiny and ovate-elliptic, the flowers are small cream or reddish and sweet-scented, and the fruits are flat. A cold bark infusion is used as emetic and purgative, charred bark is used much for rheumatism, small quantities of bark for healing wounds and chicken pox, chiefly used in decoctions to bathe gangrenous sores, swellings, ulcers on the side of the foot, and headaches using the dried bark (Neuwinger

1996, 302–303, 307–313; Ayensu 1978, 79–81; Irvine 1961, 306). Active principles are the alkaloids of erythrophleine, cassaine, cassaidine, norcassaidine, homophleine, and the acid alcohol flavonoids of pinitol and luteolin (Abbiw 1990, 119).

Onyame dua, əsennuro (Akan). Apocynaceae—Alstonia boonei

Onyame dua (Onyame—The Creator or "shining one"; dua—tree) is found mainly in forest areas. It is a huge tree with a large girth and it grows to a hundred and fifty feet or more. The wood is a hard and pale, while the leaves are green, and the tree bears seeds. The bark, which forms a white milky sap, is bitter when boiled. The bark is carved for doors, stools, and other wooden materials. In the recent historical past, children used parts of this tree to learn and master the art of woodcarving. The tree occurs in deciduous and fringing forests in Ghana and the dried whole or powdered stem of the bark is commonly used (PRSPI 1992, 10). Though the leaf is also used, the bark has antipyretic, antirheumatic, antimalarial, and antimicrobial properties (Ibid., 12). The active principle is the alkaloid of echitamine used as a malaria remedy (Abbiw 1990, 119).

Otiε, εtiε (Akan); gbɔson (Maninka). Myristicaceae—Pycnanthus angolensis (syn. Pycnanthus kombo)

Etie is a forest tree that bears fruit throughout the year and the mature fruit is constantly falling from its tree. Its wood is used for indigenous houses or roofing thereof as well as shelters for the storage of maize (corn). The bark is used for yafunu yares (stomach pains or disease), abotutu (arthritis), kookoo (piles), ahotutuo or okwaha (rheumatism). The tree is a genus of seventeen species found in closed forests and which thrives in clearings, and is distributed from Guinea to Angola and Uganda (Hyam and Pankhurst 1995, 417). A common light-loving tree up to a hundred and twenty feet high and fifteen feet in girth, the branches are often long and drooping, the bark is reddishgrey and scaly, the leaves are usually riddled with holes, and the flowers are in panicles with brownish-red male flowers. Male-female flowers are separate parts of the same tree generally at different times. The fruit is abundant, hard-shelled, thick, enclosing a single oval brown nut that is aromatic. The seed is starch-free and rich in oil. A root infusion is used as anthelmintic, the pounded bark is used for loss of appetite and as a toothache cure, and the bark decoction is used as an emetic or enema for antidote to poison, leprosy, and dropsy. The sap is used as a styptic (Irvine 1961, 29–30). The stem-twig is used for toothache, mouthwash, loss of appetite, enema, emetic, purifying mother's milk, leprosy, dropsy, poison antidote, and styptic; the root as anthelmintic and for craw-craw (Ayensu 1978, 196).

Aduro 117

Sabrabese, sabarabese (Akan). Meliaceae—Trichilia roka (syn. Trichilia emetica)

Sabrabese (sa—enema; bra—come, bring; bese—come to tell) is a very strong medicine in the form of enemas and, as a result, indigenous healers often say, "take this (enema) and come back to tell" how good it worked. Sabrabese is a savanna tree whose trunk is relatively small in width. The external color of the skin is light-brown with rough vertical lines, while the inner color is white. The root is used as an enema as well as for herbal baths in which only the root is employed. Sabrabese is extremely potent when prepared and administered as an enema. Found in deciduous and savannah forests, sometimes in fringing forests, sabrabese is widespread in tropical Africa extending to South Africa, Madagascar, and Arabia. A small tree between twenty-five and thirty feet high with a two-foot girth, sabrabese has corky twigs, pinnate leaves that are greenish-white and tomentellous, and sweet-scented flowers. The fruits are crimson-red capsules fleshy at first; the seeds are orange-red or scarlet and fleshy, and sometimes chewed like kola. The bark contains some resin and tannin. The bitter root is used as an enema to induce purging; the use of the bark as a purgative is very common in various parts of Africa. The poisonous effects of bark, however, are probably exaggerated. The bark is also used for fevers, syphilis, applied to parasitic skin diseases, itch, and ringworm. The plant is used for lumbago, jaundice, coughs, and headaches (Irvine 1961, 530-532).

Samandua (Akan). Rutaceae—Clausena anisata

Samandua (saman—ancestor; dua—tree) is also interpreted as sa (enema), (ɔ)man (nation), and dua (tree) or what "the people of the nation use for enema in a particular place." Samandua grows into a large tree, bears yellowish fruits, and its leaves are similar to those of the orange tree. Though offering some striking resemblances in type or appearance, samandua and sesadua (sesalsasa—"ghost, ancestor"; dua—tree), at least in the Bono area, are two different trees and perhaps merely species of the same botanical family. This medicine is effective against worms, mucous, ɛfi (dirt or contamination in the stomach and body), and anididane or anidaneɛ (backwards turning of uterus). Found in coastal thickets, forest undergrowth, savannas, and distributed from Guinea to Angola, samandua is widespread in tropical Africa. A shrub or small tree up to twenty feet high, samandua has leaves that are pinnate and strongly anise-scented, white or cream flowers, which are numerous, small, and in florescence up to nine inches long. The fruits are small, ellipsoid, and shinning blue-black drupes.

Used among Akan in making new "shrines" (i.e., the physical abode of the *abosom*), the root is used for stomach troubles, rheumatic and other

pains, and a decoction of root and leaves is used for piles. The roots are used for headache, the leaves for snakebites and as a tonic and laxative after childbirth. Juices of the leaves in the form of nasal drops and as an analgesic and antiseptic for bronchial troubles, headaches, and sinusitis are also prepared (Irvine 1961, 496). Used as antirheumatic, as well as for ear and toothache, the leaves can be prepared into a mosquito repellant and is known as a parasiticide (e.g., against ticks) and anthelmintic (PRSPI 1992, 33). The leaf is also used as a laxative and for snakebites, headaches, toothaches, influenza, migraines, dysentery, fevers, constipation, post-labor treatment, and swellings. The twig stems are used as chew sticks, evacuant, and for respiratory ailments, and the root for rheumatism, stomach troubles, piles, and as a mouthwash (Ayensu 1978, 232–234). Active principles include the alkaloids of atanisatine, clausanitine, and mupaamine (Abbiw 1990, 120).

Sensan (Akan). Gramineae or Poaceae—Eleusine indica

Sensan (se(n)sa(n)—"grows here and there") is a type of short grass that grows from approximately a half an inch to six to ten inches long. It is effective against killing germs in the breast or *nufu yareɛ* (breast disease) and is often added to other medicines. Sensan is also used as an ingredient in spiritual work and a piece of this grass is used culturally wherein an *smanhene* is attending the funeral of another *smanhene* of importance he puts a long piece on the mouth and does not talk. It remains unclear why he refuses to talk and therefore the meaning(s) of sensan employed in that manner is also unclear. Sensan belongs to a genus of nine species of grasses (Hyam and Pankhurst 1995, 170).

Sorono, soronoo (Akan); irúgbá, iri ìgbá, irú (Yorùbá). dóòráwà (tree), bèènà (fruit) (Hausa). Mimosaceae—Parkia clappertoniana (syn. Parkia biglobosa)

Sorono (osoro—above, north; no—it, particular (tree)) is a huge savanna tree whose fruits and leaves (used as both medicine and food) are on top, hence, the reference to "above it" or "above the top." The bark of sorono is thick with a rough skin, and the tree has tiny green leaves and bears flowers and fruits; the latter are long and dark when mature but otherwise yellowish with brown seeds inside. The hard, brown seeds have a sweet taste and are used for "dawadawa" (processed brown seed), which is used to make soup. It is mostly those from northern Ghana that use dawadawa with food, such as soup, and northerners respect this tree. In northern Ghana, dawadawa is also used as a meat substitute. The bark, root, and leaves are all used for medicinal purposes though few Bono use it for that

Aduro 119

purpose. For some Bono the processed product is taboo and most indigenous Bono healers view *dawadawa* as such. To the Bono, the leaves are used for *menemkuro* (sore throats) and *pɔmpɔ* (boils inside the esophagus or on the throat) through vapor (*pu*) therapy. The bark is used for *sunsum yareɛ* such as chronic convulsions (*ɛsoro*). The root is used for sacred purposes through the *ɔkɔmfoɔ* or *ɔbosomfoɔ*.

Common in savannas and deciduous forests, and distributed from Ghana to the Sudan, this tree of up to sixty feet high with a twelve foot girth has spreading branches and is brownish-grey with longitudinal fissures in the bark. Its leaves are often defoliated by caterpillars. It has scanty scarlet flowers in dark-red, spherical heads, often flowering when the tree is leafless. Pods in bunches contain a yellow mealy substance enclosing the seeds. The leaves are rich in nitrogen and ash, and the yellow mealy "pulp" is often used in soups, cakes, and eaten with meats and other foods. The kernels are used in dawadawa (Hausa) cakes or balls and they are common soup basis. The sapwood is yellowish-white, the hardwood is dull-brown, the bark is rich in tannin, and the roots and leaves are used for eyewash, a bark infusion as a tonic for diarrhea and orchitis, and a bark decoction as an enema. Eating the unripe fruit causes sickness and collapse, and the pulp contains an alkaloid and a cyanogenetic glucoside (Irvine 1961, 348–349). The daudawa or dawadawa cake of fermented seeds, with values per 100 gram of edible portion, contains 395 calories, 10.1 gram of water, 28.5 gram of protein, 16.8 gram of fat, 32.4 gram of carbohydrate, and has no calcium, iron, vitamin A, thiamin, riboflavin, nicotinic and ascorbic acid (Irvine 1961).

Soro-wisa, sesaa, asonsa (Akan); feve (Maninka); átá ìyèré (Yorùbá); màsóóróó (Hausa). Piperaceae—Piper guineense

Soro-wisa (əsoro—above, north; wisa or yisa—pepper), also known as black pepper, is a vine that is always "above" the ground and is often chewed as a medicine. A genus of approximately two thousand species (Castner et al 1998, 101; Hyam and Pankhurst 1995, 395), soro-wisa is found on trees in closed forests and is widely distributed. A climber of forty feet high with clapping roots, the leaves appear five-nerved at base, and the fruit is red or reddish-brown turning black when dry. Dried and fresh leaves are used as condiments in soups, the root for gonorrhea, stem for cough and root and stem for bronchitis and intestinal diseases. Fruits are widely known for stimulating properties and generally mixed with other herbs; the fruit is also used as a spice, antiviral, and as an insect repellent in powdered form (PRSPI 1992, 24). The seed is employed as a stomachic and carminative, and for syphilis and colds (Irvine 1961, 40). The leaf is

used for coughs, wounds, and to facilitate conception; twig-stem for cough, bronchitis, internal disease, intestinal disease, venereal disease, and herpes zoster; root for gonorrhea, bronchitis, and internal disease; fruit for tumors and rheumatism; seed for back pains, syphilis, colds, and as an stomachic and carminative (Ayensu 1978, 211–214). Active principles are chavicine and piperine (Abbiw 1990, 122).

Supua, (o)supuwa (Akan); bati, beatu, batio-foro, ndundu, badi (Malinké in Senegal, Ivory Coast, Mali, The Gambia, Sierra Leone, Guinea); dundaké, baure, bakudé, dunduké (Fula in The Gambia, Mali, Togo, Guinea, Sierra Leone). Rubiaceae—Nauclea diderrichii or Sarcocephalus latifolius

Supua (su (from nsuo)—water; pua—forced out by pressing) refers to sources of water or "water forced out" areas, since supua protects underground water and if one were to cut this tree the water source(s) would become desolate. A huge forest and savanna tree that can absorb much water, supua normally grows near swampy areas, streams and rivers. Supua has big oval-shaped leaves that are thick and green, a sizable yet thick bark, and sky-blue skin when fresh turning light-brown or tan when dry. The bark has a bitter taste and is used in prenatal treatment during the third month of pregnancy, while the stem is used as timber for roofing. This prenatal medicinal treatment is known as *abennuro* in which palm nut fruit is used to make a soup to drink in three-day internals for that third month. Abennuro helps the pregnant woman who experiences back and other pains, as well as facilitates the growth of the fetus. The treatment is usually applied to a fetus affected by afam yares or being "stuck to the wall of the womb" rather than growing in the middle by the third month, or if the fetus is not moving, the pregnant stomach does not protrude as normal, or the full presence of the fetus is not felt. The idea is that the baby should grow in the middle of the womb in order to properly develop and expand.

This large un-buttressed tree grows up to a hundred and twenty foot high with a nine feet girth and short trunk. It is found in savanna-woodland areas along forest margins, often in shady moist places, and is common from Senegal to Uganda, Angola, and the Sudan (Neuwinger 1996, 787). The bark is glabrous and the wood is yellowish and rough. The leaves are large, thick, broadly elliptic, obovate or round ovate, and glossy-green, while the flowers are small and white or whitish-yellow. The fruits are small, fleshy, yellow when unripe, red when ripe, and the seeds are embedded in pink, edible, sweet-sour pulp (Neuwinger 1996, 787; Irvine 1961, 692–695). The *Sarcocephalus latifolius* species is highly reputed in West Africa and is used principally for fever, particularly malarial fever, inflammations, coughs and bronchial illnesses, gastro-intestinal complaints (colic,

Aduro 121

dysentery), jaundice, intestinal worms, venereal disease, edema, wounds, haemostatic, hemorrhoids, as a diuretic and spasmolytic agent (Neuwinger 1996, 789). The roots and stem bark are mainly used. Chemically, the plant is rich in alkaloids with the roots and stem bark, for instance, containing saponines and tannins. The plant has considerable toxicity and, pharmacologically, the roots reveal the antibacterial, antifungal, antimicrobial, and antimalarial activity of the plant (Ibid., 790–791).

Toantini, əbosomfoə bese (Akan); kuranko-kakole (Maninka); kàkàşenlà (Yorùbá); furan amúryáá, góóròn dòòrináá (Hausa). Sapindaceae—Paullina pinnata

Toantini (toa—join; ntini—veins) is both a forest and savanna vine that grows larger in the forest than in the savanna. The root and leaves are used for ntini mu yaree or "problems associated with the vein or blood vessel." It is also a complement or supplement to other medicines and, primarily, administered orally. Rattray (1927, 43) noted that after the *akomfowa* bathes, he or she rubs mashed toantini roots mixed with fam-wisa onto him or herself. The purpose of this exercise was left unexplained. Found in most types of open country and in deciduous secondary forests, and common in most parts of tropical Africa, Madagascar, and South America, this woody climber has rigged stems, pinnate leaves with five leaflets, white flowers in spike-like axillary racemes, bright-red fruits, and seeds enclosed in white mealy substance. The plant is used for dysentery, snakebite antidotes, injured veins, and as a styptic, while the root is used for coughs and pulmonary diseases. A well-known aphrodisiac also used for gonorrhea, the root and leaves combination cures sterility in Ghana, and a decoction administered orally or as a vapor bath is used for asthenia and lumbago (Irvine 1961, 548–550). The dried or fresh compound leaves are used as febrifuge, homeostatic, cardiotonic, and for dysentery, protozoa, and infections; the roots and seeds are highly toxic (PRSPI 1992, 117, 119). The plant is used for jaundice, yellow fever, asthenia, dysentery, coughs, leprosy; the seed for colic, dysentery, bruises and fractures, and rheumatism; the fruit for dysentery, colic, rheumatism, bruises and fractures; and the root for colic, female sterility, bruises and fractures, preventing abortion and miscarriage, and gonorrhea (Ayensu 1978, 245–248). The active principle is timboin (Abbiw 1990, 122).

In this chapter, we uncovered *aduro*, the general term for medicine, as a multilayered concept that relates to a range of organic and non-temporal elements. The composite definition of medicine elaborated on *aduro*, and statements in that definition often referenced parts of a plant or tree, a spiritual-medicinal person of high degree, and *Onyankopon*

(the Creator). Synonyms for aduro included benefoo, bene, ahaban, ntini nhini, nyankomadee, and aduw. The varied definitions or descriptions of medicine are complementary and the factors of ecology and language play a significant role in characterizing medicine in the Bono-Takyiman area. Indigenous healers are certainly aware of these factors and access medicines from either the savanna or the forest regions, primarily because the Bono area is ideally situated in the forest-savanna ecotone. Yet even with access to a diverse set of medicines, indigenous healers still travel to neighboring countries to heal, as well as study from other African medicinal traditions. Medicinal preparations primarily consisted of leaves or roots and (various) pepper and ginger. All the medicines collected and analyzed in cultural-linguistic and bio-chemical terms address overarching categories of disease. The cultural-linguistic analysis uncovered essential layers of indigenous Bono (Akan) medicine and the knowledge produced was complemented by bio-chemical data derived from the botanical literature.

Medicines are commonly administered through baths, drinks, enemas, body applications, and nasal drops. Indigenous healers recognized that if a medicine does not work as intended, it should be changed to one known to address the particular ailment; meaning, many were confident in the efficacy and knowledge base of the medicine. Savanna-derived medicines were employed more frequently and were regarded as more effective than forest-derived medicines, underpinning a theory expressed by indigenous healers as to why medicine works or does not work. Patients showed a great deal of agency in the healing process by often being the one to inform the indigenous healer of recovery; in fact, the success of an indigenous healer's treatment depends largely on how well the patient responds to the overall treatment provided. In terms of recovery, indigenous healers felt this process should not be rushed and emphasized preventative care in the postrecovery phase. The concept of aseda ("giving thanks") is an integral part of the post-recovery and preventative care process that brings closure to the cycle of visit-diagnosis-treatment-recovery-preventative care and opens the way for a new cycle of healing. The cultural-linguistic analysis, augmented by the bio-chemical data, allowed us to uncover the properties and functions of those medicines collected and demonstrated the revealing power of Akan linguistics in terms of how the meanings of each medicine were embedded in cultural understandings. The knowledge produced in concert with indigenous healers provides a contributory basis toward the content and quality of a corpus of knowledge on Akan and indigenous African medicinal systems.

Chapter Four

Nyansa: Indigenous Knowledge and Medicine

In the universe there are so many signs. A few we understand, the way farmers know what clouds mean, and fishermen understand stars. But most signs mean nothing to us because we aren't prepared to understand them. The healer trains [his or her] eye—so [he or she] can read signs. [His or her] training is of the ears—so [he or she] can listen to sounds and understand them. [His or her] preparation is also of the nostrils—life and death have their smells. It is of the tongue, and the body's ability to feel.

-Ayi Kwei Armah, The Healers, 80

INTRODUCTION

The literature on indigenous knowledge systems identifies several domains. Those domains include ethnobotany and indigenous medicine, socio-cultural systems, food and agriculture, sustainable use of natural and cultural resources, and the philosophical basis of indigenous knowledge systems. Since the indigenous knowledge focus emerged in the early 1980s as an area of development studies, there has been great interest among researchers, development and environmental management groups, businesses, lending agencies, and to a lesser extent, indigenous peoples themselves. This focus has also led to the establishment of journals, international associations, and indigenous knowledge centers, primarily located in Europe, though some have recently emerged in Africa and Asia as well. In essence, the various non-African interest groups have made their intentions known through the commodification and appropriation of extensive cultural, scientific, and technical indigenous knowledge. It is imperative that we not only question recent external interest and foreign "investment" in indigenous knowledge,

and the extraction of indigenous natural plant species and scientific knowledge, but also that we delve into those knowledge systems in such a way that they (as closely as possible) speak for themselves and on their own terms.

Since indigenous knowledge is the collective body of knowledge of the ways in which people respond to reality, indigenous knowledge exploration becomes necessary when dealing with indigenous medicinal knowledge. In December of 1997, the Bonoman Resource Centre for Indigenous Knowledge (BRCIK) was inaugurated at the ahemfie ("palace") of the Takyimanhene. The center focuses on the indigenous knowledge of the Bono in and around Takyiman, and recently it has embarked upon developing a Bono Cultural Village situated in Takofiano, Takyiman. Though I am a part of the latter effort, sustaining the work initiated some years ago has been the main challenge. Nonetheless, no one to my knowledge, including BRCIK, has sought to look at the relationship between various archives of indigenous knowledge of the Akan to examine how these archives can inform and augment the scope or depth of indigenous medicinal knowledge. The following discussion represents an attempt to explore the relationship between medicine and the proverbial, gold weight, adinkra symbolism, and oral narrative archives of the Akan. Some archives (more than others) require further exploration among a wider population of the Akan.

AKAN PROVERBS (Mme)

Among the Akan, the proverb is known as $\varepsilon b \varepsilon$ (pl. mm ε). Mm $\varepsilon b u o$ or the process of proverb making is realized through "proverb channels" that act as visual (e.g., gold weights, akyeame staff and umbrella tops), oral, aural, symbolic (e.g., adinkra and kente cloth languages), design, and drum modalities. The root $b\varepsilon$ is shared by the expressions meaning proverb $(\varepsilon b\varepsilon)$ or oil palm tree ($ab\varepsilon$), and the "relationship between the palm tree and the proverb, according to the Akan sage, lies in the necessity to distill products from the palm tree in order to demonstrate its usefulness to the human eve, just as it is necessary to distill sense and meaning from the proverb in order to bring out its significance for the human mind" (Ofosu-Donkoh 2004, 9). The oil palm tree yields abenkwan (palm nut soup), ngo (red palm cooking oil), samina (soap), apraee or ahuaee (brooms from palm leaves), nsafufuo (palm wine), and other products that correspond to the multitude of meanings or "ideational products" distilled from the proverb. Proverbs have their origin in communal experiences and observations, which are usually in agreement with the conception of life and the way of making sense of the world held by members of that community (Udoidem 1984, 129). As

a metacognitive method of knowledge acquisition, proverbs "reveal and open the way to the world of the unspeakable. They reveal the [insight] of the human mind in making a leap from the known to the unknown and from the unknowing to the knowing" (Ibid., 134). This process involves a mode or spontaneity of proverb use that does not consider anticipation as a factor, since the use of the proverb is "often not premeditated; it is impulsive [and] extemporaneous" (Yankah 1989, 36). Yet, as Yankah (1989, 40) informs us, "the rhetorical strength of the proverb partly derives from its allusion to a cultural truth, or eternal verity . . . the social truth in a proverb may be empirically valid, or in the form of a valid traditional belief, norm or practice."

Since proverbs are a medium of communication, one who speaks in proverbs initiates communication, encodes it and, at the same time, expresses his or her mode of perception (Udoidem 1984, 126). The nature of the proverb consists of modes of communication or proverb channels that are visual, aural, oral, and drum modalities through which the proverb manifests. The nature of proverbs, as an art form, consists of short phrases or a group of phrases stressing balance, rhythm, and rhyme. "They are [also] philosophical and moral expositions shrunk to a few words [that] form a mnemonic device for effective communication" (Udoidem 1984, 129). These expositions include common proverbial forms that are narrative (didactic), anecdotal, parabolic, poetic, alliterative, and rhythmic. As the spoken word, a proverb has the power to transform or alter reality; it is also the "embodiment of acoustic energy" (Yankah 1989, 10). As oral literature, proverbs embody the idea of metaphor or allusion with levels of abstraction derived from precise observation in nature. As proverbs are allusive, they are used to explore, in the abstract, matters that are perhaps difficult or distressing to discuss directly. The proverb is effective because it acknowledges and makes use of the concrete and the abstract dimensions of reality. As such, concrete images allow for the proverb to be memorable, but as living entities. Consequently, the proverb (re)affirms the inherent connections between "things" that are often kept separate (Mcleod 1976, 90–91). In other words, "a proverb's composition . . . is primarily part of an ongoing process of culture formation in which speakers deploy new strategies to deal with old problems, and resort to old strategies to contain new problems" (Yankah 1989, 184).

In terms of the epistemological significance of proverbs, a proverb places our perception within a communal perspective (Udoidem 1984, 136). As a circular teaching method, the dialogue "or reciprocal discourse between teacher and students reaffirms the humanizing and civilizing feature of language. This very human interaction is most effective when used

according to the child's cognitive level" (Akoto 1992, 107). The reciprocal exchange and acquisition of knowledge reaffirms the teacher-student continuity. However, there is a clear understanding, depending upon the developmental level of the student, that the teacher is the guide and facilitator in the exchange. The circular teaching and learning process also challenges, develops, and assesses the creative and critical thinking of all participants through dialogue and inquiry. A proverb serves as an occasion for creative reflection. In addition, competent proverb speakers are not defined by the knowledge they possess or have access to, but the application and meaning of proverbs in appropriate interactive contexts. As a strategy of discourse, a proverb diverts itself of its common language function of direct description and opens the way to a more fundamental mode of perception (Christensen 1958, 238). Indeed, it takes a creative mind to formulate and articulate a proverb that can be communally accepted, since proverbs arise out of a communal perspective and no one person can give currency to a proverb. Thus, for the proverb, "the cultural truths [within them] may be reinforced . . . by their open or implicit attribution to ancestral wisdom. Here, the prestige and creditability of the source lend the proverb more credence and rhetorical power" (Yankah 1989, 41).

In this research, the proverb was explored as an archive of indigenous knowledge, specifically to see what this archive revealed about medicinal or healing conceptions shared by indigenous healers. Much of the Akan (Twi) language is saturated with proverbs; so much so that the language can be considered a proverbalized language. As such, Akan (Twi) speakers recognize the proverbial levels of speech and a discourse on indigenous medicine may well include proverbs such as Onvame ma wo yaree a, oma wo aduro (if Onyame gives you sickness, Onyame also gives you medicine) or *Onwam Kesebereku Atta se onya obi ama (wakose) wakoka akyere* Amakyewaa Kufuo se ənnya tannuro ho bə, na əno a ədi naba (koraa), okasa ne tiri mu (The horn bird says he or she wishes someone would [go and] tell Amakyewaa Kufuo to stop scraping the bark of Tannuro tree for even he or she who eats the seed of the tree speaks in his or her head, i.e., has impediments in his or her speech). Moreover, the dynamics of life and health in either rural or urban contexts can be distilled from proverbs, on the one hand, Aduro begye wo a, atere ma (a life saving medicine may be just a spoonful), yet, on the other hand, Aduro nye nnam a, enye ne ntoasee a (investment in a medicine does not come cheap regardless of its efficacy). Some of my respondents had no idea about or a response to my inquires related to proverbs which had medicine or healing as their subject; the majority of the indigenous healers were, however, able to submit one or several proverbs related to medicine. Those proverbs are outlined

below (in numerical order) with a translation and explanatory note where necessary. It must be made clear that unlike a translation, an explanation is only one of many possible interpretations, as most Akan proverbs are multilayered. For this reason, the explanation provided here should be seen as only one of several possible ways to make sense of the proverb and its context.

 Onni sika a, ose se aduro nnyε or Wonni sika a, wose aduro bi nnyε.

Translation: If you do not have money, you will then say the medicine is not good.

Explanation: This proverb represents an excuse given by a person who either does not have or does not want to pay the money for medicine. Consequently, that person will speak negatively about the medicine not because of its quality but rather because of his or her inability or unwillingness to pay for it.

2. Aduro gye honam.

Translation: Medicine receives or accepts the body/flesh.

Explanation: This proverb speaks to notions of why medicine works and why it does not work, and essentially describes a synergy between humans and medicine wherein the medicine is able to cure the affected person's disease or sickness.

3. Aduro pa na ekyere ne ntoasoo.¹

Translation: Good medicine, it shows its continuity

Explanation: The idea behind this proverb is that if the medicine is effective, then it inspires the patient to want more and usually he or she will return to the healer for more.

4. Nkwan pa twe adwa.

Translation: Soup that is delicious moves or invites others to come close to it.

Explanation: This proverb is employed (metaphorically) by indigenous healers to show the correlation between a delicious soup and good medicine in that both are effective, in their own right, in bringing about positive results.

5. Yenkəhwea, wose, "mehuu."

Translation: When we go to look or examine, you say, "I saw." Explanation: This proverb, as I was told, refers to an indigenous healer going to show someone a certain medicine and, before they

reach its location, the inquiring person declares they have already seen the medicine. At that point, it becomes difficult for the indigenous healer to continue further, especially when the person seeking to know this medicine claims to know more about a medicine they have never seen before. The idea is that arrogance coupled with ignorance is a hindrance to healing (medicine and learning).

6. Obi nnom aduro mma yarefox

Translation: Someone else does not drink medicine for a patient. Explanation: This very common proverb informs others that the patient must take her medicine in order for her to get well. No one else can take the patient's medicine no matter how much he may care for the patient or how soon he may want that patient to recover.

7. Da a wobefura ntoma papa no, wonhyia w'ase.

Translation: The day that you put on good indigenous cloth, you do not meet your in-laws.

Explanation: This proverb was referenced by several indigenous healers and was interpreted as the day an indigenous healer is well prepared is the day he or she does not get any clients; but the day that indigenous healer does not have any medicine, then that is the day patients will come.

8. Esie ne kagya yεnni aseda.²

Translation: The anthill and *kagya* plant do not thank each other. Explanation: *Esie* is an anthill and *kagya* is a medicinal plant that grows well on an anthill, but *kagya* is also a plant that requires farmers to take quite a bit of their time to cut or weed it. Farmers, therefore, usually leave it alone, since it is so time-consuming, and both the plant and the anthill are preserved since the plant protects the anthill and the anthill allows for the growth of the plant.

9. Agyamma kusuu kə ase kəhwe.

Translation: Overgrown by woods, one has to go under or at the foot of the *gyamma* plant to see (what is there).

Explanation: This proverb uses the *gyamma* plant as a metaphor to express the pervasive idea that one has to get close to know the actual character and nature of a person or medicinal plant.

10. Aduro bεgye wo a, atere ma.

Translation: If the medicine will receive or accept you, give a teaspoonful.

Explanation: *Atere* is a spoon and the proverb speaks to the fact that if the medicine is powerful (effective), one only needs a small amount.

11. Ahoɔden te sε dufa. Ehi.

Translation: Strength or energy is similar to dufa. It reduces.

Explanation: This proverb refers to an analogous yet paradoxical relationship between strength and *dufa* in that with youth a lot of energy exists, but with old age, that same type of energy or strength is not present. *Dufa* is a composite ball of varied medicines used little by little, somewhat similar to the eraser on a pencil, while the remaining portion is preserved for future use; *ehi* denotes a gradual wearing down because of rubbing (the medicine) in order to use it. The paradox is that as the *dufa* lessens or "ages," it decreases in size—as certain levels of strength decrease with age—but not so much in terms of potency.

12. Okomfoo bone a otena yarefoo ho ama komfoo pa aba no ye na.

Translation: A poor *akamfoo* that spends time on a patient for a good *akamfoo* to come is rare.

Explanation: Though this proverb is self-explanatory, it also speaks to the ethics of indigenous healers and the reality that there are a number of indigenous healers who acknowledge their limitations or incompetence and, for the benefit of the patient, do the best they can until they can find another indigenous healer who is more skilled and/or knowledgeable.

13. Mede me nsa ato ayarefoo aduane mu. Manni a, ɛnyɛ yie; medi nso a na medwene ho.

Translation: I place my hand in the food of sick person. If I do not eat it, it is not right; when I eat it, too, (I think) it bothers me.

Explanation: This proverb has several meanings. Generally, it offers a warning against putting one's self into a dilemma that may offer no way to escape the situation. The proverb also speaks to those who have sick loved ones and the challenge of balancing their care or concern with not getting too close and becoming sick themselves.

14. Aduro gyina papa akyi.

Translation: Medicine stands behind good intentions or a worthy cause.

Explanation: This proverb speaks to an underpinning idea about the effectiveness of medicine, which is not solely medicinal plants, in that the quality of the intent plays a significant part in how well the medicine will (not) work.

During the course of my formal conversations, proverbs were also provided in conjunction with responses to other questions. Such proverbs appear in the context of responses placed throughout this text. Other (translated) proverbs of significance included, "one indigenous healer steps on another healer's medicine to collect his own" (i.e., what one may consider useless or not notice in the gathering of one's own medicine is considered useful medicine to another) and "humans are like eggs, if they fall on the ground it is hard to pick them up and put them back together" (i.e., a deceased person is dead and nothing can be done to bring him or her back). In appendix V, the reader will find a list of proverbs related to medicine and healing drawn from a survey of more than 8,000 Akan proverbs. This list of proverbs is a revised version of largely published materials.

AKAN "GOLD WEIGHTS" (MMRAMMO)

The consumption of gold rose more rapidly than its production in Europe during the fourteenth century. The stability of European economic systems depended on gold, and there was an expansion of trade and increased world demand for gold in the late fifteenth-century (Posnansky 1987, 16; Morrison 1981, 34; Wilks 1982, 337; Wilks 1961, 28). During the late sixteenth century and early seventeenth century, there was a shift from the Akan-Malian trade and the ancient economic system of the Mediterranean world to the economic system of the Atlantic world, in which the former, dependent upon West African gold, was marginalized by the latter which depended on supplies of West African enslaved labor (Posnansky 1987, 20-21; Wilks et al. 1986, 2). There were four main centers of gold in West Africa: the Bambuk area where the Senegal and Faleme rivers meet, the Bure center located on the upper Niger, the so-called Lobi goldfields located on the Black Volta River in northeast Ivory Coast and northwest Ghana, and the northern Akan forest. It was the gold from the Lobi and Akan goldfields that later reached European markets through the coast of Ghana as well as through northern trade networks. Bighu, called Bew and Nsoko by the Akan, was the northern frontier town of Akanland and the southern frontier of the Malian world as well as a trading town for the distribution of gold from the Lobi and Akan goldfields; it was Bighu's proximity to these sites of gold which led to its rise as a commercial center (Odoom 1979, 36-37). Bighu's peak was between

the fifteenth and eighteenth century. The Akan goldfields were worked and managed by indigenous groups, which had a well-developed extractive and distributive industry. The distribution network was supposedly established by the Juula-Wangara, Malian Muslim traders.³ Juula-Wangara refers to a group dispersed from the Gambia region to Hausa country that specialized in the management of long-distance commerce (gold trade). The Juula-Wangara were also the link between the producers in West Africa and the consumers in the Mediterranean and beyond (Wilks 1982, 334). The Portuguese undertook systematic explorations to create a new and direct conduit for the passage of gold into Europe (Wilks 1982, 335).

The Juula-Wangara were not the first to settle at Bighu, and the Mande co-settlers in Bighu designated the indigenous inhabitants in the area as Brong or Bono (Wilks 1982, 346; Arhin 1979, 10). Both the traditions of Hani, the reconstituted Bighu, and Nsoko (Nsawkaw) recall that the population of Bighu included nkramofoo (Muslims), Bono, Nafana or Tomfo-Numu (Odoom 1979, 38). Tomfo2 is the Akan term for "blacksmith," while numu is a Mande counterpart. The traditions of Namasa, the metropolis of Nsoko, mention the "cave people" (Bono) and the "horsemen" (nkramofo2) as separate groups, but horses were also used in small numbers among the Bono leadership of Bonoman. It appears that Bighu, where the "foreigners" lived in the same town but in different quarters, was an indigenous Akan (Bono) center where traders initially settled on the periphery and after centuries formed more permanent, yet segmented settlements or quarters in the town.4 Furthermore, the Juula-Wangara claimed not to know the people who produced or extracted the gold, and the Bono were the largest and most recently abandoned quarter in Bighu. Bighu had several quarters which the Bono inhabited in the east, the nkramofoo in the west (Nsoko area), the Tomfo-Numu (artisan's quarter) in the north, and (a) dwabirem (market area) in the south (Posnansky 1987, 15; Wilks 1982, 5). The Akan term dwabirem ("market area, trading center") was employed at Bono-Manso and Bighu, and if one is to believe that Bighu was established or controlled by foreigners, whom the Juula-Wangara regarded themselves as, then a foreign term would have been used to demarcate the "market area," particularly as the principal site of commerce. It is more plausible that Bighu was controlled by the Bono for the following reasons: the Bono were the largest population of Bighu, the Bono capital at Manso was contemporaneous with Bighu, the Bono had control over considerable gold sources and commercial centers and routes, the market area was positioned in the south rather than the north or west, and Bighu was within the confines of the Bonoman territory.

Bonoman, as a link between the Akan forest and Mande of the middle Niger, controlled passages to Bighu-Nsoko trade centers and secured the gold mines in the Banda hills (perhaps after the conquest of the Banda region in 1630-1640 CE) and the gold-bearing Tain and Volta Rivers (Dumett 1979, 41). Some argue that iron, as well as copper, does not occur naturally in the Akan or West African region; however, the Bono, and other Akan, possess rocks that contain iron ore substance, though relatively small in quantity, which are used to make tools and small metal objects. Samples of iron ore-containing rocks were found in the village of Oforikrom in the Takviman district, and ancient Akan sites or settlements with iron smelting activity used this local laterite as ore. The foregoing considerations reveal an integral role played by the Bono in marshalling gold and other trade items through the forested and savanna Akan region, contributing to the development of commerce sites in the Akan-Muslim trade, and innovating several classical Akan traditions extant today. Warren (1987, 5), conceding to other writers, claim that the "gold weight" system and currency were adopted from the system introduced by Mande Iuula traders stationed at Bighu. Yet, there is no evidence that the system employed by the Akan exists or existed among the Mande of West Africa or for that matter the Juula.

Rattray (1923, 301–302) wrote, "each casting, irrespective of size, weight, and design, is called abrammuo (pl. mrammuo)," and skilled persons who worked with gold, silver, or leather were referred to as "adwumfo" who formed some sort of brotherhood since the art of goldsmithing was retained in certain families. In the Akan gold weight system, the implements include *mmrammo3* (brass or copper weights; sg. *abrammo3* or abramboo), nsaawa (spoons), mfamfa (scoops), nsania (scales), and sika futuro (gold dust), which were tied in twists of cloth and kept in adaka ketewa or abrampuruwa (small brass boxes). Nsaawa were used, rather than one's fingers, to place the sika futuro in one of the two concave circular brass pans of the scale, and the famfa (scoop or blow pan) was used to remove impurities from the sika futuro. All of these items, including boxes, were kept in a pack called a fotoo, bundled together in a piece of cloth and wrapped in either a rectangular piece of goat or antelope skin (McLeod 1981, 133). Some of the foto2 also contained a twabo2 (touchstone), bits of Neolithic stones, and asuman.

Writing in the late eighteenth century, Bosman briefly described the *mmrammoo* as "cast weights either of copper or tin" (1705, 86). Writing in the early twentieth century, Rattray (1923, 302) categorized the *mmrammoo* by (a) those which represented human forms, animals, fishes, etc., (b) those of inanimate objects, plants, weapons, etc., and (c) those

predominantly geometrical and symbolic. The first two categories were associated with proverbs, while the others were not; the third category, according to Rattray (1923, 302, 307), was "the oldest and most interesting" and their design was "more or less standardized" with the practice of copying old designs upon new weights. Vivian's (1996, 39) excavated items from Adansemanso (dated 393 to 1650 CE) included "two brass cast geometric gold weights [as well as "two formed cubes" referred to as "strike stones," possibly associated with the gold trade, that] suggest gold weighing and trading activities were taking place." Crossland (1989, 9), who excavated the ancient site of Bighu in the Brong-Ahafo region of Ghana, found similar stone objects and noted, "some of these small stones could have been simple gold weights as examples of these were found by the present writer mixed with an old collection of geometric weights of Bondakile [located north of ancient Bighu and northwest of contemporary Hani]." Highly dubious, therefore, is the arbitrary date of the fourteenth century proposed by Garrard (1980; 1982) for the earliest "gold weights," which were introduced by Mande-speaking traders from the north and based on the units of the Islamic mithaal and ounce, the Portuguese and Troy ounce standard (McLeod 1981, 122-123; Garrard 1980; 1982).

T. F. Garrard's work is regarded as the "authoritative" text on Akan "gold weights," but there are some questions about his arbitrary date and his assigning the introduction of the "gold weights" to the Mande and, ultimately, North African sources. Mollat's (2003, 38–39) reconsideration of 3,800 geometric and figurative "gold weights" concluded, the "geometric forms were the genuine weights for weighing gold dust" rather than the figurative ones, based on the indigenous taku seed and the Arabian gold mitkal or mithgal standard, and the "European standards and the Arabian trade standards were not incorporated in [the Akan] system" as postulated by Garrard. The elaborative nature and exorbitant quantity of gold weights, and the writing and philosophical system encoded in those weights are found only among the Akan and in no other West African civilization, including the Mande, from whom we do not find an equivalent or remotely similar system. Further, to suggest that the gold weight system of the Akan appeared seventy or so years before the arrival of the Portuguese on the West African coast is inconsistent with the logic and history of the gold and regional trade networks, which pre-date an eighth or ninth century Arab-Islamic presence in West Africa. Certainly, it is plausible that through trade or cultural contact the Akan incorporated—as all civilizations have done—some aspects of indigenous and non-African cultural motifs into their "gold weight" production, but most of the "gold

weights" derive from indigenous Akan conceptualizations as evidenced, for instance, by the predominance of "gold weight" names that remain obstinately Akan.

Though used for weighing gold, the "gold weights" were in fact rarely made of gold but rather brass, copper, stone, and other substances, and the Akan term abrammoo (abra(m)—to cover, conceal, lock; mmoo [sg., 2bo]—stones, worth, amount) or its Baule variant, yôbwê ("stones"; sika-yôbwê, "stones of gold"), has nothing to do with either "gold" or "weight." Consistent with the archaeological findings noted above, abrammoo were specific stones transformed, perhaps, similar to kyereben, a stone that is melted into products or functional items. Nonetheless, if these "gold weights" were "the indispensable possession of every adult citizen," then the sentiment that these items were more or less in the possession of goldsmiths and the wealthy can no longer be accepted (CDMECG 1975, 14). Gold and its "weights" were prevalent in Akan society. Gold dust was placed on the body, precisely the clothes or waist, of deceased elders of high social importance, and Akan ideas were encoded in the "gold weight" symbols and all families had weights though in varying degrees of quantity.

The three-volume set on Akan "gold weights" produced by the late Georges Niangoran-Bouah clearly demonstrates the existence of an indigenous Akan script in addition to the "gold weights" aesthetically encoding and conveying a range of Akan cultural and philosophical ideas. It is significant to note that gold weights related to medicine had been described by several writers. Rattray (1923, 310, 312, 318) examined "gold weights" depicting healers sacrificing a chicken to a suman, a fowl at an Nyamedua ("Creator's tree") with two eggs in the basin thereof, and the medicine(s) addressing mprenkesima or itch and crawcraw. The Nyamedua here, as distinct from the tree or plant medicine named Onyame dua, is the three or four-pronged branch or part of that tree, and a vessel with medicines, eggs, and others items sit between the prongs in what then becomes an "alter" where prayers (libations) are offered. In the past, an Nyamedua was found in most compounds or homes. McLeod's (1981, 126) review of "gold weights" found that they consisted of "men trying to scrape medicinal bark from trees single-handed," obosomfoo or okomfoo dancing with the "shrines of their [abosom] on their heads," and "men sacrificing chickens into bowls" of Anyamedua ("trees of the Creator") or over asuman. Medicinal use and administration, such as the widespread employment of rectal dosage forms or enemas, have been found coded in brass weights and figures, as well as terracotta statues and copper figures (De Smet 1999, 69, 70).

The majority of my respondents had little idea about the relevance of "gold weights" to indigenous medicine. Translated responses, such as "I do not know what to tell you," "I do not know," "some questions are meant for elders," and "this one is for the most senior elder," were common; the apparent honesty was appreciated as well as instructive. Nana Kwabena Gyimah informed me that at times the Bono people use gold in spiritual matters, such as in the creation of a suman, to empower the process and the product. Gold is also found on certain "shrines" (abode of the abosom) in the Bono-Takyiman area. Nana Kwabena Gyimah went on to say that there were many "gold weights," and advised that I go to the cultural center in Kumase. I took his advice and traveled to Kumase. Those that I spoke with at the cultural center appeared to be less informed or unwilling to share what they knew, although the physical backdrop to our conversation was a wide range of figurative "gold weights." Another indigenous healer recalled a "gold weight" design in the form of a brass pan with a door in the middle or a human figure in the brass pan. This gold weight alluded to ayaresa (healing) as the nyawa (brass pans) are used to house the physical "shrine" of the abosom in Takyiman and other Akan settlements. Interestingly, the human figure in the brass pan is literally situated in medicine of the highest caliber—that is, the abosom, whose physical "shrine" housed in the brass pan is a composite of varied medicines and other ingredients.

Another indigenous healer informed me that there is a gold weight in which the aphorism, "when sick and you do not have money in hand, then you die," is embedded. The proverb, wonni sika a, wu ("if you do not have money, die"), is another version of the above aphorism, which means medicinal treatment is not free and, therefore, one has to pay for such services. These proverbial statements allude to a recent development in Akan medicinal and social thought whereby foreign inspired or derived currency became the common denominator in the equation of whether one lives or dies. In other words, what might be considered charity or compassion in the face of insufficient resources is a cultural given in Akan society. For centuries, the sheep (odwan) and gold dust were used as currency; the use of cowry shells (sedee, alternatively spelled "cedi"), after which the Ghanaian monetary system is named, and paper currency are a more recent phenomenon.⁵ The latter, specifically during the cocoa industry boom of the early twentieth-century, created a great deal of social discord and began to compromise values, as such charity and volunteerism, in Akan societies. Recently, attendants of the well-known Akonnedi "shrine" in Larteh Kubease, Eastern Region of Ghana, began demanding, mostly or exclusively, U.S. currency for spiritual and medicinal services rendered.

In spite of these developments, hard currency is not the only or primary form of payment among many indigenous healers who are concerned principally with health and with restoring or maintaining life. In all, the "gold weight" archive of indigenous knowledge is an area that warrants further exploration not solely for its relationship to medicinal concepts but also the embedded writing and cultural knowledge system to which many Akan, especially those who do not know the "old" Twi language, are oblivious. Currently, indigenous "gold weights" are in high demand by tourists through mass production and, according to Fink (1974, 44), "knowledge about the gold weights is more easily found in books than among the Bono."

AKAN ADINKRA SYMBOLISM

One source informs us that it was after Gyamanhene Kofi Adinkra was beheaded in 1818 by Asantehene Osei Bonsu Panin for making a replica of the Asante Golden Stool, wherein Adinkra's craftsmen were taken into captivity, that the art of making "Adinkra cloth" (using patterns found on Adinkra's clothes and on the columns of his stool) was introduced into Asante (Asihene 1978, 58–59). Other references indicate that the Adinkra designs were first made for the *ahene* (indigenous male leaders) of Denkyira, Takyiman, and Asante long before the reign of the Gyamanhene Adinkra. It was then called *adwinikena* (*adwini*—art; *kena*—mark), and later corrupted to Adinkra (Asihene 1978, 59; Willis 1998, 29). The Adinkra cloth appears to have been of an earlier origin as even Thomas Bowdich, a European who was in Asante in 1817, found this cloth a year before the Asante-Gyaman war of 1818 where Kofi Adinkra was defeated and beheaded.

Among the Akan, conversations occur through the wearing of varied types of cloth by way of embedded symbolic imagery and meanings that may or may not be associated with proverbs. The bark-cloth of kyenkyen created and used in the Bono and other Akan areas existed, in earlier historical moments, with gagawuga ("an old indigenous cloth usually reserved for the omanhene and other high-ranking officials"). Rattray (1927, 220) noted the Asantehene wore kyenkyen at odwira ceremonies. Adinkra, in contrast to kyenkyen and gagawuga, is an indigenous mourning cloth of the Akan worn during funeral ceremonies—as funerals are central spiritual processes in Akan society—yet the Adinkra patterns can be stamped on fabrics for other than funerary occasions. Unstamped mourning cloths include the kobene (vermilion red) and birisie (indigo or black). Kobene, birisie, and kuntunkunu (red, brown,

russet; bark of the kuntun tree) are the three major colors used (Willis 1998, 28). Willis (1998, 31–41) has outlined the composite process of Adinkra creation. The kuntunkunu tree, bades tree, and etia (iron slag) are an integral part of that sophisticated process. The resultant dye, known as adinkra aduro (adinkra medicine), comes from the skin (or bark) of the badee tree, which is grown in the savanna area of northern Ghana. The Adinkra cloth is hand-painted and hand-embroidered, and is adorned with symbols arranged on the cloth in a specific manner to convey a parting message to the deceased (Ibid., 1). According to Willis (1998, 29), adinkra implies a message a soul takes along when leaving the earth, hence the expression, "saying good-bye to one another when parting." Adinkra, in the form of a "message one gives to another when departing," reflects indigenous traditions and specific communal values, concepts, codes of conduct or standards among the Akan. The Adinkra symbols relate to parables, aphorisms, proverbs, historical events, hairstyles, traits of animal behavior, and shapes of inanimate or manufactured objects, all with multilayered meanings (Ibid., 1). In one of the most comprehensive works on the Adinkra symbols, Willis (1998, 43) observed that many weavers and retail dealers of adinkra are not able to "read" the symbols, the symbolic beauty of the adinkra cloth has been obscured, and that its deep spiritual and cultural meaning is lacking among the population.

The foregoing observation made by Willis has implications among indigenous healers. The majority of the healers had no idea, did not know or had no answer to the question that sought to probe the relationship between Adinkra symbols and indigenous medicine. One indigenous healer said, "I was not taught this. You have to see those who work with Adinkra [as] they might know." I took his advice and again went to the cultural center in Kumase, an integral source for textile, gold weights, adinkra stamps and cloths, furniture, and other crafts. Those whom I encountered at the center, some of whom were actually in the process of creating the adinkra cloth, were less informed and one person showed me a chart containing Adinkra symbols of which I was already aware. Nana Kofi Owusu informed me that kuntunkunu, the actual dye from the tree of the same name used to make Adinkra mourning cloth, is also used to cure diseases. Although he did not use kuntun or kuntunkunu, he knew of others who did. The Adinkra mourning cloth, however, is taboo to many abosom in the Bono-Takviman area because of the dark color, which connotes sorrow, sadness, and death. In contrast, the main color of the Atano abosom is white, which represents purity, among other meanings.

Although none of my respondents were able to provide adinkra symbols that were related to medicine, Arthur (2001) discusses several adinkra symbols related to medicinal plants or health, and Willis (1998, 85, 139) described two, namely, bese saka (kola nuts; pod and sack) and musuyidee or krapa. Kola nut is a stimulant and a medicine employed during long-distance travel "to withstand fatigue or to depress the symptoms of hunger and thirst. In the northern areas of Ghana, the [kola] nut is cherished and is used in religious practices. It sometimes serves as 'food for the spirit' . . . [Kola] nuts are used in marriage, funeral, and [other] ceremonies" (Willis 1998, 85). The akomfoo also use the kola for energy and clarity in their practice. Musuyidee or krapa (mmusuo—tragedy, ill luck or a curse; yi—to remove; adee—thing) is a symbol of spiritual cleaning in the case of broken taboos, a symbol of sacrifice, and the name of a ceremony used to facilitate good fortune (Ibid., 139).

AKAN ORAL NARRATIVE (ABAK)

Oral narratives play integral roles in the processes of socialization and intergenerational culture transmission. As literary or pedagogic pieces, oral narratives encode cultural understandings of varying depth and scope, and offer another avenue by which to approach and appreciate a given people. Such narratives are suggestive of historical moments, individual or collective perspectives, temporal events or processes, and spiritual disposition, and are often unbounded by time and space in the conventional and mechanistic sense. The oral narratives to follow differ in size and depth, and represent those that have a direct or indirect association with indigenous medicine and healing or the specialists of the indigenous therapeutic system. Each narrative is prefaced by a numerical heading, such as *abakosem a edi kan* (first narrative).

Abakəsem a edi kan (first narrative) by Nana Kwaku Gyan

This brief narrative is an explanation of a significant proverb, "wokoto mpanimfoo a, na wonya *akom* kyere" (one has to bow down before or show respect to their elders in order for one to receive akom and healing knowledge). The idea is if one is either a practicing indigenous healer or in the process of becoming an indigenous healer, one must "bow down" (i.e., show respect) to one's facilitating elders. Those elders will then bless that healer with the knowledge of *akom*, medicines, and healing. If an indigenous healer does not show respect to his or her elders, those elders will not transmit their knowledge to that junior, possibly developing, healer.

Abakəsem a eto so mmienu (second narrative) by Nana Kofi Owusu

From the ancient times, we the Africans, especially, the Akan, Asante and Bono, use the trees and herbs for everything. We use these same trees for making *asuman*, and for making medicine to bathe with or to drink in order to withstand things, such as the cut made by a cutlass. The power derives from the trees and the leaves. Some medicines are made in the form of a bath, something to eat, or something to be applied to the skin through an incision so that even if one were to shoot you with a gun you would withstand the effects of the bullet. The medicines all get their power from the trees and the leaves. Though this is a small story I told you, the story differs from place to place because everyone has his or her own story about medicine.

Abakəsem a eto so mmiensa (third narrative) by Kofi Kumankoma

This story is about a medicine called hwetakyia hwebaa (hwe-beat; Takyia and Baa are proper names). Baa and Takyia were both powerful medicinal persons. They acquired most of their knowledge from the use of the forest since they were also hunters. One time, these two men decided to challenge each other medicinally. In the challenge, Takvia was beating Baa mercilessly to death. Takyia later found his friend Baa seemingly dead. Takyia collected some medicine and placed it on Baa's body to bring him back to life. Baa soon came back to life, but did not understand why this happened and they fought again. Baa defeated Takyia resulting in his death. Then Baa felt the same feeling as Takvia did when Takvia had beaten Baa, and looked for medicine to bring Takyia back to life. It appears that the same medicine was used, but prior to this recognition, both were unaware of its use. Afterwards, they said to each other, we are both equal since the power that can beat me can also beat you. Since then the plant or the medicine they used was given their names. This medicine is often used for treating abotutuo (abo-body; tutu—pain, pain) or "pain in the bones" (arthritis), wherein akekaduro (ginger) and a savannah plant named kwantimeresie are added and used as either a concoction or decoction. Sometimes, we sacrifice a chicken and say a prayer to the hwetakvia hwebaa plant, and then get the medicine. After we get the medicine, we boil it, cook the chicken, and then add the medicine to the cooked chicken, so when the patient eats the chicken the medicine will go to work to address the pain. This medicine can cure any pain related to the bones. The medicine, however, is not common or easy to find; it can be found in rocky areas and on the fringe of the forest and savanna. The plant itself is about three or four feet tall and has green leaves throughout the year. The skin of the root is black and brown.

Abakəsem a eto so nnan (fourth narrative) by Nana Yaw Mensah

In the past, the *mmoatia* taught people about medicine. They transmitted knowledge of medicine. When an *abosom* is in spiritual communion with his or her *akamfoa*, they speak through the *akyeame*, who translates to the patient which medicine to use or provides medicine for the treatment. Dreams also convey to one the knowledge of medicine. Either an *abosom* or someone else will come [in your dream] and then help to teach you about medicine to treat diseases. In addition, you can get the knowledge of medicine or healing from someone else whom perhaps you do not know, depending upon your character. Sometimes your ancestors or the *abosom* can also come back or transform themselves into humans and transmit knowledge of medicine to you.

Abakəsem a eto so nnum (fifth narrative) by Nana Kwabena Gyimah

In the past, hunters were the core inventors of medicine. Many hunters or powerful hunters could understand the language of the other animals. One day, a hunter went to the forest in search of animals, and then the hunter saw a big python and wanted to shoot it. The python told the hunter to stop, and the hunter stopped. As a result of adhering to the python's command, the python taught this hunter how to use medicine to treat gun shot wounds and how to get medicine to fight against snake-bites.

Abakəsem a eto so nsia (sixth narrative) by Nana Kofi Oboə

In the olden times of our ancestors, there were no Western doctors. Therefore, during that time, if a woman had a difficult labor, the woman was given medicine (herbs) to chew, which would then go into the stomach and help bring about an easy labor. In addition, if the fetus does not develop in the proper way, the ancestors had medicine they would collect and use toward the efforts of prenatal care. Some of them (healers) have eyes to see if a newborn child carries a disease with him or her or not. Knowing this makes it easier to give medicine to treat whatever disease starting from infancy. If a newborn child is not strong, we have medicine to give to the child in order to make him or her stronger.

The above oral narratives linked to indigenous medicine illustrate the direct relationship between respect and humility and the transmission of medicinal knowledge; the power inherent in medicinal plants; the role of the *abosom, mmoatia*, ancestors, hunters, and dreams in securing and transmitting medicinal knowledge; and the antiquity of indigenous medicine itself. These narratives also reveal a particular wisdom,

metaphorically encoded, and reflect a great number of the concepts and perspectives provided by indigenous healers and other indigenous knowledge archives surveyed. Certainly, the oral narrative archive of indigenous knowledge requires more study and, based upon what has been gathered in this research, that archive holds tremendous potential for the production of knowledge on Akan (and other African) societies. This conviction comes out of the content and context of the proverbial and to a lesser extent gold weight and adinkra archives of Akan cultural knowledge. As is the case with most archives of indigenous knowledge, the production of ideational and material culture or the expression thereof, exists in the setting of socio-political as well as historical considerations. Considerations such as those affect, in varying degrees, the production and (material) expression of indigenous knowledge and areas of cultural knowledge that interact with each other in ways that reflect changes in the larger cultural or societal context. To elucidate this point, two instances will suffice.

Silverman's (1980, 5) survey of new "shrine art" in Takyiman revealed that low production was due to the unavailability or expense of that art, high food prices, scarce raw materials, production costs, lack of clientele or patrons, national political instability, associated technologies dependent on imported materials (though most aesthetic traditions were self-sufficient), and tradesmen who became full-time farmers. 6 His search in towns and surrounding villages uncovered four potters, two sign painters and coffin makers, one weaver and stool carver, and no goldsmiths, blacksmiths, adinkra printers, or figurative wood carvers (Silverman 1980, 2). The non-existence of goldsmiths and adinkra printers certainly might adversely affect the knowledge base of indigenous healers, as evidenced in this chapter, and during the years of my research, Silverman's observations remained accurate for the most part. In fact, according to Silverman (1980, 5-6), the shortage of imported materials caused some to lament that they wished they had learned this or that from their grandparents as the production of new "shrine art" was almost non-existent, and of those items produced, the aesthetic quality and the quality of workmanship was deteriorating. Another factor, which Silverman did not consider, was the theft of "shrine art." Warren published two articles in the journal African Arts in 1975 and 1976 on Bono royal regalia and "shrine art" with details of "shrine" names and locations; within a year, advertisements in this same journal appeared from art dealers selling some of the same "shrine art" described by Warren, which was removed from "shrine houses" (Warren, 1997, 4).

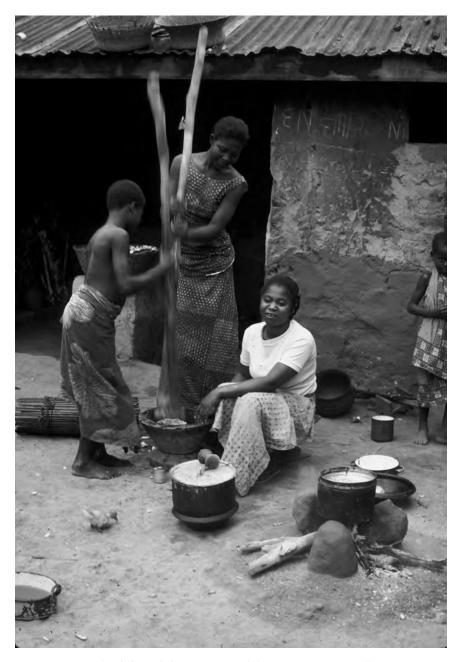


Image 1. *Pounding fufu or fufuo* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 2. Nana Kofi Owusu and Nana Kofi Donkor, 1973 (courtesy of the D. M. Warren Collection, University of Iowa)



Image 3. *Takyiman market—vegetable sellers* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 4. *Takyiman market—cloth sellers* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 5. Nana Kofi Donkor treating a child who could not walk very well (courtesy of the D. M. Warren Collection, University of Iowa)



Image 6. An odunsinni or herbalist (courtesy of the D. M. Warren Collection, University of Iowa)



Image 7. Cutting a child for esoro (courtesy of the D. M. Warren Collection, University of Iowa)



Image 8. *Nana Kofi Donkor carrying Asubonten at a festival*, 1970 (courtesy of the D. M. Warren Collection, University of Iowa)

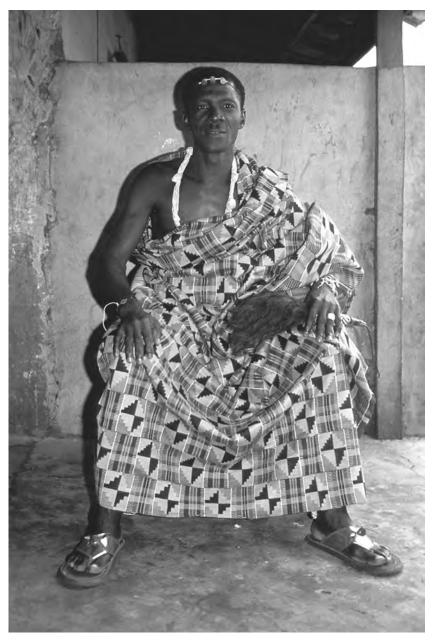


Image 9. *Taa Kofi Obosomfoo Nana Kofi Kyereme in indigenous Akan attire* (courtesy of the D. M. Warren Collection, University of Iowa)

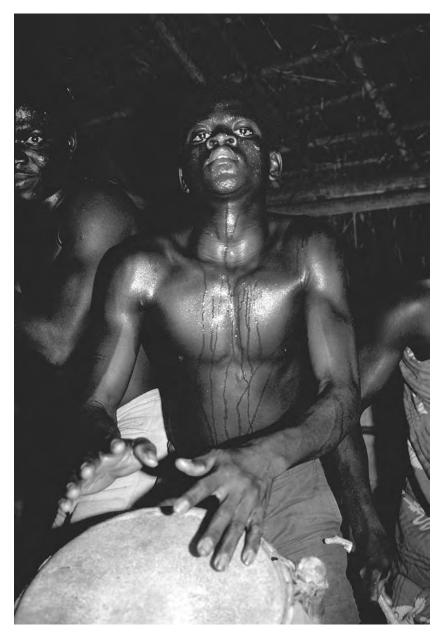


Image 10. Drummers for the obosom named Akwatiamfiri (courtesy of the D. M. Warren Collection, University of Iowa)

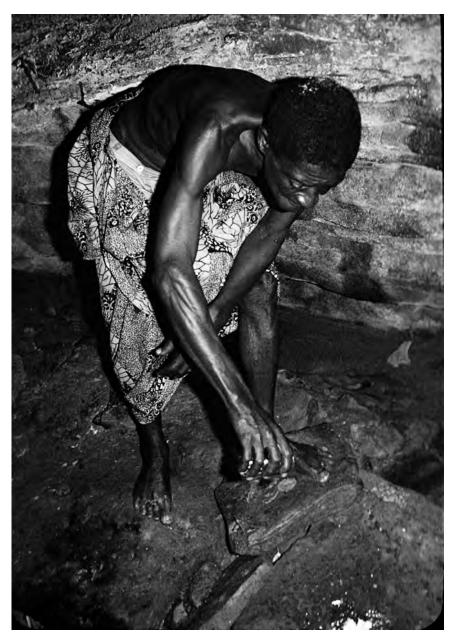


Image 11. Biakuru Obosomfoo Nana Kwasi Ntua pouring libation at Amowi cave, 1970 (courtesy of the D. M. Warren Collection, University of Iowa)



Image 12. Session 11 on First Aid at the Primary Health Training for Indigenous Healers (PRHETIH) program, Takyiman (courtesy of the D. M. Warren Collection, University of Iowa)



Image 13. *Public health clinic workers, Takyiman* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 14. *Decorated skin of a new mother, Jebiri, Takyiman* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 15. Naming and "Outdooring" ceremony of twins, Ata and Ataa (courtesy of the D. M. Warren Collection, University of Iowa)



Image 16. *Drummers in procession* (courtesy of the D. M. Warren Collection, University of Iowa)



Image 17. Female akomfoo at festival in Takyiman, 1969 (courtesy of the D. M. Warren Collection, University of Iowa)

Chapter Five

Ayaresa: Discussion and Conclusion

There's health when everything that should work together works together. . . . But say there is a bone broken in the body. The mind may think something; the will may desire it; but when the muscle tries to move the hand, there are two pieces of the broken bone pushing against each other, fighting each other, instead of working together. That is disease. . . . When one person in a community—body and soul—clashes with another individual in the same community that too is disease. . . . The healing work that cures a whole people is the highest work, far higher than the cure of single individuals.

—Ayi Kwei Armah, The Healers, 82

DISCUSSION

Our concern was not so much about the depth of knowledge that one or several indigenous healers possessed, but rather the prevailing concepts of medicine related to health and healing among a representative group of healers juxtaposed to indigenous knowledge archives of the Akan. The idea and objective was to ascertain a substantive framework for interpreting writings that have and continue to examine how specialists of the Akan therapeutic system conceptualize medicine and employ those conceptualizations in social practice. It must be stated, again, that the experiences, perceptions, and competencies of indigenous healers are not identical, and to use one person as a benchmark—which I am convinced Warren (1974) did—is problematic in the articulation of an "ethnomedical system" authenticated by so few sources that possessed equivalent levels of in-depth medicinal knowledge and aptitude. Essentially, one has to be "born into" the varied spiritual-cultural Bono (Akan) institutions, rather than arrive as a researcher or participant-observer, to access the depth of knowledge and sensibilities that provide more than a "glimpse"

into the nature and workings of those institutions. This challenge I clearly understood and accepted.

The purpose of this study hinged upon an investigation into the ways in which Akan healers and archives of cultural knowledge conceptualize and interpret medicine and healing. In addressing the research questions outlined in chapter one, and satisfying the need for a framework built on theoretical statements grounded in a multilayered data pool, the findings presented here are the theory itself, that is, a set of concepts and propositions which link those concepts together (Creswell 1998, 179). The findings are presented in a descriptive theoretical narrative that uses data from the study to provide explanatory material, and a contrast with the extant literature will show support for the framework. Framework is defined here as the basic assumption or system of thought that provides the context for the meaning of an idea or set of ideas (Akoto and Akoto 1999, 282). Accordingly, a framework (a) allows for an idea or a set of ideas to become intelligible; (b) ascribes meaning and value to phenomena in reality and society; (c) serves to explain, order, and predict activity or behavior; (d) provides for the conceptualization of the principal features of Bono (Akan) indigenous medicinal system, including its spiritual-temporal perspective, which in turn can be used as standards; and (e) reflects essential features of Bono culture providing defining parameters, since all human endeavors are culture-bound.

The thinking of the above formulation is concerned with underlying principles or a systematic statement of principles. To arrive at an appropriate framework or composite perspective, however, I am convinced that no elaborative taxonomic scheme can approach, much less approximate, the framework from which indigenous healers draw upon in their day-to-day temporal and spiritual work. The ways in which indigenous healers operate are dynamic and often do not function in the manner "prescribed" by or constructed in the minds of anthropologists. The specialists of the Bono-Takyiman therapeutic system are very much specialists of the Bono (Akan) cultural-spiritual system as well. The findings of this study begin with a reference to the conceptual outline of the Bono spiritual-temporal perspective detailed in chapter two. The conceptual outline is the primary construct in which the concepts and statements to follow are inextricably linked.

If reality, culture and human life—human life conceived here as a system existing within greater systems or layers of reality—are each conceived as a composite of the spiritual, ideational, and material, then it would follow that the approach to health and healing not only consider this but also address the dimensions of that conception in very real and substantive ways. In the indigenous therapeutic system, there exist key spheres in the production, transmission and deployment of indigenous knowledge

related to medicine and healing. The three primary spheres are: 1) core and basic knowledge; 2) specialized and in-depth knowledge; and 3) peripheral knowledge. The first sphere corresponds to the *core-basic knowledge* shared by most, if not all, community members and the basis upon which those members plan and act. Here, "core-basic" refers to what is fundamentally and widely known—within the indigenous medicinal system—at an essentially basic level of knowledge and aptitude, though there are those who are an exception to this general observation. The fact is a "majority of the population [still] prepare and use their own herbal mixtures," and thereby exhibit agency in the process of addressing their health needs (Warren 1974, 325). Furthermore, informal interviews among several youth of the Nyafuman section of town found that they were very knowledgeable about many medicinal plants and their functions, in addition to revealing the names and utilities of at least six of the most effective and frequently used medicines cited by indigenous healers in the Takyiman district.

The second sphere corresponds to specialized and in-depth knowledge that is associated with the specialists or categorical production units who function ultimately to maintain the coherency and expand the development of the community as it principally relates to holistic health and healing. Those specialists are the indigenous healers who represent the institutions of abosomfoo, akomfoo, and nnunsinfoo, and who received specialized "training" in their respective, yet overlapping vocations. It should be noted that the term "training" may obscure the fact that the development or enhancement of indigenous healers is an ongoing process facilitated by travel and study in the West African region, knowledge exchanges (though sometimes limited) among indigenous healers, dreams, the abosom, one's abofoo, and the nananom nsamanfoo (elder or evolved ancestors). These developmental opportunities certainly have implications for the quality and volume of the knowledge base from which an indigenous healer operates. Almost all of the indigenous healers interviewed agreed—with the exception of one who qualified her response—that there was a clear distinction between nyansa (wisdom) and *nimdee* (knowledge). In terms of the procedural relationship between wisdom and knowledge, wisdom is older than knowledge and one cannot acquire knowledge without wisdom. This statement was both logical and consistent with the interpretations derived from all respondents. However, it appeared that knowledge was considered heavier or more substantial than wisdom for reasons that one is born with the capacity for wisdom but knowledge had to be learned and developed, and thus it grew, accumulated, and became "heavy" because of one's journey through life.

The third and last sphere corresponds to *peripheral knowledge*, that is, facts or information about a people's existence at varied points and events

in their lives. This sphere is "static knowledge" that lacks the dynamism or "lived" characteristic of the core-basic and specialized and in-depth spheres, and archives aspects of the first and second spheres similar to how a camera captures the image of a person or event. The picture only re-presents a finite moment in the life of that person or event, and clearly is not the person or event; nor can the picture attempt to embody the person or event as a living entity or experience. The picture merely archives that finite moment, which, interestingly, in and of itself, may contain a vast amount of information and insight well beyond the moment that it visually captures. Perhaps, this (partially) explains why some Africans are apprehensive about the taking of their picture because of a feeling that their "soul" would be captured for that moment, and possibly manipulated at a later time for negative reasons (e.g., to support theories of barbarism and perpetual famine). Nonetheless, timeless narratives or information can potentially be preserved within a single photo or another documenting and archiving mechanism. Yet, even photos and archiving mechanisms spoil, corrupt, or even corrode over time, hence, acknowledging their inherent limitations. This peripheral knowledge, although significant, is the nature of this text. Since this is a document, it will have a limited existence, even with the best contemporary preservation methods, unlike some of the oral and spiritual archives of the Akan that preserve traditions and histories for centuries.

Among the Baka of the Cameroon-Congolese forest, Betti (2004, 3) found a "specialized" pharmacopoeia among the healers and a general type employed by everyone in the population. Though Betti focused on the popular and general use of medicinal plants, there seems to be overlap between the two kinds of pharmacopoeia since specialists are also of the general populace and its sphere of medicinal knowledge (2004, 3). The idea that practical knowledge of illness and healing is not a hidden cultural domain is found among many in the African world and from rural Haiti to rural Ghana, "even a child will easily list the medicinal uses of thirty or forty wild plants" (Brodwin 1996, 2-3; Dokosi 1969, 119). The process of disease or illness recognition and therapy among the Basaa of rural Cameroon proceeds from head of family or adult person to "lay healer" to ngangan as the disease or illness moves in classification from mut a ntjelel or "complaint" to mut a nkon or "simple" to kon or "non-ordinary" (Mandeng 1984, 4-6). The three spheres of healing knowledge and aptitude differ in terms of a body of knowledge which everyone possesses to persons whom the community trusts with addressing certain health needs to the specialist (ngangan) who has the knowledge of the community and "lay healer" but specializes in situations that are beyond the competency of both. Even among the Zaramo in the urban context of Dar es Salaam (Tanzania), the specialists or waganga (sg.

mganga, "healer") co-exist alongside "non-waganga" and community members who have knowledge of herbs and their use (Swantz 1990, 11). In the indigenous African context, the development of healing knowledge and application for the specialist, non-specialist, and community is facilitated through peers and largely through the constellation of family and its networks. Thus, the fact that "family seemed to be the most important source to acquire knowledge" among healers in the Bolivian Andes and Amazon supports the observation that "in [so-called] Latin America, social transmission of medicinal plant knowledge and skills is similar to Africa" (Vandebrock et al. 2004, 838). Among practicing healers and herbalists from the West African region, particularly in Takyiman (Ghana), "there is clear evidence of wide dissemination of information, extensive traveling by healers to gain new knowledge, lengthy training periods, and tremendous numbers of cross-ethnic and international linkages among indigenous healers" (Warren 1982, 95).

A central idea of medicinal and healing work is that the fundamental nature of the human being is spirit; in its temporal existence, that spirit becomes a composite being encapsulated by way of several constituent parts which form the whole person(ality). To the Akan, everyone is born with a mission or hyebea to be achieved, and the hyebea is realized as abraba (ethical and ideal existence) in the temporal. Ethical existence is regarded as both personal and communal, whereby the actual living of one's existential mission or purpose is individual, but the community is in charge of safeguarding its content. When disorder is produced by unethical existence, rituals are enacted for cyclic and cosmic balance and for the restoration of ethical existence through community participation (Ephirim-Donkor 1997). To the Bono, human conception and life exist in an interplay between the spiritual and the temporal, and "evil" or the busuyefoo (wicked person) is understood to be the creation of the same Creator who created all that is "good" and right. The Bono also conceive of a fundamental relationship between the natural environment, the earth, and the Creator as creation, which is often implicit as an ongoing and unfolding process. The abosom are conceived as the manifestations of the Creator that reside in specific locales of the natural environment, such as the ocean (bosompo or bosonopo), rivers (asuo), lakes (ataree), streams (asuwa), mountains (mmepa), forests (akwae), and trees and plants (nnua).

The Creator is conceived of as an integral part of creation and in all that is created, elements of the Creator reside within. The Bono understand this to be essential and often taboo, therefore making sacred many of the locales mentioned to (environmentally) protect those locales as life sustaining sources. *Mmoaa* is a multilayered term that conveys meanings which range from microorganisms, germs, and insects to small and large species

of animals that exist in the biological and natural environment. Although the oceans (bosompo or bosonopo), rivers (asuo), lakes (ataree), streams (asuwa), mountains (mmepo), forests (akwae), trees and plants (nnua), and mmoaa (microorganisms, insects, animals) exist in the temporal domain of Asase Yaa (Mother Earth), these entities are also a part of creation and, by extension, Onyankopon (the Creator). A majority of the indigenous healers had a distinct preference toward a forest-village context—that included rivers, mountains, trees, and other elements associated with a natural environment—in relation to the conduciveness of that context and its ability to greatly facilitate their healing practice. Several indigenous healers, who directly associated the forest-village environment to conceptions of human beingness, disease, and medicine, shared in the notion that the forest-village context was the most natural environment for human development. The latter expressed a very significant concern about what is meant and what it means to be human in all its scope and dimension.

The Bono (Akan) are very much concerned with order and balance. Akan society generally reflects this concern and Akan traditions, in all their dimensions, allow for the development of specialists with more than average competency and knowledge. The three categories of specialists were the odunsinni (pl. nnunsinfo2), 2k2mfo2 (pl. ak2mfo2), and 2bosomfo2 (pl. abosomfoo). The nnunsinfoo usually do not address spiritually linked and serious diseases; these types of diseases are often dealt with by either the okomfoo or obosomfoo. Nnunsinfoo are not attached to an obosom and usually do not engage in divination; instead, many possess asuman, which are often used in the collection of medicine and to facilitate the healing process. Unlike the pure odunsinni who may harm or kill, the akomfoo are disallowed by their *bosom* from engaging in such acts unless the intended person is caught as an *bayifoo*, in which case the *bosommrafoo* will handle the *bayifoo*. In Bono society, the *bkomfoo* is considered the junior and the *obosomfoo* the senior, an arrangement that is perhaps peculiar to Takyiman. Endowed matrilineally, the *bosomfoo* occupies an "inherited" position and represents the lineage in that capacity. Almost stubbornly, the Bono have maintained an allegiance to their ancient Atana abosom despite the shifts in Akan society and spiritual practices over at least the last century, and still regard the *abosomfoo* as senior to the *abosomfoohene* for Taa Mensa is a position of authority above all individuals, including the Takvimanhene, and the Bono remain very much concerned, as do most Akan, with a fundamental order and composite perspective as reflected in the complementary yet distinct roles of its therapeutic specialists.

Many indigenous terms, such as diseases or medicinal names, cannot be translated into the English language, and do not correspond unproblematically

to the thought system of English speakers. The same applies to other Bono (Akan) concepts related to the indigenous therapeutic system and its specialists. Akom is neither "Akan religion" nor a "possession dance," but rather, in descriptive terms, akom is both process and procedure unbounded by time or space, and is linked to the full range of rituals, medicines, spiritual entities, and specialists within the spiritual-cultural life of the Akan. In the course of my research, I came across a "call-and-response" phrase that spoke to indigenous notions encompassing the life of Akan cultural and spiritual praxis. Amongst all the healers, Nana Kofi Kyeremeh appeared to be the only one who really knew the meaning of the phrase, (a)kom pan ye adee pa, beyond its literal connotation. The phrase (a)kom pan ye adee pa literally means, "ancient or elder akom is a good thing." According to Nana Kofi Kyeremeh, (a)kom-pan is a saying or call that refers to both a "good cloth" and the "ancient akom." Adee pa ("a thing that is good") is the response to the call which also became part of the name for the Bono-Takyiman *akəmfoɔ* and abosomfo2 association established sometime before 1957. This phrase appears to be the closest indigenous conception to what some might refer to as "religion," notwithstanding that the term religion is clearly limited in its ability to act as an appropriate reference to Akan (Bono) spiritual life and practice, much less speak to the fullness of the veracity that exists among the Akan. At another layer of meaning, the phrase (a)kom pan ye adee pa is symbolic of Akan (Bono) culture, tradition, and spirituality in that the phrase, in the metaphoric form of a cloth, contains the analogy of an ancient cloth that is worn, washed, and passed on intergenerationally without the effects of fading. In other words, Bono (Akan) culture and tradition is analogous to the meaning embedded in this cloth metaphor and, for the specialists of the indigenous medicinal system, the work they do is both ancient (pan) and good (adee pa). All the indigenous healers interviewed regarded akom as something that was good and created by the Creator to help resolve challenges among and save the lives of humans. In the minds of many of indigenous healers, the so-called supernatural was natural and the dichotomy between "natural" and "supernatural" often held by many theoreticians and other academics was an artificial one that had no real meaning in their life and practice. Indigenous healers defined the meaning of (a)kom pan ye adee pa in consistent if not repetitive terms, and elaborated on the notion of goodness in relationship to the varied layers of akom and the larger cultural construct of which it is a part. Akom—as process, procedure and tradition—is as sacred as life. It exists to facilitate life and living in the temporal, and is a phenomenon rooted in creation and the Creator.

Yare (sickness or disease) is certainly a phenomenon that could not be restricted by a simple definition. The strategy of composite definitions

for this and other indigenous terms worked well for those definitions that are representative of broader and more comprehensive notions held and employed by healers. Rather than restate the composite definition of *yares*, the reader can refer to chapter two. The multiple categories of sickness or disease often required the indigenous healer to hwehwe mu, that is, to look carefully to find out the cause of the specific illness and its course of treatment. The concept of *nhwehwemu* is akin to diagnosis or interpreting the symptoms, signs, and causative factor(s) of the illness in question. Indigenous Bono healers recognize and address diseases that are inherited as well as a range of other disease categories. The most notable or frequently referenced disease category was sunsum yares; though this category can be translated to mean "spiritually linked disease," a more descriptive rendering would reveal how indigenous Bono healers actually conceptualize the phenomenon of sunsum yares. A spiritually related disease is a disease in or of the spirit and is often described as a disease that keeps returning after treatment(s). In other words, sunsum varee is usually a recurring disease that is very persistent and relatively unaffected by treatments of medicine alone. Most indigenous healers said that this category of disease cannot be cured by the hospital and not all sunsum yares leads to death, though it can certainly destroy the personality of societal members, which ultimately affects the personality of the nation. Many inhabitants of the Bono-Takyiman area, including hospital workers, admit that sunsum yares is best examined and treated by the *bosomfoo* or *skomfoo* and the *abosom*. Given the character and modes through which sunsum yares manifest, it is not surprising that most indigenous healers addressed this category of disease with more frequency and in more depth than other categories of diseases.

Natural or minor disease types were regarded as less difficult to cure and were synonymous with the patient citing the sickness or the symptoms thereof on their own, such as stomach pains, offending one's elders (for which apology was the medicine), malaria, challenging and varied life circumstances, germs and parasites, and headaches and fevers. In effect, any disease for which medicine is administered and is cured in a short period is considered a minor or ordinary disease, whereas those that take longer to cure are serious or spiritually linked diseases, such as infertility, which is regarded as both ordinary and serious. The idea that "sickness is sickness but there are different kinds of sickness" is not incompatible with the notion that "there is no difference between yaree pa [naturally related or personal disease] and sunsum yaree," since different treatments are employed for spiritually and non-spiritually associated diseases. These ideas express a consistency that configures the so-called supernatural as a natural part of reality and, ultimately, disease is disease, though consisting of varied

categories that presuppose concurrent and layered modes of diagnosis and treatment. By way of example, the inability to sleep is described as both honam yaree and sunsum yaree, although as sunsum yaree, the inability to sleep could develop into insanity or another form of mental disease. This is where divination becomes operational as a procedure to discern if the patient had a spiritually or non-spiritually related disease and, if so, what type, how best that type could be treated, who should be involved in the addressing of this situation, and when and where the necessary healing work should be done.

Indigenous healers define physical medicine as a multiple of related but distinct elements. For instance, one respondent explained that aduro (medicine) is plants, roots and barks. The general term for medicine, aduro, is a multilayered concept that does not relate to herbs nor plants alone but to a range of organic and non-temporal elements. The idea that "there [were] so many definitions for medicine" and that "the meaning of medicine [did not] mean one thing" suggests that indigenous healers employed other terms to mean "medicine" or a form thereof. The primary factors of geography and language played a significant role in characterizing medicines germane to the Bono-Takyiman area. The greater role of ecology and location in the characterization and meanings assigned to what constitutes medicine is captured by the fact that local geographical distinctions exist wherein one might find some medicines in one area but not in another area. It seems, however, that indigenous healers are aware of this discrepancy and, therefore, become creative in finding medicines not readily accessible in their particular locale. It also appears that indigenous Bono healers, generally, are mobile; meaning, some travel and study medicine in places such as Burkina Faso, Ivory Coast, and Mali.

Indigenous healers are, for the most part, not restricted in movement and they are able to learn and master medicinal knowledge through several means. Those options include their families, a knowledgeable person, apprenticeship, and through general service. The claim that many patients from northern or southern Ghana use medicine from the Bono area was corroborated by my observations and interactions. Also, the assertions that savanna-derived medicine is more effective (since this type of medicine received quantities of energy from *awia*—the sun) and that medicines collected from this region often brought success were more or less confirmed by the types of frequently used and effective medicines employed. From the data, as well as from my interactions and observations, medicinal leaves and roots, in addition to various peppers and ginger, are primarily used. Beyond the segments of plants and herbs, the skin and parts of some animals (e.g., crocodile, tigers, and hippopotamus)

are also employed in the processes of preparing medicine and effective healing. The *atundee* (ingredients) were combined with the medicine(s) to facilitate the effectiveness of the medicine, and *nneema* ("additives") such as shea butter were seen as necessary because without such items the medicine would not work as intended. In addition to a composite medicine such as *mɔtɔ*, singular and complementary medicines were used. Complementary medicines are different medicines synergistically combined to produce a greater medicinal treatment.

One *odunsimii* conveyed to me that there are generally four categories of diseases, namely, diseases that destroy the personality, kill, deform the body, and were transmitted. Beyond these general categories, there are broader as well as overlapping categories of diseases. Those disease categories include: 1) *bayie yareɛ* ("witchcraft" diseases, also referred to as *sunsum bayie*); 2) *sunsum yareɛ* (a disease borne of or through spiritual means; disease at the spiritual level); 3) *nka no kwa yareɛ* (a sickness without any obvious or perceivable cause); 4) *aduto yareɛ* (negative medicine used to cause disease); 5) *abɔdeɛ yareɛ* (disease associated with the natural environment); 6) *aduane yareɛ* (food diseases); 7) *mmoaa yareɛ* (germs, bacteria, microorganisms); 8) *duabɔ yareɛ* (cursing); 9) *honhom yareɛ* (diseases borne of a "kind of spirit"); and 10) *sman yareɛ* (social disease).

According to indigenous healers, there were several ways medicine prevents and cures diseases in terms of the workings of the medicine once it comes in contact with the human body. To them, the medicine diffuses in the blood through the veins, and the blood transports the medicine throughout the body to prevent or cure the disease. In order words, once the medicine reaches the body through the stomach or enters the skin in bath form, it diffuses into the blood and moves to all parts of the body to fight or protect against the sickness in question. When medicine is applied to the body, it also passes through the skin and fights against the sickness or kills the germs that caused the sickness. Since every disease has its method of treatment, medicines are commonly administered through baths, drinking, enemas, body application, and nasal drops. Adhering to taboos associated with each medicine facilitates prevention and cure, and preventative medicine serves as a taboo to negative forces, making it impossible for those forces to cause *sunsum yares* or disease at the spiritual level. It appears that there are certain notions about the workings of the blood; the idea is that blood not only facilitates the intent of the medicine but also serves as an indicator of certain diseases.

General caution guides the use of medicines against incidences such as overdose, while a "person-specific" notion of each person possessing an illness unique to him or her which may be the same "general" sickness affecting

another patient is often driven by the certainty of a curing medicine. Although many indigenous healers were aware of foreign medicines, as well as scattered foreign medical institutions throughout the country, most shared the position that abibiduro (indigenous African medicine) was strong enough to cure diseases or sicknesses completely. If initial medicines are ineffective, then the indigenous healer uses others and, based upon the efficacy of the successful medicine(s) the indigenous healer knows and chooses that one. The idea is that if the medicine is strong enough to cure a disease, the body has to receive or accept it. If the medicine does not work too well—which means the body is not receptive to it—then the indigenous healer has to change the medicine, though not necessarily the method. Moreover, based on the experience of the indigenous healer or patient, the indigenous healer knows which medicine is most effective given the prior ineffectiveness of other medicines or treatments employed. If a patient shows no improvement with one medicine, then that medicine is changed to a more effective one based on the latter's demonstrated ability to improve the situation.

The praxis of indigenous healers using medicines known to address bodily, mental, or spiritual disease based upon the demonstrated capacity of those medicines can also be discerned from the proverbs, aduro gye honam (the body receives or accepts the medicine) and aduro ve nnam (medicine is sharp and able to cure or cut the disease down). The indigenous healers' theory of medicinal efficacy—precisely, the reasons why indigenous medicines works or not-argues that every medicine has its function and a medicine should be changed if it is not the appropriate one for a particular sickness. The ideas or reasons as to why indigenous medicine works assume the converse of why medicine does not work; however, additional reasons extend this operational assumption. The composite idea here is that a medicine will be able to address a sickness effectively if the blood has accepted the medicine; there exists a knowledge in the efficacy of the medicine and confidence that every medicine cures; instructions and rules associated with a medicine are adhered to; and a patient has not been overcharged. Then the medicine or medicines will work accordingly. Not all of the foregoing conditions have to hold true in order for the medicine to work. Either one or a combination of those conditions allows for medicines to work as intended. Nevertheless, as it appears, if all the stated conditions are present, then it would seem a near impossibility for the medicine not to work. This is the relevance of composite ideas or notions arrived at collectively regarding, in this instance, conditions under which medicines have worked as intended. It would then seem that once the medicine works (or did not work and is changed to one that allows for the desired outcome), the patient-indigenous healer relationship for that particular ailment has ended. Indigenous healers of the Bono-Takviman

area engage in post-treatment processes that are largely contingent upon the health and well-being of the patient as articulated by that patient.

All indigenous healers spoke of a common scenario wherein patients are the ones, in fact, who conveyed recovery—in terms of being able to perform tasks inhibited by their illness prior to the prescribed medicine(s) and thereby exhibited agency in the healing process. In other words, "when you give a patient the medicine they will compare their state before and after, and they and you will see the changes (for the better) by their ability to do things they were not able to do before the treatment." In the articulations of indigenous healers, "we the healers cannot tell the patient that they are healed; it is the patient who will tell [us] that they are healed." Among indigenous healers, there is also the understanding that one should not rush the recovery process. Some indigenous healers recommended either a conservative period of two to four weeks, while others advocate that patients be allowed to make periodic "check up" visits every few days or weeks until they nya ahooden (get strength, energy, or were cured). If he or she is not well, the patient should continue his or her treatment. As part of the post-recovery process, preventative measures are taken since, for instance, abayifo2 ("witches") or a different energy or entity in varied form can compromise the wellness of a person not receiving treatment and the protection thereof, or expose that person's vulnerability. In terms of recovery and cost, some treatments require a *ntoasee* ("down payment"), which, in most cases, is not monetary but rather implies the collection of a chicken, eggs or other items to help facilitate the healing process. Aseda ("giving thanks") is the concept of post-treatment payment for services rendered. In the process of aseda, the patient returns to the indigenous healer to convey to him or her the successful course of the treatment and to provide payment in the form of eggs, chickens, sika ("money"), nsa (drink for libation), and other items if necessary. Aseda is an integral part of the post-recovery and preventative care process. A healer's conduct in this and other moments in the healing process is subject to very firm conceptions of indigenous standards of ethics for indigenous therapeutic practitioners. These benchmarks are listed at the end of chapter two. Those standards are indeed significant in terms of the sophistication and quality of the indigenous medicinal system, in addition to mechanisms for limiting falsehood in the face of entrenched colonial attitudes, institutions, and sensibilities that compound or confound the work of righteous healers.

In an attempt to explore the relationship between medicine and the proverbial, gold weight, *adinkra* symbolism, and oral narrative archives of the Akan, it was shown that some archives (more than others) require further exploration among a wider population of Akan peoples to expand

or clarify the knowledge production links between indigenous knowledge archives and indigenous therapeutic concepts and praxis. The difficulty of some responding to questions related to the proverbial archive was eclipsed by not only the proverbs shared, but also those provided in the appendices through secondary sources. That list of proverbs derived from secondary sources reveals a wealth of indigenous perspectives on holistic conceptions of Akan healing and medicine, which is captured by the proverb, Onyame ma wo yareε a, ɔma wo aduro ("if Onyame gives you sickness, Onyame also gives you medicine"). The proverbs shared by healers speak most explicitly to the effectiveness and strength, situations, guidelines, and concepts related to and about medicine and medicinal specialists. An exploration into the gold weight archive revealed that the majority of my respondents had little knowledge of the topic as it related to medicine or healing, perhaps due to the declining presence or non-existence of goldsmiths in the Takviman area. In fact, many were unfamiliar with the term mmrammoo or abrammoo, or its variants, for gold, brass, or copper weights. The gold weights herein were congruent with several of the proverbs collected as well as concepts of medicine expressed by all indigenous healers. In all, the "gold weight" archive of indigenous knowledge is an area that warrants further exploration not solely for its relationship to medicinal concepts but also for the embedded cultural knowledge and writing system shared among the Akan, to which, increasingly, many Akan are becoming oblivious.

Regarding the Adinkra symbolism archive, Willis (1998, 43) observed the inability of several weavers and many retail dealers of Adinkra cloth to "read" the symbols, which suggests an obscuring of the symbolic beauty of Adinkra cloth in addition to deficiencies in appreciating its profound spiritual and cultural meanings among the population. This state of affairs relative to Adinkra cloth or symbols had implications for indigenous healers as well. The majority of my respondents had little or any knowledge of direct or indirect relationships between Adinkra symbols and medicine or healing. Though none of my respondents were able to provide Adinkra symbols that were related to medicine, Willis (1998, 85, 139) described two, namely, bese saka (kola nuts; pod and sack) and musuvidee or krapa. The latter is a symbol of spiritual cleansing, sacrifice, and the name of a ceremony used to facilitate fortuity (Willis 1998, 139). Lastly, in terms of the oral narrative archive, a number of concise yet informative oral narratives associated with medicine or healing were shared. Of those collected, the relationship between respect and humility and the transmission of medicinal knowledge; the power inherent in medicinal plants; the role of the abosom, mmoatia, ancestors, hunters, and dreams in securing and transmitting medicinal knowledge; and the antiquity of indigenous medicine were thematic. Akan

archives of indigenous cultural knowledge provide fertile ground for rediscovery and reclamation and, therefore, must occupy a contributory role in any discussion relative to Akan cultural reality and perspectives in historical time and cultural space.

CONCLUSION

The overriding thesis or most definitive conclusion of this study is that Bono spiritual-temporal perspective is the framework from which indigenous healers draw upon in their day-to-day operation—often in the manner not prescribed by or constructed in the minds of anthropologists—and the central idea to that perspective is a composite human being embedded in and informed by the spiritual, ideational, and physical nature of reality itself. This framework and notion of human nature resonates with the earliest recorded medical knowledge and literature found in ancient Egypt as well as most of indigenous Africa of antiquity and to the present (Finch 1990a; 1990b, 140; Newsome 1990, 131). Most Akan or Twi speakers also resort to this fundamental way of making sense of their day-to-day reality whether they promulgate indigenous spirituality or not—by virtue of their socialization and its extension into their being through the instrumentalities of family, anansesem or folktales, proverbs, life cycle rituals and ceremonies, diet, material culture (e.g., adinkra, kente cloth), and other constituent parts of the larger culture complex. Indigenous medicine resonates much with the above framework for it is thematic or symptomatic of a holistic approach to disease or sickness, healing, balanced health, and other human circumstances linked to an idea of life that takes into account one's family, way of making sense of the world, vocation, ecology, and cultural environment with a high value placed on the human being in the context of community (Ayim-Aboagye 1993, 180; Bishaw 1991, 199; Memel-Fotê 1999, 328; Mandeng 1984, 247; Appiah-Kubi 1981, 148). In one of Mandeng's (1984, 245) interviews with an elder healer in Cameroon, that healer, through the translated version of a larger statement, explained, "the living and the dead, we all live in the same world." Instructed by the simplicity yet elegance of that healer's words, we are, however, often confronted by a very pervasive dichotomization in the theories of illness causation and, by extension, diagnosis and treatment well represented in the academic literature (Obeng 2004, 72; Green 1999; Murdock 1980; Warren 1974). This dichotomization is commonly unrealized in practice by indigenous healers (Ventevogel 1996, 132-133; Van Delen 1987; Minkus 1980). The recent history of assigning meaning and interpretation to indigenous African medicinal systems has been centered on the notion that

these systems were largely extensions of "traditional religions" (having no basis in rationalism or scientism) and efforts to show that practitioners not only have non-religious explanations but lean more toward "naturalist" theories of disease causation and treatment. What has been most obvious and, seemingly, most illusive is that in the recognition and treatment of illness, "both the organic and the spiritual aspects of the disease are taken into consideration. This is essentially based on the knowledge in West Africa, that [the human being] is a compound of material and immaterial substances, which makes the maintenance of a balance between the spiritual and material in [humans] a condition for sound health" (Opoku 1978, 149). Yet, to suggest that "[t]he practice of medicine is closely tied up with the practice of religion in Africa," muffles and undermines indigenous concepts of medicine and healing through the use of the alien variable of "religion" with its unreconcilied linguistic and cultural baggage (Ibid., 148–149).

Though resting on very tenuous evidence, the case for the descriptive and explanatory power of the natural-supernatural or naturalistic-personalistic dichotomy in indigenous African medicine is inescapable. If this dichotomy were an academic journal, it would appear from the literature that many writers have active or perhaps lifetime subscriptions in terms of buying into the supposed "naturalistic" and "personalistic" explanations or classifications of disease and the therapeutic strategies deployed (Muela et al. 2000; Green 1999; Bierlich 1999; Gyekye 1997, 245-146; Ventevogel 1996; Gbadegesin 1991, 128; Fink 1990; Swantz 1990, 143; Warren and Green 1998, 6; Mandeng 1984; Warren 1982, 89; Fosu 1981; Morley 1979; Foster 1976). A few have constructed three categories of illness causation, namely, natural, preternatural, and supernatural to explain the parallel physical, magical, ritual-sacrifice dimensions of each respective category, while most have remained vigilant on the natural-supernatural antagonism. Guided by the belief that the anthropologist's first task is "to find the simplest taxonomy for causality beliefs" and that to "depersonalize causality" reflects an "evolution of culture," Foster (1976, 775-776), among others, argued the principal etiologies of "non-Western medical systems" were personalistic and naturalistic in nature. Painted on a neat canvas as irreconcilable opposites, these two primary etiologies have been criticized by Foulks (1978, 660) as "inappropriate and unnatural categorizations" undermining "a more emic approach," and as "enormous reduction" that fails to examine health and sickness ideas "as they are in the usually exigent context of social action" by Kleinman (1978, 661). Moreover, the naturalistic-personalistic dichotomized model is deficient not only in terms of addressing how practitioners and patients conceptualize illness and therapy, especially in ways contrary to an either/or logic, but also

explaining health behavior and perceptions in situations where multiple health systems are utilized by members of a given society. For if a society does not distinguish what researchers call "separate levels of reality," then why do these same writers present that society in terms of "natural" and "supernatural" worlds (Bierlich 1999)? The main idea which emerges then from the varied perspectives riddled by the natural-supernatural dichotomy is that complexities of life, whether health related or not, are often crudely forced or imprisoned into one generalization or the other without regard for the ways in which real people approach and resolve health and healing circumstances during their life cycle(s).

Among the Bântu-Bakôngo, the notion of n'kisi ("medicine") is complemented by the concept of "self-healing power" (lendo mu kukiniâkisa) as "the biogenetic package [futu dia ngolo] of power that is received at the moment of conception in the mother's womb" (Fu-Kiau 1991, 23). This package is not only the key to one's health, but it is the most excellent healer since it is both creative and generative. For the Bântu-Bakôngo, sickness is the abnormal functioning capacity of one's self-healing power caused not by bacteria or virus, but by the loss of the body's balance or energy (Ibid., 39). The cure is perceived in terms of wholeness and the therapist (n'niâkisi or m'fièdi) "believes that therapy is essentially grounded in both flesh and spirit," a process of restoring self-healing power (Ibid., 49). In Nigeria, Offiong (1999, 129) concluded, "It seems proper to assume that religious [i.e., spiritual] factors are intrinsic to healing." In the Ivory Coast, among the four main cultural groups of the Mande, Gur, Kru, and Akan, Memel-Fotê (1999, 328) found that the comprehensiveness of indigenous medicine is characterized by "its broad conception of health, sickness and cure, itself linked to the idea of life," and indigenous "medical theory is that man's nature is not only physical but also mental and spiritual."

Most notable in the area of indigenous medicine, Ghanaians, and most Africans, have been described as being in an "ambiguous situation" with confusing attitudes towards Western (medical) institutions as a result of the "fatal impact of irreconcilable social systems and cultures" (Assimeng 1999, 246–247). This ambiguity is a cultural and ideational one that engenders scholars such as Addae-Mensah (1992, 49) to proclaim, "it is for us scientists to throw the light of science on the herbalist's art, and lay a more pragmatic and scientific basis for his practice." His statement is consistent with the very notion that "healing with herbs cannot continue to be just an art" since "African methods were wholly trial and error" (Addy 2003, 31; Addae 1996, 13). Many of these same scholars (and biomedical practitioners) fail to either recognize or accept that there has always been a demystified "scientific" process to indigenous medicine in addition

to the vast knowledge of medicines acquired through close observation of nature and animals' application of those medicines, and practical experience accrued over centuries (Opoku 1978, 150; Edusei 1985, 162).

Ventevogel (1996, 135) concluded that "medical knowledge is not a thing or a fact, it is the outcome of a historic process" and postulated "that constructing an 'ethnomedical' system resembles taking a snap-shot of a certain place at a certain time." Though the notion of a "snap-shot" gives further credence to the "peripheral sphere" of indigenous knowledge discussed earlier, what the author is insinuating is that the indigenous Akan medicinal system is not what it was a hundred years ago nor will it be the same a century from now. Furthermore, the boundaries of what constitutes "Akan medicine" are becoming blurred. Yet, he and others must be made aware that what Minkus (1980) found twenty years ago and what Maier (1979) discerned from the literature related to Asante (Akan) medicine almost two centuries ago is corroborated by contemporary sources and still holds true among many Akan. (This is not to suggest that Akan medicinal knowledge or its system of production, transmission, and deployment is static or resistant to refinement, but rather that that system is a part of a spiritual-temporal core that is pervasive and perpetuated by succeeding generations.) The idea, following Abraham (1962, 47, 50), is that in "the Akan metaphysics, what is in the first place is spirit. Spirits exist in a hierarchy because the primary properties of spirits are qualities . . . [and] morality, politics, medicine are all made to flow from metaphysics." The boundaries of what constitutes "Akan medicine," as opposed to Mossi or Dagomba medicine, are sometimes not easy to discern as a result of movement, interaction, and incorporation of varied skills and techniques related to health and healing. This development, however, reveals the significance of the Bono cultural and ecological zone as a point of (medicinal) knowledge convergence among varied African societies and gives rise to the notion of an internal pan-African knowledge base to the indigenous medicinal systems that exist in West Africa.

Certainly, the foregoing discussion does not undermine the "naturalistic" or "non-religious" conclusions reached by other researchers; it simply puts them into their proper context or perspective. Hence, Fink's (1990, 326) finding about the contrast of competence and aptitude between the primary categories of indigenous healers is consistent with our findings on each category. Green's (1999, 39) observations that contagious diseases can be carried in the air or wind, the "concepts of small or unseen insects or worms that carry illness," and the relationship between microorganismic agents and agents of impurity (e.g., dirt) certainly resonate with the concept of *mmoaa* (microorganism, insects, animals) as well as that of *ɛfi* (concept

of "dirt" includes all bodily wastes). Here, the latter is synonymous with contamination and disease, and implies the necessity of cleansing and purification. In regards to the concept of εfi , Patterson (1981, 94,107) noted the "striking contrast between personal and environmental sanitation" in Ghana and that "substantial and sustained advances in general levels of health are impossible without major improvements in living conditions." Though the Bono (Akan) bathe twice a day and are very much concerned about contamination, the poor sanitation and degradation of many living and working environments are inconsistent with their personal approach to cleansing and purification. It is nearly impossible to not be struck by this unfortunate paradox in Ghana.

The notion that "in many communities, modern medicine is not perceived as better than traditional medicine" was expressed by indigenous Bono healers without the acceptance of the connotative arrogance embedded in "modern" medicine (Groce and Reeve 1996, 351). J. L. S. Taylor (2001), among others, noted the seldom-effective collaboration between indigenous and Western medical practitioners, a situation aided by the fact that the "orthodox biomedical system is everywhere, intertwined and symbiotic with the established political and socioeconomic systems of a country. It is thus oriented toward serving the affluent, powerful, and mostly urban class that is able to appropriate public resources" (Good 1987, 16). Nakuma (1993) suggested a two-tier medical system, while Offiong (1999,128) is of the opinion "that 'integration' and 'inclusion' should mean merging the disparate systems into a coherent unit," and suggests, following Warren et al (1982), "identifying areas where the traditions can best complement each other and establishing a working contact in such areas." Yet, as Offiong (1999, 128-129) himself notes, "integration or not, traditional healers remain the very embodiment of the conscience of their communities."

Integration and Cooperation Debate

Some have argued that the encounters between indigenous medicine and "Western" medicine have been characterized by struggles, resistance, adaptation, critique, negotiation, and appropriation, processes which have all reduced indigenous systems to "things" and objectified individual herbs through "Western" analytical concepts, bio-chemical analysis, randomized clinical trails, creating patents for bio-chemical substances, and marketing those substances as drugs and nutritional supplements. In this context, the debate with regard to the "integration" of indigenous therapeutic systems (specifically their varied categories of healers) into national health delivery systems remains a discourse captured by seemingly irreconcilable ways

of thinking, cultural behavior, and sensibilities (Offiong 1999; Ventevogel 1996; Good 1987, 17–18; Anyinam 1987; Evans-Anfom 1986, 43–62; Pillsbury 1982; Rappaport and Rappaport 1981; Twumasi 1975). Irrespective of the argument that the distance between "Western medicine" and "non-European folk medicine is a product of post-nineteenth century medical science," the lives of African people are decisively affected by the contestation that exists (Meyers 1976, xii). Given that ministries of health and medical schools still propagate colonial attitudes towards indigenous healers in Africa, and missionary and government school curricula nurture those perceptions, it is not surprising then to find the ambiguity harbored in the minds of Ghanaians especially in their perspectives on indigenous medicine (Assimeng 1999, 246; Nakuma 1994). The claim, to the contrary, that "the introduction of Western institutions has not resulted in conflict between culture or between 'traditional' and 'modern' segments of culture, but rather in accommodation" among the Bono facilitated the first of several integrative health projects in Africa (Warren et al. 1981, 18; Warren 1978, 77).

In the 1970s Ghana was one of the first African nations to host health initiatives such as the Damfa project funded by USAID in Greater Accra, the Brong-Ahafo Rural Integrated Development Project (BARIDEP) project funded by the World Health Organization (WHO) and the Swedish International Development Cooperation Agency (SIDA) in the Kintampo district, varied United Nations Children's Fund (UNICEF) sponsored training projects, and the Primary Health Training for Indigenous Healers (PRHETIH) project which operated between 1979-1983 in the Takviman district (Warren 1986, 26). Several projects of a similar nature were initiated in the Bono inhabited districts of Berekum and Dormaa based upon the PRHETIH experience and the film initially entitled Bono Medicines (1983) and later renamed Healers of Ghana (1996). Many indigenous healers who participated in the PRHETIH program soon discovered the "one-way" nature of PRHETIH as well as analogous efforts such as the Damfa project, and this realization was confirmed by project facilitators who noted how sessions on herbs were the most well received while those which "consisted primarily of advice or description" were least welcomed (Warren et al. 1981, 14; Appiah-Kubi 1981, 148). These experiences have engendered multiple arguments and proposals. Some argue that integration is pragmatically impossible but some form of cooperation in areas where both indigenous and "Western" medicine complement each other is feasible, while others propose that integration or collaboration could result in reconciliation particularly with the push by African governments and others for indigenous medicine to "go modern" or "convert itself" by way of the demands of scientific rationality as doctors

recognize healers as potential allies in the fight against HIV/AIDS (Liverpool et al. 2004; Yangni-Angate 2004, 4; Offiong 1999, 128; Gessler et al. 1995, 158; Twumasi 1988, 26-27; Warren et al. 1981). If indigenous medicine in an African environment serves as an "alternative system" (though as an alternative to what remains unclear), it then should be known that in other contexts "alternative practitioners" are defined and restricted to the margins of the biomedical community which they have been looked upon as invading (Shuval and Mizrachi 2004; Makhubu 1998, 40). Perhaps the barriers to integration are in fact substantial and the benefits are unproven, as Barrett et al. (2004, 258) argues. Proposals to provide on-the-job training for young health professionals with indigenous healers and public education to rectify the popularized false perceptions of indigenous medicine, to utilize indigenous healers as part of a global disease reporting systems for emerging diseases, and to create a two-tier medical school system may be missing a vital point (Groce and Reeve 1996, 352; Nakuma 1994; Appiah-Kubi 1981, 148). The conjuncture of views and propositions on integration or collaboration suggests what is really at work is a recasting or reduction of indigenous medicine as a mechanical, lifeless, and inhuman adjunct to biomedicine with a "one-size-fit-all" approach that neglects the fact that physiologically, emotionally, spiritually, and ideationally no two human beings are the same in and of themselves. In effect, indigenous medicine will become like biomedicine and since we are dealing with "two different medical paradigms," as Hedberg and Straugård (1989, 29) observed, "any [integrative] attempt to separate the 'empirical' from the 'spiritual' for the purposes of approaching and incorporating only the 'empirical' into the modern health care system is bound to result not in the promotion of [indigenous] medicine, but, on the contrary, in rendering it as mechanical and segmented as modern medicine may have become of late" (Bishaw 1991, 199). In this context, Foulkes' (1992, 122) contention that indigenous African medicine is a system that is "irreconcilable with our own" (i.e., "Western" or bio-medicine) seems more intelligible though there are those who believe that there is compatibility "in the domain of contagious disease" (Green 1999, 17). Surprisingly, the relatively high levels of collaboration among indigenous healers themselves in places such as Cote d'Ivoire, for instance, are usually never part of the discourse nor do they figure in proposals for health projects in African societies (Memel-Fotê 1999, 333). Rather than efforts to further the collaboration and efficiency among indigenous healers who serve large segments of the general populace, the idea that "traditional healers are a poorly organized group of people with only a low formal education, and therefore cannot be regarded as equal partners with Western health care workers who are well trained and embedded in powerful institutions" incarcerates our thinking

(Ventevogal 1996, 123). Lastly, one cannot simply imitate, in the African context, the stories of "integration" between "traditional" and "biomedical" specialists in the Asian countries of China, Vietnam, and Singapore.

The findings of this study concur with Bishaw in several ways, particularly on the topic of "integration" or "cooperation." The way the "cooperation" discourse is framed, indigenous healers and the medicinal system they represent are not only problematized—that is, there is a problem "training indigenous healers" and integrating them into the biomedical system—but also so-called "cooperation" or "integration" is never stated as one of either creating a new system wherein both participate on agreed upon terms or the latter biomedical workers "integrate" the indigenous system, particularly if that system represents and is responsive to the overwhelming majority of the population. Rather, the "cooperation" or "integration" debate has been unilateral with the biomedical system being both the source and the destination. It would seem more sensible to "integrate" into a system, such as the indigenous one, that is embedded in the thought and pragmatic structure of society than to do the same with an external (and antagonistic) system, such as the biomedical one, which is imported and removed from the majority of the people, and only accessible to a few financially well-off, urbanized individuals. This debate appears to be a distraction from the real issue: the inherent and unbalanced power relations embedded in society. At the cultural or ideational level, both the indigenous and the biomedical systems are irreconcilable at their very core. The notion of "integration" seems misguided and the idea of "cooperation" (whatever that means) appears more feasible if both systems acknowledge and accept their areas of expertise and limitations, perspectives and cultural foundations from which they operate, and are genuinely concerned about what it really means to be human and the difficult but necessary task of being human. The indigenous system has more or less met these criteria; it is the hostile, and therefore irreconcilable, nature of the contemporary biomedical system and its specialists that need to become archeologists who dig into their own disciplinary and ideological (pro)positions. The fact is that medical training in Ghana and other parts of the world traditionally focuses on disease diagnosis and management rather than on preventative medicine and health promotion, and the latter foci constitute the very underbelly of biomedicine. It appears, therefore, the self-induced excavations or introspection of the biomedical system as expressed in Africa is more necessary for that system than for those it is most antagonistic toward. In rural Haiti, the competing ideologies of Catholicism and Protestantism unite and consolidate their assault toward Vodun adherents and specialists as their "demonic inverse," yet and still, Haitian peoples continue to seek out and

utilize the latter (Brodwin 1996, 193). In Ghana and other parts of Africa, the collaboration between the truncated nation-state and its political and medical instruments also assault yet underestimate the depth of cultural views and values in the everyday struggles of most people who have come to realize that they are the grass when elephants fight and negotiate those battles as best as they can through what they culturally know.

"Witchcraft" Discourse

Many African nations "still retain Witchcraft Acts promulgated during the colonial era," and, in Botswana, for instance, its "witchcraft proclamation" (aimed at "diviners" rather than herbalists) passed in 1927 remains in legal force (Makhubu 1998, 40; Hedberg and Straugård 1989, 22). The discourse on "witchcraft" in the African context is often silent on this legal and historical fact as a pragmatic and ideological consideration in the ethnographic "conversations" about illness and therapy. The resuscitation of Evans-Pritchard recently by Robert Pool, among others, argues that there is no such thing as African medical systems since everything in those nonsystems is ultimately embedded in and explained by "witchcraft" (Pool 1994a; 1994b). In Bongmba's (1998, 166) attempt at an interpretation of the phenomenon of "witchcraft" among the Wimbum-in one of whose towns Pool conducted his study—he notes the conceptual and contextual translation difficulties surrounding the Limbum terms of bfui, brii, and tfu employed to differentiate the varied phenomena consolidated under the term "witchcraft". The fact that the Wimbum and perhaps other Africans have come to use non-Limbum vocabulary from other parts of Cameroon as well as English terms, such as witchcraft and sorcery, in their "attempt to make sense of what it means to be human" in a capitalist and homogenizing global order suggest the "borrowed" use of "witchcraft" is no more than semantical or misappropriated nonsense (Bongmba 1998, 168). Though Bongmba criticizes what he considers to be Evans-Pritchard's imposition of Azande thought in terms of epistemological superiority, it was writers such as Gillies who concluded that the Azande or other Africans do not attribute diseases to witchcraft or sorcery for these "actors" make distinctions between different kinds of illness and between levels of etiology and pathogenesis (Feierman 1985, 108; Gillies 1976, 358, 391-392). Even those who argue that "beliefs and practices related to medical care should be subsumed under the domains of religion, magic or witchcraft," while contemplating Evans-Pritchard's contribution to polemic debates on rationality, perhaps should read the literature in their own field (Morley 1979, 2, 8–9; Foster 1976, 773). In Murdock's (1980) global survey of the ethnographic literature using criteria derived from medical science and anthropology, he

found that witchcraft was "practically universal in the Circum-Mediterranean region but surprisingly rare elsewhere in the world" (21). According to Murdock (1980, 43, 45–46, 52), this region includes "Caucasoids," "the Afroasiatic, Indo-European and Maro-Sudanic," and is distinct from the "region of Sub-Saharan Africa" offering "essential confirmation to a single region" based on overwhelmingly high witchcraft ratings. "Witchcraft," Murdock (1980, 48) wrote, "is important among about a third of Africa's peoples but is absent in about half of them." These statements offered by Murdock, however flawed by his reliance on studies which largely sought after the exotic and supernatural, only reveal a fragmented reality, at best, since his "basic dichotomy between theories of natural causation and theories of supernatural causation" may not exist in the thinking and praxis of those delineated by way of his dichotomy (van der Geest 1984, 60; Murdock 1980, 8).

African Perspectives on African Medicinal Systems

In southern and eastern Africa, so-called traditional medicine is the dominant healing system and it is often regarded as the more appropriate mode of treatment (Rukangira 2001, 180). Stretching from Ethiopia, Tanzania, South Africa, Zambia to Cameroon, Nigeria, and elsewhere, indigenous African healing systems are regarded highly by large segments of the (rural) populations surveyed (Bishaw 1991; Gessler et al. 1995; Puckree et al. 2002; Rukangira 2001, 180; Stekelenburg et al. 2005, 78; Mandeng 1984, 3–4; Betti 2004, 3; Osujih 1993; Offiong 1999, 128–129; Ekpere and Mshana 1997, 2). These perspectives on indigenous medicine and healing are shared by parallel populations in geographically distinct places such as New Zealand, Hawaii, and the United States among persons of African ancestry (Toafa and Guthrie 2001; Bell et al. 2001; Marbella 1998, 184; Payne-Jackson and Lee 1993, 3).

Akan or African scholars have generally not sought to investigate the depth and scope of indigenous knowledge systems for the reason, I am convinced, that many are largely divorced from their indigenous cultural reality and values. To them, indigenous "Africa remains merely an idea" (Oyěwùmí 1997, 27). This is not to ridicule but to state the obvious, "African intellectuals [uncritically] accept and identify so much with European thinking that they have created African versions of Western things" (Oyěwùmí 1997, 19). Thus studies on Akan (and African) knowledge systems are largely academic in nature or wholly superficial in conception and content. Kwame Nkrumah once charged the Institute of African Studies, in its inception, to "study the history, culture and institutions, languages and arts of Ghana and of Africa in new African

centred ways" (July 1996, 184). This charge has been left very much unfulfilled.

Indeed, indigenous (medicinal) knowledge research must be situated among a broader population of continental and diasporian Africans in terms of enhancing the efforts of dedicated healers rather than such specialists opportunitistically serving as "data plantations" for pharmaceutical companies, thesis and dissertation seekers, and academics to exploit. As a corollary, research efforts become an asset to those being researched when these efforts explore ways to improve the infrastructural, living conditions of populations that inhabit the site(s) of research using indigenous resources and exogenous techniques that are not adverse to indigenous spiritual-temporal perspectives.² Any bio-chemical analysis, however, must be informed by indigenous medicinal concepts and perspectives reflective of the larger cultural context in which medicinal specialists exist and operate, and that analysis would serve the purpose of providing a complementary contribution to a cultural-linguistic analysis rather than to "validate claims" made by indigenous healers and populations who patronize the indigenous therapeutic system. The life of the concepts and perspectives addressed herein go beyond this text to contribute to the work of indigenous healers internal and external to Ghana, to enhance the overall health and living environments of indigenous rural populations, and to facilitate a re-investment in the core of medicinal and other indigenous knowledge systems as a basis for locally engendered growth in the quality of life and living. The Akan in particular and Africa in general must come to see its culture—as articulated in this text—as its most precious and endangered natural resource or recourse, and as the basis from which socio-political and economic self-sufficing will emerge and be sustained.

Appendix One

The Indigenous Bono (Akan) Calendar

The Akan calendrical system is a temporal design for daily life and living in relation to empirical and spiritual cycles that have helped to shape reality as it is perceived by the Akan. The most fundamental unit of time for daily life and living is the εda (pl. nna), the day of twenty-four hours and its periodicity. The two broad categories of adekyee (dawn; beginning of daytime) and anadwo (nighttime) constitute an \(\varepsilon da\) and of which the constituents of each category number ten parts in total (Arthur 2001, 114; Wilks 1992, 179; Warren 1976, 251). Eight inclusive nna (days), in which the initial day (out of seven) is counted twice, form a singular nnawatwe ("eight days") or one week. A week is also referred to as dapεn (in Akuapem areas) and, in some cases, avisi. The name of each *nnawatwe* is a combination of a prefix and a stem. The six prefixes are nwona, nkyi, kuru, kwa, mono, and foo. The seven stems, and their parallel in the Georgian calendar, include wuku(o) (Wednesday), yaw (Thursday), fi(e) (Friday), memene (Saturday), kwasi (Sunday), dwoo (Monday), and bena (Tuesday).

Each ɛda has a specific character and, within the adaduanan cycle of forty-two days, there are three general categories in which the nna (days) fall under—dapaa, dabone, and dahunu. Arthur (2001, 115) and Wilks (1982, 181) concur that each day has a distinct character and regards dapaa ("good day") as auspicious, dabone ("not so good day") as inauspicious, and dahunu as indifferent, since it is a common (non-festival) day. These three categories, however, require some clarification. Peripherally, dapaa (da—day; paa—really good), dabone (da—day; bone—evil, bad, serious), and dahunu (da—day; hunu—optimistic, ordinary, jovial)

182 Appendix One

are clear enough, since in *dapaa* we find *pa* or *paa*, which (through the same intonation) carry the meanings of very well, goodness, genuine, and real. Likewise, *dabone* is a sacred, serious, reflective, and critical day for the immoral and the righteous, those who abhor evil and the perpetrators thereof.

In reality, however, both nnapaa (sg. dapaa) and nnabone (sing. dabone) are propitious days; however, nnabone are unsympathetic days for obayifoo or those nefarious persons who do bayie (acute acts of wickedness) as well as ordinary members of society who do not adhere to taboos and the performance of specific rituals. In fact, two of the most critical nna of the adaduanan cycle, Akwasidae and Awukudae, are celebrated on nnabone and are immediately preceded by nnapaa. Dabone, as opposed to dapaa, may serve as a time of reflection on culture within the natural order (McCaskie 1995, 153). It also seems that on nnabone the focus is more on the spiritual agencies reified within that cyclical unity of natural elements: nnipa (humans), nananom nsamanfo2 (ancestors), the children vet unborn, and those children of Odomankoma Oboades (the Creator), the abosom. On *nnabone* the foregoing agencies are invoked and manifest themselves on the earth (in forests and on farms) and in the air, hence, the restriction from farming, for instance, on those days. By respecting the restrictions and meditating on the meaning of temporal life within the natural order (by way of pouring *mpaee* (libation) and providing offerings), one will receive the appropriate *nhyira* (blessings) and be empowered by the presence of those invoked.

At the conclusion of each adaduanan, the cycle simply begins again and the successive cycles, totaling nine in all, constitute an afe ("one year")—marked by the saying, afe nko aporo mmeto yen so bio, "the year should make its circular journey and should met us again"—after which a new series begins. The conclusion and beginning of an afe occur with the odwira or analogous harvest-new year festivals among the Akan. Generally, the annual festival in Takyiman is for the state *bosom*, Taa Mensa, and is usually held on a *foodwoo*. The narrative associated with the celebration is that there were several different ahabayere (forest or wild yams) when yam was created. The people were afraid to eat these yams. Taa Mensa gave the people the courage to eat the yams, hence, the celebration wherein yams and sacrifices are offered to the abosom, nananom nsamanfoo, and then the leadership of the indigenous polity and its people. A similar narrative was recorded by Busia (1951, 30) in Wankyi (Wenchi), "At first there used to be a famine in the land. So when we planted yams, and we got a good crop, we first gave some to the [abosom]. The yam is mashed with palm-oil and

Appendix One 183

eggs. The eggs are presented by the people who live in the town in which the [əbosom] dwells."

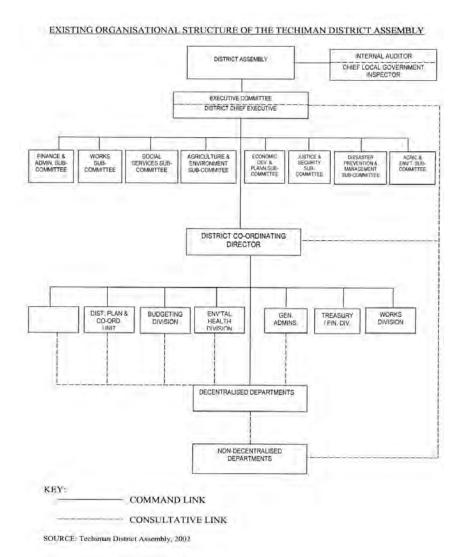
The adaduanan cycle for the Bono of Takyiman appears below, and this cycle begins on Fodwoo, and descending vertically to Fookwasi and continuing to the next right column, ends Monokwasi. On the day marked by kurubena (abosom-nhyiamu, or abosom meeting), the abosom of Bonoman (Bono nation) convene a meeting until monoyaw to discuss matters concerning the people of the nation, and the nation itself. On these days, the abosomfie ("house of the abosom") are closed and then reopened on *foofie* (a Friday); on *foofie*, regular "shrine" activity resumes and the abosom share resolutions to those matters discussed. Kurubena is not regarded as a "shrine day" though libation can be poured and sacrifices can be done. The Foofie (bayerefabye) festival is celebrated annually between August and October during the harvest-new year season, while the apos festival is held usually in late March or early April and always begins on nkyifie and ends on fodwoo. The term apod derives from the verb poo ("to reject") and is a thirteen-day cleansing and (re)affirmative celebration that takes place in the Takyiman and Wankyi (Wenchi) areas of the Brong-Ahafo region.

Bono-Takyiman Adaduanan Cycle

Foodwoo	Nwonadwoo	Nkyidwoo	Kurudwoo	Kwadwoo	Monodwoo
Nwonabena	Nkyibena Dapaa	Kurubena Abosom- nhyiamu	Kwabena	Monobena	Foobena
Nkyiwukuo	Kurudapaa- wukuo	Kwawukuo	Monowukuo Abononneε	Foowukuo	Nwonawukuo
Kuruyaw	Kwayaw	Monoyaw	Fooyaw	Nwonayaw	Nkyiyaw
Kwafie Afidam	Monofie	Foofie Bayerɛfahyɛ	Nwonafie	Nkyifie Apoo	Kurufie
Monomemene	Foomemene	Nwonamemene	Nkyimemene Dapaa	Kurumemene	Kwamemene
Fookwasi	Nwonakwasi	Nkyikwasi	Kurukwasi	Kwakwasi	Monokwasi

Appendix Two

Organizational Structure of the Bono-Takyiman District Assembly



Appendix Three

Functional Hierarchy of Settlements in Takyiman District (2002)²

							_	_				_		_	_						_	_	_
Settlement	2002 Population	River and Stream	Co-op. District Assistant	Traditional Birth Attendant	Nursery	Primary School	Town/Area	G.P.R.T.U. & PROTOA ³	Junior Secondary School	Pharmacy and Drugs	Daily Market	Agricultural Extension	Electricity	Pipe Borne	Hand Dug Well	Cocoa Shed	Police Station	Senior Secondary School	Health Center	Health Post	Postal Agency	Maternity Home	Petrol (Gas) Station
Takyiman	74,980	x	x	x	X	x	X	х	x	x	X	x	x	X	X	x	x	X	X	x	x	x	Х
Tuobodom	11,133	х	Х	X	Х	X	X	х	X	Х	х	X	Х	х	X	X	X	X	Х	х	X	X	х
Tanoso	8,221	X	Х	X	X	X	X	х	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aworowa	6,949	X	Х	X	X	х	X	х	X	х	X	X	х	X		X	X	X	X	X	х	X	х
Offuman	5,995	X	Х	X	X	X	X	Х	X	X	X	X	X	X		X	X	X	X	X	X	X	X
Krobo	3,803	X	х	X	X	X	X	Х	X	X	X	х	х	X	X	X	X						
Buoyem	3,288	х	Х	X	X	х	X	х	X	х	X	х	х					X					
Akrofrom	3,227	х	Х	X	X	X	X	Х	X	Х	X	X	Х	X			X						
Oforikrom	3,160	X	Х	X	X	x	X	х	X	X	X	X			X								
Asueyi	2,502	х	х	x	Х	х	х	х	x	х	Х	x	х										Г
Nkwaeso	2,346	X	х	X	Х	x	х	х	X	X	Х	x	X		Х	X							Г
Fiaso	2,236	x	х	X	Х	x	х	х	X	X	Х	x											Г
Nsuta	2,150	х	х	X	х	х	x	х	X	х	х	х	П			x	х		х				Г
Mangoase	2,100	х	х	х	Х	х	Х	Х	х	х	Х	х	П			х				П	П		
Tanoboase	2,084	х	х	х	Х	х	Х	Х	х	х	Х	х	х	Г									
New- Takyiman	1,803	х	х	х	X	х	x	х	X					X									
Ahansua	1,641	Х	Х	Х	х	Х	х	х	Х	П			П	Х						П			
Mesidan	1,615	х	х	х	х	х	X	х	х	х			х										
Tadieso	1,025	Х	Х	Х	х	Х	х	х	Х		Х			Х									
Kuntunso	906	х	Х	Х	х	х	х		Х					Х									
Ayeasu	756	х	х	х	х	х	х	х	х						х								
Atrensu	678	х	х	х	х	х	х	х	х														
Traa	624	х	Х	х	х	х	х	х							х								
Bonya	522	х	х	х	х	х	х	х															
Adutwie	467	Х	Х	Х	х	х	х	х															
Aboabo	278	Х	Х	X	х	Х	х								х								
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	X	X	Х	$\overline{}$	Circuit Tribunal	Fertilizer Depot	Community Bank	Rural Inf. Center	District Police	District Hospital	District Administration	Weekly Market	Credit Union(s)	RTSC & BAC ⁵	Timber Market	District Library	Circuit Court	Telecom	Tourism Center	Mortuary	Mineral Water Production	Computer Training	Comm. of Human Rights Admin.	Fire Service	Liquid Petroleum Gas Station	Disabled Training Center	5 6 5 Total number of function
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Appendix Four

Glossary of Pharmacological and Medical Terms

Adjuvant A pharmacological agent or ingredient in a remedy

which assists or modifies the action of other remedies.

Alkaloid A naturally occurring, bitter-tasting nitrogenous organic

base possessing medicinal or poisonous caffeine, quinine, morphine, nicotine, cocaine, or reserpine.

Analgesic A medication that eliminates or reduces pain.

Anti-arrhythmic Acting against any abnormality or variation in either

the force or rate of heartbeat.

Anti-bacterial Any substance that destroys or inhibits the growth of

bacteria. A synonym for antimicrobial and antibiotic.

Anti-convulsant A drug or substance that alleviates or prevents convul-

sions.

Antiemetic An agent that arrests or prevents vomiting.

Antifungal Any agent that destroys or prevents the growth of

fungi or certain bacteria.

Anthelmintic An agent that destroys or causes the expulsion of

parasitic intestinal worms.

Anti-Protozoal A medicinal drug used to fight diseases, such as

malaria, that are caused by protozoa.

Antipruritic A substance that relieves or prevents the sensation of

itching.

Antipyretic A medication capable of lowering body temperature as

in feverish conditions.

Antiseptic An agent that prevents the multiplication of microor-

ganisms responsible for disease, fermentation or putre-

faction.

Anti-spasmodic A drug capable of relieving or preventing spasms,

especially of smooth muscle, or convulsions.

Antitussive A remedy for cough. Relieves or checks coughs.

Arthritis Inflammation of a joint.

Astringent A drug capable of contracting tissues, arresting secre-

tion, or controlling bleeding or discharge.

Carminative A drug used to facilitate expulsion of gas from the

stomach or to relieve flatulence.

Colic Severe abdominal pain caused by spasm, obstruction,

or distention of any of the hollow viscera, such as the

intestines.

Concoction A preparation (e.g., soup, drink) made usually from

many ingredients.

Decoction Any plant medicine prepared by placing the plant drug

(usually root or bark) in cold water, boiling and allowing it to simmer for up to one hour, and then placed in

a container for use.

Diarrhea Frequent passage of uniform liquid or watery stools

(e.g., dysentery or cholera).

Diuretic A substance that induces or increases the volume of

urine passed.

Dyspepsia Difficulty in digestion; usually applied to indigestion.

Emetic Any substance that causes vomiting.

Febrifuge A drug or remedy which relieves, mitigates or prevents

feverish symptoms.

Hematinic Any therapeutic agent that causes an increase in the

hemoglobin content of the blood.

Hemostatic A drug or agent that stops hemorrhage or bleeding.

Appendix Four 193

Jaundice A syndrome characterized by an excess of bile pig-

ments in the blood. A yellowish discoloration of the whites of the eyes, skin, and mucous membranes caused by deposition of bile salts in these tissues.

Parasiticide A substance that destroys parasites.

Poultice A soft, moist mass prepared from boiled, simmered

or soaked herbs, and, in other cases, some cohesive or adhesive substance to which water has been added.

Usually applied hot to a surface.

Purgative An agent used to promote evacuation or cleansing of

the bowels.

Rheumatism Any of several pathological conditions of the muscles,

tendons, joints, bones, or nerves, characterized by dis-

comfort and disability.

Styptic A substance with hemostatic and astringent properties

able to arrest bleeding.

Tincture An alcoholic extract of a plant or animal drug. Usually

prepared by maceration or percolation.

Tisane An infusion of a plant drug extract, usually about ten

percent the strength of the original extract.

Medicinal Proverbs from Secondary Sources

All proverbs in this section derive from the works of J. G. Christaller's (1990) Three thousand six hundred [Ghanaian] proverbs (from the Asante and Fante language) translated by Kofi Ron Lange, R. S. Rattray (1916) Ashanti Proverbs, and A. A. G. Ampem's (1998) Akan Mmebusem Bi. Most of Christaller's collection is in the Akuapem variant of Akan (Twi), which differs insignificantly from Asante or Bono (Twi). The following proverbs are presented in Asante (Twi) along with English translations that attempt to situate them in their cultural context.

Wo ba kəsumina-so na əwəka no a, wontwa nto ntwene, na mmom woyεno aduro.

If your child goes to the trash heap (a place where trash is disposed of) and a snake bites him or her, you do not cut that part and throw it out but rather you cure him or her with medicine.

Oba werefoonnte aduro.

A child that is hyperactive (or not focused) does not go and select (get) the medicine (because many plant medicines look alike and thus one must be both careful and knowledgeable).

Obi nnom aduro ma əyarefoə.

Someone does not drink medicine on behalf of the sick person (since the sick person must do the work that is required of him or her for his or her recovery).

Obi nnye əyarefoəaduro nnom.

No one takes a sick person's medicine and drinks (it).

Obi ntena obaa anan so nnye asisi-aduro.

No one sits on the legs of a woman (or a woman's lap) to receive waist medicine.

Dbaakofoowere aduro a, egu (or egugu).

If one person scrapes the medicine, it falls (spills).

Dbosomakotere wo awogyeduro a anka orebewo a, ne yam rempaee.

If the chameleon had medicine for the delivery of babies, its stomach would not have burst at the time of delivery.

Wodi aborə na wo rebewu a, hwe wo yafunu.

When you engage in wicked acts against other people, at the time of death look at your stomach [it will show the evidence].

Nnua nyinaa yeaduro, na wo nnim a, na wo se, eyebəne.

All plants/trees are medicine; if you do not know, then you say it is destructive.

Aduro a efi (efiri) kəmfoənsa mu nyinaa yeaduro pa.

All medicines from the hands of an *akamfoa* are good medicine.

Aduroyefoənnom aduro mma əyarefoə.

The one who makes the medicine does not drink it for the sick person.

Эkoterєwэεyam-aduro a, anka eyam ansi no adurade.

If a lizard had medicine for skin disease, it would not have wrapped or covered up in a cloth (akin to full cover Muslim style).

Wənkəəyarefoəho a, wənyenea əma no aduro.

If they do not go around the sick person, then they are not the one who gives him or her medicine.

Akokəwənkwa aduro a, anka yede no twa abosom so?

If the chicken had medicine for life (to prolong its life), how come it is sacrificed to the *abosom* (the chicken does not have control over its life)?

Kwata aduro ne suman.

The medicine for leprosy is the *suman* [i.e., can be healed by it].

Okom de wo a, bisa m'akoa; m'akoa nim okom aduro.

When hunger gets you, ask my servant; my servant knows the medicine for hunger.

Akuama yeaduro a anka otwe nam ntenten wowuram?

If the "akuama" plant is medicine, would the antelope that lives in the forest have to travel length ways or a long distance?

Ma me aduro seesei, nyɛaduro.

Give me medicine right now! Not medicine (since one has to be diagnosed before he or she can receive medicine).

Amerekum kuro, na kuro kum (amere) wo.

The "amere" tree (a medicine for sores) heals or kills the sores, and the sores kill you.

Anɔfranako səre borədeε ase ma ədwan awo nta.

Anofranako remove yourself from under the plantain tree, so that the ram can produce twins (since the Akan expect doubles in reproduction and in blessings).

Anokorampən n'ase firi soro na obi nnim n'ase.

The *anokorampon* (a parasitical plant growing on trees), its roots are from above, and so no one knows the source of its life.

[O]nunum ho annwono na ɛfiri əmanfoə.

If the *nunum* plant does not have peace it is because of the local people (people of the nation) plucking its leaves.

Onyame ma wo yareε a, ɔma wo aduro.

If Onyame gives you an illness, Onyame also gives you the cure.

Apatipere gyansakyi, ədi mako, enye no ya a, əde ye ne to aduro.

The bird (apatipere gyansakyi) eats pepper; if it is not painful, it uses some as an enema.

Aponkyerene wəbafan aduro a, anka ne ba mmutu fam.

If the toad had medicine to cure rachitis, then his child would not be crouching on the ground.

Seesei ara, seesei ara nni aduro.

Medicine that is prepared quickly is not good medicine.

Эsafoə nsa ne ho yareε.

The doctor cannot heal him or herself.

Osamane ho hwa te senunum.

The smell of a "ghost" or ancestor is like the smell of the "Nunum" shrub.

Otan nni aduro.6

There is no medicine for hatred.

Wo tõ aduro-bone a, ɛbi ka w'ano.

If you make negative medicine by way of heat or roasting, some (of it will) remain on your mouth or affect you too.

Dwoaduro, wote no ahoohare.

The herbs to be applied to snakebite are plucked quickly.

Owuo de ne mpasua fa fie mu a, obosomfooaduro dane nsuo.

If death takes his or her battle lines in the house, the medicine of the *bbosomfoo* turns to water.

Dyareεa εbεkum wo nni aduro.

There is no medicine for the sickness that will kill you.

Enyeagorone "ma yentõ aduro."

"Let us roast medicine or (medicinally) harm someone," is not what should be seen as a joke.

Aduro begye wo a, atere ma.

A life-saving medicine may be just a spoonful.

Aduro nyennam a, enyene ntoaseea.

If medicine is not sharp (efficacious), it is not its down payment.

Ehia əkəmfoəna ehia əyarefoə.

It is as important to the *akamfoa* as it is to the sick person.

Kotepomponini se əbema wo kuro aduro a, hwene ho.

If the agama-lizard promises to give you medicine for pithyriasis, look at its own skin.

Koterewəeyam aduro a, anka eyam nsii no atadee.

If the lizard had a cure for skin disease, it would not be draped or clothed by scales.

Kəmfo bəne a ətena yarefoəho ma kəmfo pa beto no yena.

The not-so-good *akamfoa* who sustains the life of a sick person until a good *akamfoa* comes along is hard to come by.

Sika nye owuo aduro.

Money is not a remedy for death.

Wonni sika a, wose aduro nye.

When you do not have money, you say that medicine is not a useful commodity.

Yenkəte aduro (mmra) ene ahahan.

Let us go pluck medicine (and come); it is leaves or herbs (to which we are referring).

Dyare a ebekum wo bo wo a, wonkae aduroyefoo.

When the illness that is going to kill you comes upon you, you forget the herbalist who could have cured you

Nnua nyinaa yeaduro, na wunnim a, na wuse, eyebone.

All plants are medicinal, but you do not know and say this one is useless or bad.

Appendix Six

Interview Protocol

Time of Interview:

Date [$\mathcal{E}da$]:

Place of residence [Kurom]:

Interviewee name [*Edin*]:

Age [*Mfe a wadi*]:

Position of Interviewee [W' adwuma]:

Matriclan [Wo εna abusua]:

Project description: The purpose of the research project is to investigate how "medicine" is conceptualized and interpreted based on specialists and archives of indigenous knowledge.

(1) Contextual questions

- a. Onipa tebea a Onyame de maa no ne nea ɛwɔhe? [What is the natural environment of humans?]
- b. Obi ka se "Akom pan ye ade pa" a, na ekyere sen? [What is the meaning of "kom pan ye ade pa?"]
- c. Bonofoo Nnunsinfoone Akomfoo ka "yaree" a, na wokyere sen?
 - [Is there a way that Bono healers define sickness or disease?]
- d. Esono yareε na εsono sunsum mu yareε anaa?
 [Is there a difference between ordinary sickness and sickness in the spirit?]
- e. Bonofoo Nnunsinfoo ne Akomfoo tumi kyere asee nea enti a yaree ba? Yebo yaree ho ban sen? [Bono healers define the causes, medicines and prevention of sicknesses how?]

202 Appendix Six

f. Nsonsonoeε bɛn na εda nyansa-hu ne nimdeε ntam(u)? "Adwene nko na nyansa nko." Adɛn nti? [What is the difference between wisdom and knowledge?]

(2) Medicinal Questions

a. Aduro ye deen anaa deen na yefre no aduro? "Aduro" kasafua ase kyere sen?

[What is medicine? What do the roots of the word Aduro mean?]

- b. Twi kasa foforo bεn na εkyerε aduro?[Is there another way of saying medicine in Twi?]
- c. Se wo rekyere obi Bonofoo aduro a, sen na wo bekyere kyere no mu?

[If you were teaching someone about Bono medicine, how would you explain it?]

- d. Nnuro gugu ahoroo ahe?
 [What are the different types of medicine that you use?]
- e. Edeɛn na ɛma yareɛ yareɛ yi ba? Egugu ahodoɔ ahodoɔ sɛn? [How do you group the causes of diseases or sicknesses?]
- f. Na nnuro yi sisi yares yi ho akwan sɛn? [How do the different types of medicine that you use prevent or cure sicknesses?]
- g. Na sma wo hunu se aduro bi ye kyen aduro bi sen?
 [Why do you choose certain medicines over others to prevent or cure a sickness?]
- h. Aduro bεn na yε taa de sa yareε pii, na aden nti?[What is your most frequently used medicine and why?]
- i. Aduro a emu yɛ den paa ne nea ɛwɔ he? [What is your best medicine and why?]
 - a) Yede aduro wei sa nyarewa ben? [What diseases does this medicine cure?]
 - b) Edeen na yede noa aduro yi? [What is used to make (cook) this medicine?]
 - c) Yadee ben na etumi sa? [What illness can it cure?]
- j. Edeen na ema ayarefoo hunu se won ho ato won? [How do patients (or clients) know they have been healed or cured?]
- k. Aduro ye adwuma. Anaa se aduro bi nye adwuma. Aden nti? [Medicine works. Some medicine does not work. Why is that?]

Appendix Six 203

 Bere/mmere ben na ema wohu se Okomfoo ne Odunsinni nnye papa?

- [When is an Okomfoo/Odunsinni viewed as being corrupt or unrighteous]?
- m. Emmere ben na Okomfoo anaa Odunsinni ma ye hunu se oye papa, (oye) nokwafoo anaa (oye) ahotefoo? [When is an Okomfoo/Odunsinni viewed as being honorable or righteous?]

(3) Indigenous Archives Questions

- a. Ma me nnuro, ahooden ne yaresa ho abebuo nyinaa.
 [Could you list as many proverbs as you can about medicine, health or healing?]
- b. Mmrammoo ["gold weights"] ben na eka aduro ne ayaresa ho nsem?
 [Which gold weights are related to medicine, health or healing?]
- c. Adinkra nsenkyerε ne εbεn na εfa aduro anaa ayaresa ho?
 [Which adinkra symbols are related to medicine, health or healing?]
- d. Aduro ho wo abakosem bi? Ka bi kyere me. [Are there any stories about medicine? Give a few examples.]

Notes

NOTES TO THE GLOSSARY

- Some middle tones are omitted due to technical limitations associated with the range of characters available. However, this omission does not hinder accurate pronunciation since mid-tones are optional when written and are usually understood in conversation.
- 2. W. B. Willis, *The Adinkra dictionary* (Washington, DC: The Pyramid Complex, 1998), 1.
- 3. R. A. Silverman, "Historical dimensions of Tano worship among the Asante and Bono" in *Golden Stool: Studies of the Asante Center and Periphery*, ed. E. Schildkrout, 272–288 (New York: American Museum of National History, 1987), 272.
- D. M. Warren, The Techiman-Bono of Ghana: An ethnography of an Akan society (Dubuque, Iowa: Kendall and Hunt Publishing Company, 1975),
 P. Ventevogel, Whiteman's things: Training and detraining healers in Ghana (Amsterdam: Het Spinhuis Publishers, 1996), 15.
- 5. K. A Busia, The position of the chief in the modern political system of Ashanti (London: Oxford University Press, 1951), 40.
- 6. E. K. A Azzii Akator, *Traditional medicine: Notions and applications* (Kumase, Ghana: Author, 1988), 12.
- O. Bempong, "They have used a broom to sweep my womb: The concept of witchcraft in Ghana" Research Review 12, nos. 1–2 (1996): 45–46; T. C. McCaskie, State and Society in Pre-colonial Asante (New York: Cambridge University Press, 1995), 274.
- 8. Brempong, "They have used a broom," 47.
- 9. W. E. Abraham, *The mind of Africa* (Chicago: The University of Chicago Press, 1962), 52.
- 10. K. Odaaku, Spoken Twi guide (Hyattsville, MD: Author, 1995), 17.
- 11. K. Yankah, *Speaking for the chief* (Bloomington: Indiana University Press, 1995), 1.
- 12. Ibid., 29.

NOTES TO THE PREFACE

1. In Akan society, elders of some stature and with known degrees of healing knowledge usually do not reveal sacred information until time has passed and trust is built, and, in some instances, this may occur just before making their transition. The elder—in the sense that not every "person of age" is an elder—must know that the recipient of that information can be entrusted to use it appropriately.

NOTES TO CHAPTER ONE

- 1. Questioning a British botanist who "discovered" a medicinal plant near a national park in Cameroon in 1992, Andoh (1993, 1967) remarked, "how can a foreigner wander into my compound and discover something that I am not aware of? If by some remote chance this occurred, how can this foreigner then place claims of ownership on the vegetation on my grounds, surrounding my home?" Andoh's questions are specific to Ghana; however, the critical issues of ownership, access, and conservation of medicinal resources are much larger than this West African nation.
- The Baule and Agni, presently located in the Ivory Coast, migrated from Denkyira after its defeat by Asante in 1700–01 and later in the first half of the eighteenth-century due to a dispute with Asantehene Opoku Ware.
- 3. The term *Sunyani* is a corruption of *ason ndwae*, "place for skinning elephants." Sunyani, which used to be a rich cocoa growing area, is about 80 miles from Kumase and 250 miles from Accra. The Brong-Ahafo region spans 199 miles from the Ghana-Ivory Coast border in the west to the Volta Lake in the east.
- 4. See the *Ghanaian Chronicle* or *Accra Mail* from November 2002 to February 2003, and even to the present, for news reports that highlight this growing concern.
- Interview with Yaw Odei, Washington, DC (Embassy of Ghana), November 2001.
- 6. For a discussion on the proliferation of the AIDS virus in Africa and the role of the World Health Organization, see Ani (1994, 442–445). For a discussion on the introduction of infectious diseases with the advent of European colonialism in Ghana, see Patterson (1981).
- 7. Several Akan proverbs more or less affirm the idea that "all events are caused but not all causes are said to operate in a spiritual way": (1) Biribi anka mpopa, ɛnyɛ krada; (2) Biribi anaka abɛ ho a, ne mpopa nyɛ krada; and (3) Abɔsobaa na ɛma egya pae.
- 8. Indigenous knowledge, as defined here, should not be confused or collated with the notion of "recipe knowledge," that is, culturally learned formulas activated and unquestioned in historical and social contexts (see Hausmann-Muela and Muela, 2003)

NOTES TO CHAPTER TWO

- 1. The terms, "Brong" and "Techiman," are anglicized forms of Bono and Takyiman, respectively, and the latter names will be used herein. Takyiman is a contraction of *Takyi Firi* (name of hunter who founded the settlement) and *sman*, an indigenous notion of settlement and territory that most linguists of the Akan language render as either "nation" or "state." An *sman* is distinct from a *kuro* or *kurom* (town or town's inside), a permanent settlement with houses where large households live or a *akuraa* (village), a semi-permanent agricultural settlement (Ventevogel 1996).
- 2. It is said that when a woman gives birth for the first time she is called *abonowoo* (Arhin 1979, 49).
- 3. Some claim that the <code>okomfoo</code> of Biakru, regarded by Warren and Brempong (1971, 148) as the "earliest Bono [<code>obosom</code>]," and several people stayed behind to guard the sacred site of Amowi (Akumfi-Ameyaw 2004, 1–2).
- All the sacred sites connected with Bonoman—Amowi I and II, Gyamma and Kokuman hills, Nkyira-Anyiman cave, Bono-Manso, old Takyiman, and Buoyem-Takyia—are located close to or in caves and rock shelters (Effah-Gyamfi 1979b, 177).
- 5. The border of Offinso was marked by a place referred to as *Mfutud-waneemu*, a stretch of marshy land near a stream that one crosses after passing Asuosu on the Takyiman-Kumase road (Arhin, 1979, 50).
- 6. Accounts of the events and particularly the actions of Bafo Pim, who was rewarded the Nkoransa *man* by the Asante for his deeds, can be found in Ntim-Yeboah (1985, 3), Fynn (1971, 37), Arhin (1973, 67), and Meyerowitz (152, 38–44).
- 7. Asante's interest in the Bono area during the early eighteenth century included, though was not limited to (1) the area of Ahafo as a kola producing area and as a buffer zone between Aowin and Sehwi, (2) the main route to the Salaga (Gonja) slave market, and (3) goldfields in western Bono once controlled by Bono-Manso (Arhin 1979, 13; Warren 1975, 5; Arhin 1967, 70). The conflict between Bono and what would later be the Asante existed since the time of Kwamanhene Obiri Yeboah, who died in 1680 and was succeeded by Osei Tutu, the first Asantehene who founded Asanteman (Asante nation) with Kwame Frempon Anokye Kotowbere (Okomfoo Anokye). Obiri Yeboah's fights with Dormaa or Domaa (part of Gyaman settlement) and the Abron were continued by the first and second Asantehene, respectively, Osei Tutu and Opoku Ware. In the latter half of the seventeenth-century, Asante's history began with their movement from Adansi hills under Osei Tutu. Hence, the core Asante states (amanto)—Bekwae, Dwaben, Kokofu, Mampon, and Nsuta—were those that migrated from the Adansi-Akrokerri area (Arhin, 1967, 67-69). With the help of the Akwamu, Asanteman defeated the Denkyira, which had previously exercised hegemony over the Asante, and later defeated Ahwene Akoko (1711–12; capital of old Wankyi), Bono-Manso (1722– 23), and the Abron/Bono settlement of Gyaman (1746-47), which was

- created in the seventeenth-century by the Dormaa of Suman (Arhin 1979, 12). The defeat and destruction of Bono-Manso allowed the Asante to confiscate its royal treasury, which was a key to Asante's initial wealth and the reform of its fiscal and bureaucratic system (Dumett 1979, 41, 60; Arhin 1979, 12).
- 8. Asante's sacking of Bighu, a significant market area in the south-north trade between the forest and middle Niger, also occurred in 1722–23 (Stahl 2001, 148–149; Posnansky 1987, 17). Trade networks in the Western Sudanic region also facilitated the transmission of Islam and later Judeo-Christianity in West Africa. The nine villages are also sites of some of the oldest and most powerful Atano *abosom* among the Akan. One-third of the tolls, which went to the Asante National Fund, were collected from the nine villages and paid to Asante.
- 9. After the 1722–23 defeat by Asante, Bono-Takyiman had to provide soldiers to fight on Asante's side against the Gonja in the Bote war, and against Banda, Gyaman, Fante, and Ewe in subsequent wars. Taa Kora and Taa Mensa *abosom* of Bono-Takyiman were taken to war to help the Asante win (Arhin 1979, 51).
- Contemporary Gyaman is divided into two districts, one in the Ivory Coast at Bonduku and the other in the Brong-Ahafo region of Ghana at New Drobo.
- 11. Bonokyempem (bono—the [first] created; kye—to divide, share; apem—a thousand) derives from the phrase, bono kye ampem dua ne kwaa (The [first] created divided into a thousand and planted itself everywhere), which affirms the Bono as one of the pioneers of Akan civilization.
- 12. Akan *shene* (pl. *ahene*), and other levels of indigenous leadership, figuratively "occupy stools" (*akənnwa*—stool, seat, chair, office) which represent the unity of the community and *sana*. To "occupy a stool" is to hold an office in the indigenous polity. The stool enshrines the spiritual and cultural identity of the people and links the living with their timeless ancestry, who in fact owns the land and the stool, and entrust the use of the land and stool to the *shene* (Appiah-Kubi 1981, 7). Before an *shene* (indigenous male leader) is destooled or removed from this leadership position, charges must be first brought against him to the traditional council, who in turn investigate the merits of those charges.
- 13. Nana Akumfi Ameyaw III, despite his efforts toward reclaiming the nine villages and Bono unification, was destooled, and the people of Bono-Takyiman rebelled against him seven times. His successor, Nana Kwakye Ameyaw II, a month after his enstoolment, also met rebellion and (unsuccessful) attempts to destool him. It seemed he had difficulty uniting the people and faced enemies who supported Nana Akumfi Ameyaw III. After eight years of litigation concerning attempts to destool him in the 1980s, he was finally destooled in the early 1990s; Nana Takyia-Ameyaw II became the new Takyimanhene.
- 14. The most notorious and offensive of all the insults from the Asantehene and Kumase *ahene* was the "feet on the head ritual," wherein the Asantehene would remove his sandals and put his left foot on the crown of

the Takyimanhene's head. While the Takyimanhene squatted before the Asantehene, the Asantehene rubbed his foot three times on the crown of the Takyimanhene's head while the Kumase *ahene* gave the epithet, *Safroadu! Safroadu!* (Brempong 1988, 10). For the Asantehene, this was a ritual of superiority since no Bono *ahene* was considered equal to him. The ritual was an insult to the Bono *ahene* and Bonoman because it not only undermined the prestige and authority of the Takyimanhene but was also regarded as a taboo since nothing should touch the head of a Bono *ahene* once enstooled.

- 15. The Fante on the coast of Ghana also have this type of clan organization; the Bono have an *nton* patri-system, whereas other Akan societies have an *nton* patri-system. See McCaskie (1995, 170–172) for a list and discussion of the *nton* groups (as it relates to Asante). Some claim that there are nine; others argue that there are twelve groups.
- 16. For one to become an *ohene*, the male candidate must be uncircumcised, as one criterion, since the candidate must not be deformed in any way or have spilled blood through any wound. Circumcision in the past was considered a form of mutilation.
- 17. Some of the root etymologies of these titles are provided here: Twafoo (*twa*—cut, chop; *foo*—people), Ankobea (*a*—(one) who; *nko*—does not go; *bea*—(any) place), Akyidom (*akyi*—back, rear; *dom*—group, crowd). See Warren (1975, 44–45) for a list of the Gyaasefoo or the Gyaase attendants and their duties.
- 18. It is taboo to speak of an occurrence such as the *manhene's* passing until after it has been announced to the entire *man*. The *manhene's* or any analogous leader's transition must be mentioned euphemistically, as in "the strong wind has made the big tree fall," "we are in the sun because the big shaded tree has fallen," or "Nana has kicked salt down."
- 19. Takyiman District Assembly, unpublished document, 2002;—indicates the unavailability of data.
- 20. Sources for Table 2.2 include A. B. Ellis' The Tshi-speaking peoples of the Gold Coast of West Africa (Chicago, Benin Press Limited, 1887 [1964]), R. S. Rattray's Ashanti (Oxford, The Clarendon Press, 1923) and Religion and Art in Ashanti (Oxford, The Clarendon Press, 1927), E. L. R. Meyerowitz's The Akan of Ghana, Their ancient beliefs (London, Faber and Faber, 1958), M. J. Fields" Search for Security, An ethno-psychiatric study of rural Ghana (London, Faber and Faber, 1960), W. E. Abraham's The Mind of Africa (Chicago, The University of Chicago Press, 1962), K. Antubam's Ghana's heritage of culture (Leipzig, Koehler and Amelang, 1963), J. B. Danquah's The Akan Doctrine of God, A fragment of Gold Coast ethics and religion (London, Cass, 1968), D. M. Warren's The Akan of Ghana, An overview of the ethnographic literature (Accra, Ghana, Pointer Limited, 1973), P. Sarpong's Ghana in Retrospect, Some aspects of Ghanaian culture (Tema, Ghana, Ghana Publishing Corporation, 1974), K. A. Opoku's West African Traditional Religion (Accra, FEP International Private Ltd., 1978), K. Appiah-Kubi's Man Cures, God Heals, Religion and medical practice among the Akan of Ghana (New York, Friendship Press,

- 1981), and K. Gyekye's An Essay on African Philosophical Thought, The Akan conceptual scheme (Philadelphia, Temple University Press, 1995).
- 21. Tiboa (*ti*—head; *boa*—creature, animal, and organism) refers to "head creature" or the "being in the mind," that is, conscience.
- 22. The ability or option to change one's destiny by appealing to *Onyankopon* through the *abosom* or *Onyankopon mma* (the Creator's children) was conveyed to me on several occasions while in the Takyiman area.
- 23. The concept of "blood" among the Akan has multiple meanings and provides its own interpretive framework for constitutions of society, family, health, and healing. Manni's (1996, 233) study of anemia in Takyiman (Techiman) and Tanoboase illustrates this conception as well as the issues confronted by its biological, ideational, and spiritual connotations.
- 24. See Ephirim-Donkor (1998) as one of several references that contain a version of the oral narrative about the original ancestress, her six children, and *Onyame* (the Creator). The constellation is called *Aberewa ne ne mma* ("the old woman and her children").
- 25. *Afodie* is a ceremony where the *agya's* or father's *ntoro* is invoked.
- Suicide is considered unacceptable if not done in war or to wipe out dishonor and ridicule.
- Interview with Nana Kwasi Owusu of the Takyiman Township, 11 December 2002.
- 28. Interview with Nana Kwasi Appiah, Takyiman Township, 25 December 2001.
- 29. Indigenous Bono healers described the *nyawa* as beautiful, bright, lustrous, shiny, durable, and strong. They explain that the "*ayawa* is a palanquin for the Atano" (Silverman 1983, 219). Many *nyawa* are decorated with a variety of *hyire* (white clay) designs marked by the *abosomfoo* to delineate the eyes or face of the *abosom*. Silverman (1983, 220) noted, "each of the motifs has a name and is laden with symbolic (often proverbial) meaning."
- 30. Interview with Nana Akosua Owusu, Tanoso, 17 December 2002.
- 31. Ventevogal (1996, 14) regards *bayie* as an "evil spiritual power seen as material substance," which perverts the *sunsum* of the conscious or unconscious host transforming him or her into an *stayifos*.
- 32. When the <code>akamfoo</code> enters into spiritual communion with an <code>abosom</code>, she or he first points to the sky to acknowledge <code>Onyankopon</code> as all the <code>abosom</code> are conceived as the <code>akyeame</code> of <code>Onyankopon</code> (Warren 1974, 56). See the glossary for a descriptive explanation of <code>akyeame</code>.
- 33. In Takyiman, however, Taa Mensa (Taa Kɛseɛ) rather than Taa Kora is the highest; this posture seems to be the result of another shift in Akan or Bono spiritual practices related to the long-standing yet futile Bono-Asante conflict premised by historical bitterness (at least on the part of the Bono of Takyiman).
- 34. The Gold Coast government in 1947 established the Cocoa Marketing Board, which determined the optimal conditions for producers, fixed prices locally and for distribution to the world market, and appointed agents who bought cocoa from farmers on behalf of the board. The board was or currently is the only authority to market cocoa outside of Ghana and the Kwahuhene is the head of the board.

- 35. Tigare is both a *suman* and an *shosom*, and the latter is a more recent development according to traditions found among the Bono. The story is that Tigare was a *suman* used primarily by hunters, as a hunter found it in the forest, and as a *suman* did not "possess" its custodian. A Tano *shosom* extracted clay from the Tano River, in addition to other ingredients, and placed the composite substance on the Tigare *suman*, enabling it to become an *shosom*.
- 36. Warren (1974, 326) noted, "The organization of indigenous healers during the Nkrumah regime into the Ghana Psychic and Traditional Healers Association increased local prestige and support for indigenous healing methods."
- 37. Tanoso literally means "on top of or by the Tano (river)."
- 38. Nana Akosua Pomaa was the founder of Pomaakurom (Apotadeε) and the Mframa *obosom*; she is in fact the mother (or grandmother) of Nana Afia Mframa.
- 39. Interview with Nana Kwabena Gyimah, Takyiman Township, 9 December 2002.
- 40. Interview with Nana Kwasi Owusu, Takyiman Township, 11 December 2002.
- 41. Interview with Nana Kofi Obo*ɔ*, Takyiman Township, and Nana Kwaku Wiafe Kenten, Oforikrom, 10 December 2002 and 22 December 2002, respectively.
- 42. Interview with Nana Akosua Owusu, Tanoso, 17 December 2002.
- 43. As Akan philosopher W. E. Abraham notes, "worship is a concept that had no place in Akan thought" (1962, 52). *Odomankoma* is one of several gender-neutral terms that the Akan use to describe the attributes of and refer to the Creator, which the Akan regard more appropriately as *Oboadee*, the Creator, or *Odomankoma Oboadee*. The term *Odomankoma* literally means, "the only one who gives (or can give) grace" (*adom*—grace; *anko*—alone; *ma*—to give).
- 44. Compare the notion of εkɔm (as "hunger") and akɔm (as "spiritual process") to the stomach in Dagara thought, "the emptier [the stomach] is, the easier it will be for you to learn since other things within us are better nurtured when the body is not fed" (Some 1994, 205). The Dagara hold that "truth emanates from the belly, and when someone is out of touch with truth, his or her belly serves only as a place to digest food into stinking excrement" (Ibid., 305).
- 45. The Bono-Akomfoo Association was formed after some of the Bono *nnunsinfoo* (herbalists), who unlike the *akomfoo* can have a non-indigenous religious perspective, disassociated themselves from a union of both *akomfoo* and *nnunsinfoo*. According to Kofi Kumankoma, it was after the creation and viewing of the "Bono Medicines" documentary film (later titled, "Healers of Ghana") that the *nnunsinfoo* left the union due to feelings that the film focused too much on the *akomfoo* and their "religion," with which Muslims or Christians were not necessarily in agreement. Consequently, *(a)kom pan* also came to mean that the *akomfoo* were still doing good work despite what the departed healers might think.
- 46. Asenam ("under the flesh or skin") has many types such as asenam boredwo or asenam tinso, where the head sinks in, and is often described as a malnutrition

disease. *Asenam* resembles hydrocephalus, which is an abnormal accumulation of cerebrospinal fluid in the brain; the fluid is often under increased pressure, which can squeeze and damage the brain. There are types of *asenam* that cause diarrhea, wherein the disease starts from the head and goes to the stomach to make the child want to use the bathroom frequently, and others that lock the jaw of a child so that he or she is unable to be breastfed.

- 47. Nana Akua Sewaa stated, "it is *Onyankopən* who made it [*kwata* (leprosy)] like that."
- 48. This disease has several causal agents (e.g., using the *abosom* to curse another; eating spoiled food).
- 49. *Okomfoo* Kwabena Nyanko of Krobo informed me that *duabo* is the act of calling the name of an *obosom* to search for what has been lost. In addition, *duabo* is the act of cursing someone. In Akan (Twi) dictionaries, one will find that the term *bo dua* (the verb) translated as "to curse."
- 50. Interview with Nana Kwaku Gyan, Mfante New Town, 9 December 2002.
- 51. Interview with Nana Kwabena Gyimah and Nana Kofi Oboo, Takyiman Township, 9 December 2002 and 10 December 2002, respectively.
- 52. One such disease that helps the senses to grow is *ananosono*, which when well treated, opens the child's brain (for greater development).
- 53. See the selected glossary for term *nyansa*. The term *nimdeε* derives from "nim" (to know) and "adeε" (a thing or something), hence, *nimdeε* means, "to know something."
- 54. There exists also a distinction between types of *nyansa* (wisdom) in that, for instance, there is *sukuu nyansa* (school-derived wisdom) and *abosom nyansa* (abosom-derived wisdom).
- 55. Interview with Nana Afia Mframa, Pomaakrom, 13 December 2002.
- 56. To be disgraced in this way also shows that the victimized *akamfoa* did not have any power or powerful medicine to withstand the "attack."
- 57. Nowadays, according to Nana Kwaku Gyan, a few indigenous healers charge at the beginning of the treatment process because if you do not some people will think that the medicine is not worthwhile.

NOTES TO CHAPTER THREE

- The frequency refers to what the indigenous healer defined as medicine, which, in most cases refers to a multiplicity of related but distinct elements. For instance, one healer explained that *aduro* was plants, roots and barks.
- 2. Interview with Nana Kofi Owusu, Pomaakrom, December 18, 2002.
- 3. Interview with Nana Kofi Atta, Nana Yaw Agyei, Kofi Kumankoma, and Kwame Mamadou.
- 4. Interview with Nana Kofi Oboo, Nyafuman, December 10, 2002.
- 5. An example is the *besemankoma* tree: from Takyiman to Nsoko it is *kurusengya* even though it is the same tree.
- 6. The indigenous Bono healer, for example, may have the patient provide an egg, take the egg into the forest, and offer or place it by the plant (to be used) by way of requesting its use and power in the process of curing the

person in question. Generally, prayers and offerings of an egg to a plant imbue the healing process with the power to cure and protect. This act of offering prayers, eggs and (sometimes) sacrifices is not unique to the Bono but is found among other Akan (and African) societies. Beek and Banga (1992, 70) note, among the Dogon of Mali, "using [a] tree for medicinal purposes implies a ritual conversation with the tree."

- 7. Interview with Kwame Mamadou, Kenten, December 20, 2002.
- 8. Some medicines are made into bitters or alcohol-based medicines. "In general," Hoffmann (1988, 203) writes, "alcohol is a better solvent than water for most plant constituents. Mixtures of alcohol and water dissolve nearly all the relevant ingredients of an herb and at the same time act as a preservative. Alcohol-based preparations are called tinctures . . ." For general use, a liquid of at least 30% alcohol (e.g., 60 proof Vodka), which is about the weakest alcohol-water mixture with a long-term preservative action, is recommended, though tinctures are much stronger, volume for volume, than infusions or decoctions administered in much smaller dosages depending upon the herb (Hoffman 1988, 204). See glossary of pharmacological terms in the Appendix IV.
- 9. In the Nkoransa District, this medicine is referred to as *sonokodiatia*. This type of medicine is used as a substitute for other medicines and is known to work immediately. In preparation, the medicine is boiled and then prepared as decoction to drink, applied to the skin, or prepared as bitters.
- 10. A good substitute medicine used for temporary relief until the intended medicine can be retrieved. This medicine can be taken orally or added to one's food, wherein a very small amount of sugar may be added for taste. In preparation, this medicine is dried and dirt from it is removed; it is chopped, placed in a cooking pot with three fam-wisa (peppers) to boil, cooled slightly and then drunk.
- 11. After it is collected from the forest, *afodoo* is beaten and the skin is removed. The skin is pounded, ground on stone and then given as enema.
- 12. For waist pains, *agyennawuro* and *sabrabese* can be used as an enema to treat waist pains and constipation.
- 13. This medicine is administered—with the addition of a spice—through medicinal baths, oral intake, or application to the affected area of the skin. *Asengyera* can be combined with *awobε*, *gyamma*, and *sabrabese* for swellings.
- 14. Awobε is found in the forest and savanna; it is a plant with small thorns around it and is also used as a chewing stick. As an enema, the root is ground on a stone, ginger is added and then medicine is administered. Otherwise, the root can be boiled and then taken orally.
- 15. *Borəferεmma* are the "children" (seeds) of the pawpaw (*borəferε*). Either ripe or unripe pawpaw can be used.
- 16. Once leaves of *dufore* are collected and prepared in a calabash, a child is sponged with the medicine in addition to the child receiving some of the medicine to drink. *Dufore* comes from Gyaman, the state and town at the border of Western Ghana and the Ivory Coast.

- 17. Yam and yamu, and sometimes yafunu, refers to the stomach or abdomen area.
- 18. In preparation, the medicine is dried, chopped, cooked or boiled with three peppers, cooled and then drunk.
- 19. For *anididane* (backwards turning of uterus; menstrual pains), the root of *kankano*, *namprane*, *sesadua*, and *kotodweben* are boiled and drunk three times a day.
- 20. This medicine is combined with *korɔbaa* and the bark of *kukudenkum*. It is boiled, covered with cloth and used for streaming or vapor treatment (*pu*); when it has cooled it can be administered as an herbal bath. In addition, one may take some of the bark, grind it until soft, add *fam-wisa* (pepper) and apply to the body.
- 21. This medicine is combined with *onyamedua* to address leg pains, swellings, and an inflamed stomach. In preparation, the medicines are ground on a stone, lime is added, and the resultant medicine is applied to the body.
- 22. This medicine is used in conjunction with *duanwonsini*, *konkoroma*, and *sabrabese*.
- 23. This medicine is used in conjunction with *adubrafoo*. Possibly other herbs are used with this combination. In preparation, the medicines are collected from the forest, dried so *Onyankopon hunu* ("the Creator sees inside," that is, the sun's energy upon the medicine), and pounded.
- 24. Onion (gyeene) is added to Sabrabese as well as samandua or sesadua.
- 25. A savanna plant that bears fruit and is used in northern Ghana for *dawadawa*, which is the processed brown seed used to make soup. After steaming or vapor treatment, the medicine is eaten with lime juice (or the lime is licked, and then eaten). For boils, the medicine is boiled while the steam is directed to the boil that appears on the throat.
- 26. Mpəmpə refers to a variety of boils. Ventevogal (1996, 21) noted that pəmpə denotes skin diseases and infections referred to as boils, and "the Akan identify many different kinds of boils."
- 27. The Akan use the physiological terms *afuro* (belly), *didifuro* (stomach), and *yafunu* (abdomen) interchangeably as well as to refer to distinct areas in and around the abdomen or stomach (see Ansa 1962).
- Interview with Nana Kwabena Gyimah, Takyiman Township, December 9, 2002.
- 29. Interview with Nana Kofi Oboo, Takyiman Township, December 10, 2002.
- 30. Interview with Kofi Iddrisu, Kenten, December 21, 2002.
- 31. On the use of indigenous African or "Western" medicine, Nana Kwaku Gyan stated, "a single herb may work better than the Western medicine, since it is best for some diseases; indigenous medicines are best for some diseases."
- 32. On the issue of changing the medicine, one indigenous healer informed me that changing the medicine after some days also helps to determine which medicine works better for that condition.
- 33. Interview with Nana Yao Agyei, Takyiman Township, December 15, 2002.
- 34. Interview with Nana Akosua Owusu and James Adampah, Tanoso, December 17, 2002.
- 35. Interview with Nana Kofi Owusu, Pomaakurom, December 18, 2002.

- 36. Interview with Kofi Kumankoma, Takyiman Township, and Kwame Mamadou, Kenten, December 23, 2002 and December 20, 2002, respectively.
- 37. Interview with Kofi Kumankoma, Takyiman Township, December 23, 2002.
- 38. Secondary sources used include Amponsah, K. et al. Manual for the propagation and cultivation of medicinal plants of Ghana (Aburi, Aburi Botanic Garden, 2002); Agbovie, T. et al. Conservation and sustainable use of medicinal plants in Ghana, Ethnobotanical survey (Aburi, Aburi Botanic Garden, 2002); Ansa, C.A. Onipadua (Accra, Bureau of Ghana Languages, 1962); Appiah-Kubi, K. Man cures, God heals (New York, The Friendship Press, 1981); Avensu, E. S. Medicinal plants of West Africa (Algonac, MI, Reference Publications, 1978); Blench, R. Hausa names for plants and trees (Unpublished draft manuscript, 2003); Castner, J. L. et al. A field guide to medicinal and useful plants of the upper Amazon (Grainsville, Feline Press, 1998); Fairhead, J. and M. Leach. Misreading the African Landscape (New York, Cambridge University Press, 1996); Foster, S. and J. A. Duke. A field guide to medicinal plants (Boston, Houghton Mifflin Company, 1990); Gelfand, M. et al. The Traditional medical practitioner in Zimbabwe (Harare, Mambo Press, 1985); Hedberg, I. and F. Straugård. Traditional medicine in Botswana, Traditional medicinal plants (Gaborone, Ipeleng Publishers, 1989); Hyam, R. and R. Pankhurst. Plants and their names (New York, Oxford University Press, 1995); Ivrine, F. R. Woody plants of Ghana (London, Oxford University Press, 1961); Neuwinger, H. D. African ethnobotany, Poisons and drugs (New York, Chapman and Hall, 1996); Sofowora, A. Medicinal plants and traditional medicine in Africa (New York, John Wiley and Sons Limited, 1982); Warren, D. M. Unpublished correspondence between D. M. Warren and Dr. Constantine of Oregon State University, December 29, 1969 (copy in author's possession).
- 39. One or both languages of Malinké and Fula are spoken in Senegal, The Gambia, Guinea-Bissau, Sierra Leone, Mali, Guinea, Ivory Coast, Nigeria, Niger, Burkina Faso, and Cameroon
- 40. Dioecious usually refers to organisms, especially plants that have male and female reproductive organs borne or occurring on separate individual plants of the same species.

NOTES TO CHAPTER FOUR

- 1. Another version of this proverb is amfo na εkyerε ne toasoɔ.
- 2. Griffonia simplicifolia (indigenous name, *kagya*) has a wide range of uses including medicinal (humans and animals), brushwood, basketry, chewing sticks and as a dye. It represents the largest single plant material exported from Ghana in recent times for medicinal purposes.
- 3. In Mandinka, the terms *julayaa* (trade, trading) and *juloo* (trader, rope, debt) approximate the term *juula*, a term said to mean "to trade" from one of the Mande languages. In the Akan (Twi) language, *kramo* (pl. *nkramofoo*) refers to a Muslim and is said to derive from the Malinke, *karamoko*. The

- Muslims who lived between Takyiman and Nkoransa were referred to as *mbotisua*, supposedly a Gonja term.
- 4. In fact, what the Akan referred to as *Nsoko* was the region around (former) Bighu that was occupied by the *nkramofoo*. In contrast to Bighu, Bono-Manso was free of "foreigners." Foreigners or traders only came to the capital for commerce and not settlement, since most preferred to stay outside of the capital. Their settlement was referred to as *Kramokurom* (Muslim town).
- 5. The Akan employed (and continue to use) the sheep (odwan; pl. nnwan) in the purification of society, resolution of dispute and debts, and in the exchange of goods and/or services as evidenced by the term peredwan, which was the largest "weight" and monetary unit in the Akan payment or "gold weight" system. In the Akan (Twi) language, pere means to "struggle, strive, or bargain," while odwan refers to a "sheep" (pl. nnwan). Peredwan, therefore, suggests bargaining with a sheep or struggling to set oneself free from debt or calamity through the exchange or offering of a sheep. In cases where large-scale fines, debts or calamities exist, or a serious taboo was not adhered to, a sheep would be used to settle the debt or payment of fine, in addition to being used to address the calamity or taboo rather than a chicken or eggs, which are reserved are smaller, less complicated matters. Seldom were goats used and cows are a contemporary resort for extremely serious matters, such as annual "state" festivals or the death of an important indigenous "state" leader. Akan expressions which illustrate the foregoing include megye wo odwan ("I [will] receive your sheep") or wobetwa odwan ("you will cut [i.e., sacrifice] a sheep").
- 6. "Shrine art" refers to artwork produced through various media (e.g., wood, plastic, ceramic) which are symbolically or pragmatically associated with the functions and idiosyncrasies of specific *abosom*. Such material culture is usually found in and around a "shrine house" or *abosomfie*.

NOTES TO CHAPTER FIVE

- 1. Interview with Nana Kofi Owusu of Pomaakrom, December 18, 2002.
- 2. Kwefio-Okai's (1991, 264–266) study of an indigenous herbal preparation sought to validate its "claim" of being "useful in arthritic management." The results were consistent with therapeutic ends in Ghana and with clinically effective drugs for antiflammatory therapy. The author sought validation from "clinical" rather than or in addition to indigenous sources, which suggests that indigenous knowledge bases are invalid until they are authenticated by exogenous recourses, largely European or "Western."

NOTES TO THE APPENDICES

1. The reader should bear in mind that Ghana is located just above the equator and thus receives an almost equal amount of daylight and moonlight (night) times. *Nkwa-da* is also used to refer to a day of twenty-four hours and *da-fua* represents a single day.

- 2. Takyiman (Techiman) District Assembly, Medium Term Development Plan, 2002–2004, unpublished document, 25, 63.
- 3. G.P.R.T.U. stands for the Ghana Private Road Transport Union, and PROTOA is the Progressive Transport Association.
- 4. "Silos" stores crops and agricultural products.
- 5. RTSC stands for the Rural Technology Service Center, while BAC is the Business Advisory Center.
- 6. A similar type of proverbs would be, "owuo nni aduro," meaning death does not have a medicine or there is no medicine for death. Since everyone dies, death is incurable.

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A Abodes yares (food disease) 86 Abennuro 120 Ababuruwa (sonokodiatia) 93–94 Abayifoo (sg., obayifoo) 50–51, 92, 162, 168 Aberewa ("the old woman") 46 Abibiduro (indigenous African medicine) 88, 167 Abobomma (Annonaceae-Annona senegalensis) 94–95	Adurupa 17 Aduto (negative "roasted" medicine) 68, 86 Aduto 17 Aduw (talisman with limited powers) 79 Afonoo or Afodoo (Polygalaceae-Securidaca longepedunculata) 96–97 Aframomum daniellii 5 Aframomum melegueta 5 African Muslims 34 African Union (AU) 11
Abosom (sg., obosom) 29, 31, 43–45, 51–52, 79, 117, 134–135, 137, 140, 161, 169	Agona 32, 45 Agyennawuro (Mimosaceae-Calliandra portoricensis) 97–98
Abosomfoo (sg., obosomfoo) 18, 20, 23–24, 45, 48, 54–55, 79, 159, 162–164 Abosommrafoo (sg., obosombrafoo) 51, 54–56, 79, 162	Ahaban (herb, leaf) 78 Ahama (creepers or vines) 78 Ahemfie (ohene's residence) 34, 124 Ahiafosamina ("poor person's soap") 96 Ahobaa (semen) 45–46
Abosomsom 15 Abotutu (arthritis) 100 Abrabo (ethical and ideal existence) 44, 161 Abugyentia 95 Aburokyire (abroad) 63 Abusua (family; clan) 32, 35, 45	Ahohoo (swellings) 94 Ahotutuo or okwaha (rheumatism; arthritis) 116, 139 Akom 45, 54, 65, 138, 163 Akom pan ya adea pa 64–65, 75, 163 Akomfoo (sg., okomfoo) 18, 20, 23–24, 45,
Accra 34, 37, 63 Adansemanso 133 Adawufoo 28 Adinkra symbolism 20, 136–138, 168–170 Adinkra, Gyamanhene Kofi 136	48, 53–54, 70, 79, 138, 140, 159, 162–164 Akəmfowa (sg., əkəmfowa) 64, 73–74, 121 Akan categories of healers 20
Adubena (Hyperciaceae-Harungana madagascariensis) 95 Adubena 6 Adubone 17 Adubrafoo (Euphorbiaceae-Mareya micrantha) 95–96 Aduro ("medicine") 78, 121–122, 165	categories of ancestors 48–49 clans 45; see also Abusua concepts of the human being 38–43 indigenous knowledge archives 20, 124–140 language 9, 24, 31, 60, 63, 126, 136 names 43

people(s) 9	Atundes (ingredients) 85, 166
Akekaduro (ginger; Zingiberaceae-Zingiber	Atwadeε (lime) 85
officinale) 5, 85, 98, 139 Akoma yareɛ (heart disease) 87	Atwadeε (Rutaceae-Citrus aurantiifolia) 100–01
Akonnedi ("shrine" of Larteh) 135	Awedeaba (Annonaceae-Monodora myris-
Akrofrom 36	tica) 5, 101
Akuraa (villages) 30	Awedeaba (spices) 85
Akuro (towns) 30	Awobε (Euphordiaceae-Phyllanthus muel-
Akurotuokrom (nine villages) 29	lerianus) 101–102
Akwapem 9, 17,	Aworowa 36
Akyem Bosome 28	Awutu-Effutu 28
Akyeneboa ("totems") 45	Ayamtim (constipation) 96
Aman(indigenous Akan polities) 9	Ayawa or ayowa (pl., nyawa or nyowa) 51,
Ameyaw II, Takyimanhene Kwakye 29	135
Ameyaw III, Takyimanhene Akumfi 29, 34	Azande 13, 178
Amowi 27	
Anofranako 7	В
Ananosono (children's disease) 67	Boto (black-powdered medicine) 33; see also
Ananse bonto (Leguminosene-Cassia occi-	Moto
dentalis) 98–99	Babaso (gonorrhea; venereal disease) 94
Aniasetwa ("cut beneath the eye" ritual) 33	Bafo Pim 28
Anididane or anidanes (turning of uterus)	Banda 28, 34, 132
94, 117	Bântu-Bakôngo 172
Apetese (indigenous gin) 33	Bayie ("witchcraft") 50, 69
Apoo (festival) 29, 31,	bayie yareɛ (sunsum bayie) 85
Armah, Ayi Kwei 1, 27, 77, 123, 157	Bene ("well-cooked") 78
Asengyera (Ebenaceae-Diospyros canalicu-	Benin 31
lata) 99–100	Berekum 175
Asako (Ampelidaceae or Liliaceae-Cissus	Bese (kola) 7, 138, 169
populnea) 99	Besemankoma (Araliaceae-Cussonia barteri)
Asakyiri 32, 45	102–103
Asaman, Nana 27	Bighu 28, 34, 130–133
Asamando 48–49	Biomedicine 2, 10
Asante 9, 14, 29–31, 136	Black Volta River 28
Asante-Gyaman war 136	Bonduku 28
confederacy 29–30	Bono (Brong) 9
invasion of Bonoman 28	calendar 31, 38, 181–183
invasion of Bono-Takyiman 29	category of diseases 85–86, 166
medicine 18, 173	category of healers 20, 53–56
Asante-Akan gyeene (onion) 99	conceptions of medicine 19, 78–93
Asase Yaa ("the earth") 47, 52, 162	cosmology 38–52
Aseda ("giving thanks") 92, 122, 168	federation 30
Asenam (infant and children's disease) 67	healers (in Takyiman district) 5–6
Asenamduro 7	history 27–30
Asenee 32, 45	language 31, 60, 63
Asian countries 177	profile of healers 57–62
Asona 32, 45	standards of conduct among healers
Association for the Promotion of Traditional	74–75
Medicine (PROMETRA) 57	society 30–37
Asuman 49, 68, 115, 134–135, 139, 162	socio-political structure 33–34, 46
Atenndie (insults) 29	Bono Medicines (1983) 175
Atana abosom 51, 56, 137	Bonohene 27–28

Bonokyampem movement 29 Bonoman (Bono nation) 28–29, 131–132 Bonoman Resource Center for Indigenous	Edam (mental disease; madness) 67, 96 Edwira (Ejura) 28
Knowledge (BRCIK) 60, 124	Ekoona 32, 45 Ethnomedical 13
Bono-Manso 28, 131	Evans-Pritchard, E. E. 13, 178
Borofere (Caricaceae-Carica papaya) 5,	Evans Tittenard, E. E. 13, 170
103–104	F
Bosommuru 45	Fam-wisa (type of pepper) 85, 105
Bosompo (bosonopo) 44–45, 52, 161	Fante 9, 28,
Bosompra 44–45	Fiaso 36
Bosu (morning dew) 33	Fields, M. J. 14
Botswana 24, 178	Foodwoo 31
Boyerew or abofono (stomach sickness) 94	Foofie festival 31
Braman 29	Fofie, Takyimanhene Kwabena 29
Bretuo (or Beretuo) 32, 45	Folktales (anansesεm) 170
Bridelia micrantha 5	
British 29, 31,	G
Brong-Ahafo House of Chiefs 30	Gagawuga (indigenous cloth) 136
Brong-Ahafo region 10, 30, 133	Ghana 2, 9, 30–31, 34, 78, 177–180
Brong-Ahafo Rural Integrated Development	exodus of biomedical workers 10
Project 175	governmental administration 10
Buoyem 29, 36	land resource and use 11 military coups 2
C	political economy 2–3
Cameroon 5, 179	sacred groves 4
Dja reserve 5, 160	Ghana Psychic and Traditional Healers
Tabenken (Wimbum town) 16	Association (GPTHA) 2, 57–59
Cassia singueana 5	Ghana Traditional Medical Association
Centre for Scientific Research into Plant	(GTMA) 59
Medicine 57	Gold Coast government 29–30
Convulsions (esoro) 33	Gold weights (mmrammoo) 20, 130–136,
Culture concept 19–20	169
_	Gonja 28, 34
D	Guinea 5
Denkyira 9, 28, 61	Guinean-Congolian forest 5, 78
Dagarti (Dagara) 34, 65	Gyako III, Takyimanhene Kwaku 29
Dagomba 34–35, 173	Gyaman (Abron) 29, 105
Damenam or Damaram 7	Gyamma (Euphorbiaceae-Alchornea cordifo
Damfa project 175	lia) 5, 105–107
Dawadawa (processed brown seeds) 118–119	Gyeene (onion) 85
District Assembly (Takyiman) 30, 34 Djeli (French, griot) 22	Н
Doctors without Borders 57	Haiti 17, 160, 177
Doma (or soma) 22–23	Hausa 5, 34–35, 119
P. 1. 37. 77.01.5	Hausaland 28
Donkor, Nana Kofi 13 Dormaa (Domma) 18, 175	names of medicines in 94, 98–99, 101,
Duabo yares (disease by way of a curse) 86	103, 105, 107, 111, 118–119,
Duanwonsini 104–105	121
Dufurε (Mimosaceae-Entada pursaetha) 105	Healers of Ghana (1996) 175
	Highly Indebted Poor Countries (HIPC) 3
E	HIV/AIDS 1, 57, 176
Esoro yares (convulsions) 67	Holy Family Hospital 37

Honam yaree 67, 70	Kotogyeben (Fabaceae-Cassia sieberiana)
Honhom yareε ("spirit" disease) 86	112
Hwedeε (Gramineae-Pennisetum purpu-	Kotokusaabobe (Aristolochiaceae-Paraistolo-
reum) 107	chia promissa) 112–113
Hwehwε mu 67, 164	Kradin ("soul name") 38
Hwentia ("Ethiopian pepper") 85, 107–108	Kramo, Takyimanhene Yaw 34
Hyire (powdered white clay) 44, 48	Krobo 36
T	Krontihene 27
I	Kru (Liberia) 99
Indigenous knowledge 8–9, 12–13, 19–20,	Kumase (Kwaman) 28–29, 37
123–124, 158–160, 173, 180	Kwakye, Bonohene Ameyaw 28
exploitation of 8	Kyenkyen (indigenous bark cloth) 136
Indigenous medicine 11–12, 170–174, 180	Kyerɛbenten (Rubiaceae-Amaralia bignoni-
African perspectives on 179–180	iflora) 113
cultural-biochemical analysis 93–121	Kyereme, Nana Kofi 64
Ethiopian 18	Kyima yareɛ (menstrual disorder) 102
ingredients and parts used in 81–84	L
integration debate 12, 174–178 most frequently used among healers	Latin America 161
89–90	Latin America 101
theory of medicinal efficacy 90–91	M
International Monetary Fund (IMF) 2–3	Moto (black-powdered medicine) 33, 85, 166
Ivory Coast (Côte d'Ivoire) 9, 29, 31, 79, 99,	Madagascar 5
105, 165, 172	Mali 31, 79, 165
,	Mampon 28
J	Mande 28, 130–133, 172
Jenne (Djenne) 9	Mande languages 94
Juula-Wangara traders 34–35, 131–132	names of medicines in 94-96, 103, 107,
	110–111, 115–116, 119–121
K	Manso 27
Kokowa 110	Medical Mission Sisters 37; see also Holy
Kəmfokurom ("əkəmfoə village") 32	Family Hospital
Kətewuiɛ (impotency) 95	Medicinal plant research 4, 7–8,
Kankano (Rubiaceae-Nauclea latifolia) 5,	Ministry of Health 37, 175
108–109	Mmoaa 52, 161–162, 173
Kar river 36	Mmoaa yareε (disease caused by germs) 86
Kente (cloth) 30, 170	Mmoatia 49–50, 115, 140, 169
Kenya 10	Mmogya (blood) 45, 50, 87
exodus of biomedical workers 10–11	Mmogya mmoroso (hypertension; excessive
Kete Krakye 28	blood) 87 Manubuig (paralysis paley fractures) 67, 97
Kintampo (district) 35, 175 Knowledge economy 8	Mmubuiiε (paralysis, palsy, fractures) 67, 97 Mogya mu yadeε ("naturally-caused dis-
Kokonisuo (Bignoniaceae-Spathodea cam-	eases") 15
panulata) 109–110	Mossi 34, 62, 79, 173
Kokonisuo 7	Mpaee (or nsuguo; libation) 33, 48–49
Konkoroma (Rubiaceae-Morinda lucida)	Muslim Ahmadyyia Hospital 37
110–111	
Konkrom, Takyimanhene Kwadwo 34	N
Kookoo (piles) 116	Namprane (Rubiaceae-Gardenia ternifolia)
Korobaa (Meliaceae-Khaya senegalensis)	113–114
111–112	Nananom nsamanfoo (ancestors) 31, 44
Kotodweben 7	Natural Products ALERT (NAPRALERT) 4

Natural vs. supernatural ("personalistic") dichotomy 15–16, 171–172, 179	Oral narratives (abakəsem) 138–140 Orality (oral archives of knowledge) 22–23
Niger 31	Otic (Myristicaceae-Pycnanthus angolensis)
Nigeria 31, 179	5, 116
Nimdes (knowledge) 72-73, 159	Otwa or etwire (epilepsy) 96
Nka no kwa yareɛ (disease without obvious	
cause) 86	P
Nkãnaa (Euphorbiaceae-Flueggea virosa)	Perempe I, Asantehene Agyeman 29
5, 114	Pepuda or atiridiiɛ (fever) 110
Nkonimdes (honor) 89	Pharmaceutical industry 1–2, 8,
Nkonkon (cough) 67	Pinihi 27
Nkora yareɛ (children's disease) 67	Piper guinense (guineensis) 5
Nkoransa (district) 34, 93	Primary Health Training for Indigenous
Nkrumah, Kwame 2, 59, 179	Healers (PRHETIH) 15-16, 175
Nkwaeso 36	Proverbs (mmɛ) 20, 124–130, 168–170
Nkyeraa (Nchiraa) 29	
Nnunsinfoo (herbalists; sg., odinsinni) 18,	R
20, 23–24, 53, 159, 162	Rattray, R. S. 14, 29,
Nseeyε (skin disease) 67, 96	Rivers, W. H. R. 13
Nsoko 34	
Nsuta 36	S
Ntoro (or Nton) 43–46	Sabrabese (Meliaceae-Trichilia roka) 117
Ntoaseε (or ntoaseεa; "down payment") 168	Samandua (Rutaceae-Clausena anisata)
Ntoburo or osekye (measles) 67	117–118
Nufu yareε (breast disease) 118	Sasabonsam (or kasampere) 50
Nwoase 29	Secundaca longepedunculata 5
Nyankomadee 79	Seligman, C. G. 13
Nyansa (wisdom) 72–73, 159	Senegal 57
	Seychelles Islands 29
0	Shrine art 141
Obofoo 49–50	Siakwan (infertility) 94
Odades (Bombacaceae-Adansonia digitata)	Sisala 34
5, 103	Sisire 7; see also Kokonisuo
Ode(e) (Octoknemataceae-Okoubaka aubre-	Sorono (Mimosaceae-Parkia clappertoniana)
villei) 114–115	118–119
Oyokoo 32, 45	Soro-wisa (type of pepper) 85, 119–120
Odom (Caesalpinaceae-Erythrophleum sua-	Suben river 36
veolens) 5, 115–116	Subinso 29
Odomankoma Oboades (the Creator) 43, 45	Sukom mmoraso (dehydration) 96
Ofenso (Offinso) 28	Sunsum 17, 46
Oforikrom 36, 132 Ofuman 29, 36	sunsum yares 17, 68–70, 85, 87, 110, 164–166
Oman (pl., aman; polity) 28–30, 32, 34	Sunyani (regional capital) 10, 36
Oman yares (social disease) 86	Supua (Rubiaceae-Nauclea diderrichii)
Onipa (human being) 38	120–121
Onyame dua (Apocynaceae-Alstonia boonei)	Swedish International Development Coop-
5, 116, 134	eration Agency 175
Onyamesom 15, 63	cration rigency 175
Onyankopon (the Creator) 38, 51–52,	T
62–63, 78, 121, 162; see also	Taa Kora 51, 55
Odomankoma Oboades	Taa Mensa 29, 55, 162
Opoku Agyeman Specialist Hospital 37	Takofiano 36
opona 118, eman operanot 1100pitai 5/	Tunonumo oo

Takoradi 37 Takyiman (Techiman) 5, 14, 16, 28–37, 132, 141, 159–161, 164–165, 175 Takyiman Traditional Council 30, 34 Tamale 37 Tano (river) 31, 36, 51, 55 Tanoso 36 Tannuro 6 Tanoboase 29	Warren, D. M. 14–16 Western anthropology 2, 9–18 medical anthropology and the Akan 9–18, 171–173, 175 Wimbum 16, 178 Witchcraft 13–14, 16–17, 178–179 World Health Assembly 11 World Health Organization (WHO) 1, 11, 175
Tanzania 160 Tawia (or Kyeremeh), Takyimanhene Kwaku	X
29	Xylopia aethiopica 5
Ti yareε or atipaeε (headache) 67	, 1
Tigare 56	Y
Timbuktu 9	Yefri 27
Toantini (Sapindaceae-Paulina pinnata) 7, 121 Togo 9, 31	Yadeε or yareε (disease or illness) 66–68, 163–164
Tuobodom 29, 36	Yafunu yareɛ (stomach disease) 67
Turner, V. M. 13	Yendi 28
Twi, Takyimanhene Kwasi 29	Yielbongura 65
,,	Yorùbá 34
U	names of medicines in 94–96, 98–103,
United Nations Children's Fund 175	105, 107, 110–111, 118–121
W	Z
Wagadu (ancient Ghana) 9	Zabrama 34
Wankyi (Wenchi) 27, 31, 35	Zongo ("stranger's quarters") 34-35