

Emerging Planetary Medicines

Frank Cook



Qualities

of the

Emerging Planetary Healing System

**Holistic Herbal Medicine Trends
Toward Integrating Traditional Medicines**

by Frank Cook

Dissertation for a Masters in Holistic Science from
Schumacher College, Devonshire, England.
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<http://www.goddessgift.net/page77.html>

*The human journey is an expression of the Journey of Mother Earth.
Look to Mother Earth—Gaia—for inspiration, for ways of living righteously.*



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Preface

This work represents applied **holistic science** principles within the context of the cerebrally focused exercise called a master's thesis or dissertation. This dissertation was turned in at the beginning of September, 2008 to complete a year-long program at Schumacher College for a master's degree in holistic science.

Within holistic science we do not try to be removed from the phenomenon but to immerse ourselves in it. In order to reflect this philosophy, I have introduced some unconventional approaches, including:

- 1) Maintaining gender-neutral language when the gender is ambiguous and acknowledging the animate, dynamic life forces in all matter. This aligns well with the principles of **earth jurisprudence** and **pan-psychism** introduced by Schumacher College core teachers, Brian Goodwin and Stephan Harding.
- 2) Acknowledging the potential of life to manifest in different ways depending on the conditions in which they come to be. To do this I have included the convention of '/' introduced by Schumacher teacher, Henri Bortoft. Life is not so much black or white but black/white. Bortoft encouraged us to stay within the stream of potentiality in our approach to life. Though we see the manifestations of life downstream, we can learn to *see* that which is prior; things exist in probabilities.
- 3) Highlighting terms in **bold** that are either not commonly known or are being used in different ways. They are defined in the Glossary at the end of this book.

Preface to the Second Edition

Frank Cook passed away unexpectedly on August 19, 2009. After submitting his thesis in September 2008, Frank sent it out to a small group of people to edit and review, including Jill Mahanna, Marc Williams, Marc Bradley, and Mary Morgaine Squire. Their comments and minor corrections and clarifications are now a part of this volume, published in February of 2013. This edition is produced by Plants and Healers International (PHI), a non-profit organization created to continue Frank's vision and life's work. For more information, please visit www.plantsandhealers.org.

Acknowledgements

I began my walk with **Gaia** sixteen years ago when I *tuned in, turned on, and dropped out*. I quit my job, sold my worldly goods, left my house, and headed off in a retrofitted 1963 VW windows bus with two friends and our dog. I left the promised security of career and house for the adventure of seeking right-livelihood through donations.

Through all these years people and plants have come forward to guide, inspire and assist me. I have kept the faith. I have experienced the unfathomable complexity of Gaia hand-in-hand with the deeply personal aspects of Gaia. I want to acknowledge all that has allowed me to get to here now. I want to acknowledge seven generations from the past and seven forward. My elders—the trees, the green beings, the swimming ones and those that fly and walk on all fours and my human teachers. I thank you. I live a blessed life.

This last year at Schumacher has been wonderful. I immersed myself in communal living and experienced deep revelations from all the teachings, people and books within the erudite atmosphere at the college. I wish to thank the staff and teachers. Thank you to all the *Angels* who supported me through this experience.

I am indebted to the caretakers of over a dozen private libraries, whose volumes contributed to my research. During the months of work I could not have kept the focus without the support of my community while I traveled to various gatherings around the country, in my homes and friend's houses, and in the spaces between my teaching obligations. To the herbalists of fame and hedgerow who gave forth rich stories and experiences, I open to your teachings. May you see clear mirrors of these resources and teachings in this work. The plants help to remind me to make this work more than an academic exercise.

This dissertation is an application of the principles taught to me over the last year at Schumacher College. The course outline and descriptions of my teachers can be found on the website: www.schumachercollege.org.

Each year I feel more and more like a plant within my being. I am so thankful for this green path laid before me. A central lesson I received from doing this work was how to maintain a holistic life along the way. With each breath I feel the support of Gaia and the plant kingdom. Onward! Aho!

ABSTRACT

Human cultures are melding worldwide. This dissertation explores the potential for integrated health systems to thrive within the rising world culture. The foundation of this work is based on previous field research of traditional healing systems and a literature review.

Conditions seem favorable for the emergence of systems of integrated medicine despite the potential ideological clashes between different healing philosophies. This growth is evidenced in the alternative healing and health food movements, the budding of modern herbalism, and the creation of integrated health clinics in the western world. This dissertation points to some possibilities ahead as the cultures of the world continue to interact more deeply via the media, internet, travel and consumerism.

Pilot interviews were conducted with eminent herbalists and plant researchers to identify the herbs most suitable for international recognition and the methods used to transform those herbs into medicine. From the research and interviews, a questionnaire was generated. The results from this survey were obtained from herbalists in the United States and Great Britain to gauge their awareness of these international herbs and to determine the prevalence of their use in the herbalists' healing practices.

I received a total of 31 responses to the questionnaire—8 men and 23 women. Twenty-two respondents are from the U.S. and 9 are from the U.K. Their average age is 43.5 years with an average of almost 15 years of experience working with herbal medicines.

A lot of valuable information was compiled because the respondents had so much experience working with plant medicines. My study confirms what herbs practitioners are using on a regular basis with their patients and themselves, and whether the herbs are being grown by the herbalist, purchased, traded, or wildcrafted. These herbalists rely on herbs from the west and are confident of their western herbal knowledge as well as nutritional therapy. Other traditions that a notable number of respondents had experiences in are: Chinese (87%), Native American (87%) and Ayurveda (84%). The respondents had no knowledge of a number of modalities: Polynesian (10%), Aboriginal (10%) and African (19%). Knowledge of the herbs I asked about had a direct correlation with knowledge of the healing system from which that herb comes.

Of the 64 herbs queried, 23 represented well-known and often-used core herbs. Another 14 were well known but were more supplemental in use. The results also indicate 11 herbs that people know but have little experience with. This list of high potential herbs represents a good opportunity to increase availability to the west over the next five years. There were three herbs that, though famous in their modalities, were virtually unknown to the respondents.

Education, cultural exchange, an international apprentice program, a seed/plant exchange, collective gardening and books/articles written will help disseminate knowledge of these modalities and herbs. These are essential ways for us to increase our collective resilience.

This dissertation offers some trends to watch in the emerging planetary culture toward integrating traditional plant medicines and healing modalities.

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Introduction

“These are the times that try men's souls. ... Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly: it is dearness only that gives every thing its value. Heaven knows how to put a proper price upon its goods; and it would be strange indeed if so celestial an article as FREEDOM should not be highly rated.”

- Thomas Paine, 1776 “The Crisis”

“There are nine requisites for contented living: HEALTH enough to make work a pleasure; WEALTH enough to support your needs; STRENGTH enough to battle with difficulties and forsake them; GRACE enough to confess your sins and overcome them; PATIENCE enough to toil until some good is accomplished; CHARITY enough to see some good in your neighbor; LOVE enough to move you to be useful and helpful to others; FAITH enough to make real the things of God; HOPE enough to remove all anxious fears concerning the future.”

“There is no past that we can bring back by longing for it. There is only an eternally new now that builds and creates itself out of the best as the past withdraws.”

-Wolfgang von Goethe



These *are* the times that try humanity's soul. Our requisites for contented living are not being met. At every level humanity is being challenged to change or die. We must look within and about to address the crises upon us. My goal in this work is straightforward:

--to help nurture our planetary awareness as it pertains to human and ecosystem vitality

Who really knows their body better than the inhabitant (be it Gaia or our own)? How do we maintain health? I am looking for living knowledge, not dusty tomes or detached expertise. What has worked and what hasn't? What do people imbibe or perform to exorcise illness? What do other cultures use to treat their symptoms of dis-ease and the underlying conditions that bring these forth? What has been used in the past? Why is it no longer done? What is being practiced by one culture and is unknown in another?

There are many questions, but basically I am asking one thing. How are people staying alive?

I have appreciated hearing the term "expert patient" come into usage. These are patients who research their symptoms and approach doctors from a position of knowledge. I imagine this new kind of patient is shifting western medicine greatly. We can change reality by enhancing our communication skills.

"A change in worldview is a change in world viewed."

-unknown

Mythologist Jules Cashford, who lectured twice at Schumacher, says, "It is only recently that we can have a world perspective".

The first image of earth was from a v-2 rocket in 1946, but perhaps one of the most famous pictures of the 20th century is from Apollo 17 on December 7, 1972:



<http://www.my-spot.com/earth-a17.htm>

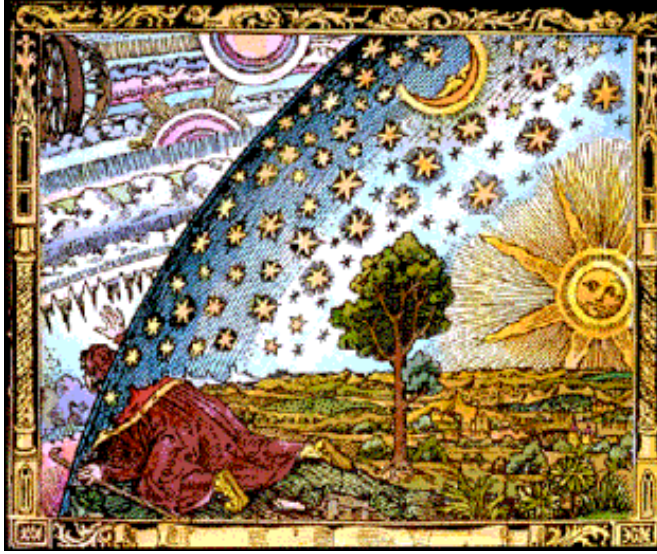
Billions of us have seen this image and can imagine our limits, recognize our impact. The Greek name for the earth goddess was (or is?) Gaia. The scientist James Lovelock picked this as the name for his theory describing the earth functioning like a living organism. This **Gaian Awareness** is growing rapidly through technology's ability to disseminate information quickly and widely. There are currently 1.5 billion people accessing the internet. Imagine!

In my research of the last thirteen years I have felt like a cosmonaut coming from the future to the still "intact" cultures of the world and asking, "What from your culture would you like to see live on into the **planetary culture rising?**"

"As the planetary sociosphere becomes smaller, it is interesting as well as useful and practical to compare the beginnings of medical thought and practice with what is evolving today in modern holistic medicine."

-Christopher Hobbs, *American Herbalism* (pg 272)

When I tell westerners about my work they often listen curiously. What I think many of them fail to see is that the new world coming is not western. I have begun asking Americans and Europeans what they would like to see passed on from their cultures to the coming new world. The question is still out there and I will continue listening to the answers as we come to this understanding. We are in gestation.



Camille Flammarion, L'Atmosphère: Météorologie Populaire (Paris, 1888)

This work is a **fractal** of our transformation that gives us hints of the whole as it comes into presence. What plants will be with us? What will be the spectrum of healing techniques in the coming **Gaian Consciousness**?

Transition to Gaian Consciousness

Our mind analyzes, breaking things into parts to understand them. It is our imagination that allows us to **grok** the whole. Imagination will bring us back into life. Gaia is a dynamic force on our side. We need to make room for imagination to grow. Imagination has evolved from Gaia; it is not separate.

This change to a global awareness is pervasive throughout all the branches of modern culture. (Read Thomas Berry's *The Great Work* for details on this.) This can be exemplified in looking at the **Transition Culture** (TC) Movement coming from Southwest England. The TC Movement was started four years ago in Kinsale, Ireland by Rob Hopkins. Rob is a permaculture teacher who showed his class the peak oil documentary, *The End of Suburbia*. They were so moved they wrote a declaration called "The Energy Descent Action Plan". They emphasized resilience, re-localization and multi-skilling, from the grassroots up. This declaration "went viral" when they put it

on their website. Thousands of people wanted to know more. (www.transitionculture.org)

The transition idea presents to the world a possibility of positive lives after peak oil and climate change. It has struck a chord within our world culture and over 900 towns in the world are preparing to become transition towns. Dozens of places have already begun transitioning, including the pilot project launched in Totnes near Schumacher College in 2006. Part of our master's program involved engaging the movement and helping it to grow and mature.

The organizers of this movement have found the complexity of sharing their ideas with the world to be challenging. Translating the ideas and main tenets into many languages and across cultures has proven to be formidable. Analogies and statistics are culturally dependent and need to be adapted to each culture that tries to embrace it. For instance, at the London Transition Training I attended, the Japanese people present said there was no suitable word in Japanese for transition.

The sustainable designer Ezio Manzini, in his lectures at Schumacher, pointed out the challenge to upscale local innovative projects from their particulars into their global applications without losing the special qualities of the idea. Manzini stated "Can you upscale a social innovation, enhancing the virtuous cycles...without killing the good qualities...? 'Quality' is intangible yet critical to social enterprises." This is the challenge in the work presented here. We do not want to co-opt the healing modalities of the world into facades of traditional systems.

Instead, we are looking at an integration of different modalities into something new. We are leaving behind the limitations of one culture's definitions of a plant or healing technique. Each way has its biases, be they cultural, religious or otherwise. A distillation of sorts is needed to find the ways in which a culture's healing traditions can be disseminated to the world through the stories of the plants and the techniques that work. We know they work through experience with them and their presence in multiple cultures around the world.

Through a literature review, interviews, questionnaires and other research, I find that the question of who we are becoming in terms of a planetary culture is being posed more and more. I bring years of botanical exploration onto all the continents of the world except Antarctica to this work. Many signs indicate a radical shift for humanity in the coming generation, though no one knows the future's

details. I cannot fathom the all-encompassing transformation that lies before us, except perhaps down one thread, or should I say root: the root of the plants who have always been there for us. They are our bridge, our teachers in raising Gaian consciousness.

The journey of knowing the plants began for me, like many, as a utilitarian one. I learned names for each plant and all the ways they were useful to me. The botany of plants interested me. I was also intrigued by the path, alluded to by Nietzsche, toward enlightenment—a path with many names but few adherents. Some might call it a **shamanic** path (read Harner's *The Way of the Shaman*) or walking the **green path**.

Over the years I have grown to see plants as sentient beings and elders to us in many ways. With that understanding I've reflected on how my human friends would interact with me if all I wanted to do was to *use* them. I have worked to cultivate relationships with plants and to have them as allies.

Plants are how, and largely why, I believe, we are here. I believe our primary purpose is to serve the plants and to be caretakers of the Earth. My hope is that in some small way this work will plant seeds toward our opening into an earth awareness.

Holistic Science Overview

“...Only since Descartes and Newton has materialism gained acceptance as an accurate model of reality. Our modern world assumes that we live in an objective universe that can be explored by objective observation, that only the physically observable universe is real, that a whole can be known by a study of its parts, that one cause produces one effect, and that mind and body are totally independent of one another...we have been living with the consequences of these assumptions ever since.... The idea that the world is made up of objects that are independent of human consciousness conflicts with both the theories of quantum mechanics and with experimental fact.”

Svoboda, Ayurveda: Life, Health and Longevity

“He [Bortoft] succeeds in showing that Goethe's way of doing science was not a poet's folly, but rather a genuine alternative to the dominant scientific paradigm. He shows that a different, "gentler"”

kind of empiricism is possible than that demanded by the dualizing mind of modern technological science, and demonstrates that Goethe's participatory phenomenology of a new way of seeing, far from being a historical curiosity, actually proposes a workable solution to the dilemmas of contemporary, postmodern science.”
-from a review of Wholeness of Nature

“Sickness has no Mind, and it cannot seek out Victims. One Camp, Ten Camps, or a Hundred Camps can never Stand Alone. Each Camp Affects Every Other Camp no matter what the Distance between them”
 -Hyemeyohsts Storm, Seven Arrows (pg. 244)

“Finding a language for our perceptions, intuitions and realizations, and communicating with others with the intention of finding shared meanings, contribute to the development of a new culture...”
 -Diamond, Living Your Passion (pg. 22)

For us to find meaning in our world we need the tools and language for greater understanding. We need a change in mindset that sees us connected to nature. The last 50+ years have evolved a new age of science called **post-Newtonian physics**. The ripples of this transition are now emerging within all aspects of western civilization. Within the biological sciences we have Ecology, Gaian studies and **Goethean science**, as well as a slew of other emerging disciplines that have come forth to help our study of life come back into relevance. The edges of Biology need to be broadened to include the tenants of Holistic Science, if it is to shift from a mechanistic, reductionist approach. One Schumacher teacher, Craig Holdrege, writes, “The realization that the phenomena we confront are always richer than the abstractions we use to explain them is central to the Goethean approach.” This shift is fundamental to our core. We need to be released from seeing the universe as a clock, our bodies as a machine, our minds as a computer and the earth as dead.

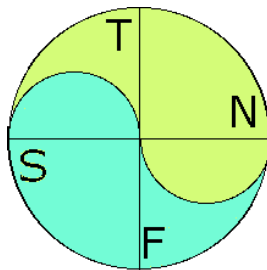
Brian Goodwin, a main Schumacher teacher, spent several lectures covering new dimensions of health/illness. “The heart lives in an unpredictable situation. So it stays sensitive, does not strongly lock into a rhythm of its own. Too much order in the heart is a sign of danger.” He made a case that perhaps entropy in addition to being

defined as disorder could be defined as “dynamic diversity.” He feels that western science tries to isolate itself from external stimuli and is “unreal”. Western science is built on special case assumptions and is not engaging the “dynamicness of life”. He entreated students to go beyond the search for the meaning of life to “find a life of meaning”. He commented that the holistic healing system coming will be “embedded in community” and will focus on “treating the whole person not just the disease”. He recommended we read works by Daniel Moerman and Simon Mills on the topic.

Another Schumacher lecturer, Rupert Sheldrake, writes in his book, *A New Science of Life*, “In effect this [holistic] philosophy proposes a change from the paradigm of the machine to the paradigm of the organism in the biological *and* in the physical sciences.” (pg. 12) Sheldrake is also famous in science for supporting the presence of **morphic fields**.

As the biological sciences transform, a ripple will come through Contemporary Western Medicine (CWM), as I discussed above. Though there are attempts to integrate CWM into something more holistic, we need to see that the Planetary Medicine coming is new unto itself. Made from the old and the current, it represents a new way, a metamorphosis to meet the evolving needs of Gaia and humanity. Let us work diligently to bring forth the tools of Holistic Science, for they are drastically needed in our transforming culture.

Holistic science continues to grow and has the language, concepts and tools to provide a framework for holistic herbal medicine. Holistic science is the water in the ocean of the planetary healing system emerging. Stephan Harding encouraged us as holistic scientists to embrace our shadow and work to improve our weak side within the well-known Jungian matrix: Thinking-Feeling and Intuiting-Sensing.



Bringing this awareness into medicine will be a significant paradigm shift. It is already happening.

A quote Stephan shared is, “Our western worldview is unbalanced. There have been 400 years of this dominating worldview.... The *Anima Mundi* (soul of the earth) has expressed itself in every culture of the world. This was deliberately suppressed in the 1600’s to keep the soul in the church. Western culture sees the earth as a dead machine focusing on quantification, abstraction, manipulation and separation.”

Western science shows thinking and sensing but this is only a subset of the whole. We westerners need to open our beliefs to truly see and understand. We must learn to feel and intuit. Many of the healing modalities presented later embrace this holistic way. Each falls short in some ways. We look toward the future hoping to find ways to increase vitality. Holistic medicine offers preventive healing and advocates personal responsibility within a community context.

Holistic science is rapidly emerging into western culture to explain the context of technology and also to integrate the teachings of Einstein and others into the education system. The reflection of this into the modern culture’s philosophies is beginning to make itself known. This can be seen in medicine through the integrative clinics and the prevalence of alternative healing modalities, including Traditional Chinese Medicine (TCM), massage therapies and naturopathic doctors. Holistic medicine would not have a context from which to express itself without holistic science.

Our Relationships with Plants

“In all ancient civilizations, plants served as important elements of food, shelter, dyes, ornamentation, religious rituals and medicines....”

“Innumerable medical plant traditions that remain intact to the present originated as far back as 2700 B.C.”

“Perhaps, in a prehistoric jungle of South America, a pool of water containing fallen plant material leached out some of the precious medicinal constituents...tannins, glycosides, sugars, and alkaloids....”

- Auerbach, Wilderness Medicine

An early human suffering some malady happens upon this pool and drinks and notices s/he feels better. S/he remembers this spot and situation with his/her mind and shares it with others. This is the contemporary western story of how herbal medicine came into being. The story continues to claim that we have developed that mind to create technological solutions to our problems. This came into dominance at the end of WWII with the underlying slogan, “Better Living through Chemistry”. We suffer from a failure of imagination in modern life. The pursuit of objectivity and the thought that we humans are somehow separate from the nature around (and in) us is one of the shortcomings of western thinking.

“All things brought to us as information, data and facts need to be interpreted and considered anew by our deepest forces.”

-Rudolf Steiner

Other explanations exist as to how plant medicines came into human hands. Scientists have been stumped as to the way tribal people of Peru discovered that two unrelated plants that are separately inert can together create a potent entheogenic medicine. But if you go down and ask the makers of the medicine--the Ayahuascaros--how they came to know it, they laugh at such a naïve question and quietly say, “The plants told us.”

The western story of trial and error aided by an ever-evolving brain is not wrong; it is just *not complete*. Intuitions, dreams,

personal experience, hunches, channels and shamanic journeys are central to our evolution and will continue to contribute to our understanding of the world.

Emerging Planetary Herbology

“The problem [of accepting Chinese medicine into the West] does not lie entirely with the medical and scientific establishment. Almost none of the traditional Chinese medical texts are available in English, and those that are available make little or no attempt to present the cultural medical tradition in toto. Even translated works pose the problem of a completely unfamiliar approach to disease and foreign terminology. Only someone familiar with Chinese language, naturalist and Taoist philosophy, would be able to comprehend the Chinese medical tradition.”

-Kapuchak, The Web that has no Weaver

Kapuchak presents a challenge central to the work of looking ahead into our emerging world consciousness. He asks how we can carry the cultural context of the plants and techniques along with the physical? The white **sangoma**, Neil Campbell, posed the same question to me when I interviewed him inside his healing hut in Botswana. “Symbols are not intrinsic in their meaning. Ritual is built up by meanings. We are forming a world ritual slowly.” He pointed around the dimly lit hut. “For someone initiated in the African ways these images and implements are a script telling us meanings and rituals. To those uninitiated, you miss so much. You see merely the surface.”

The nature of stories is that they change and grow and die and are reborn. (Read Henri Bortoft for more on this topic.) What we need to discern are the stories with meaning, the living stories adapted to modern civilization, and pass them on to the future.

By way of example, let us have a look at mugwort (*Artemisia vulgaris*). I have learned so many amazing stories about this plant and its relatives. I still learn new stories even though I know this plant well. Recently, I was reminded by a Chinese medical doctor that it is in the same genus used in moxa sticks (*A. moxa*). She also said that the Chinese let it cure for two years before using it. I did not know this detail and added it to my list of questions for my trip to China in the future. I will find out why this practice is observed and

discern if it is based on something cultural or if there are universal qualities that support such a curing time. This new knowledge has affected my relationship with *Artemisia* and causes me to ponder the drying of herbs further. Knowledge is not an object but a wave of change. This plant has many medicinal, practical, and sacramental uses.

Artemisia's magico-medico efficacy came through for me some years ago when I tried a famous drink made with one of the species, *A. absinthium*. That night I had the most vivid dreams I can recall. The next night I slept over at another house and came in very late. The house smelled as though someone had burned the dinner. I again had lucid dreams and was concerned that I may have become stuck over the edge. The next morning, when I asked about the burned smell from the night before, the owner of the house said he had burned a big bundle of mugwort (*A. vulgaris*) before he had gone to bed. *Artemisia* had taken me on another journey and deeply instilled in me respect for its power.

"If the doors of perception were cleansed every thing would appear to man as it is, infinite. For man has closed himself up, till he sees all things through narrow chinks of his cavern."

-William Blake, *The Marriage of Heaven and Hell*

One of the keys to good health in this life is getting to know the living plants themselves and learning their stories. I, like Jung, Steiner, and many others, believe there is a collective unconscious a.k.a. the Akoshic records. These records exist in the ether and contain our collective memory. The journey in knowing a plant involves shared experiences in the way of connecting through sensorial perception and imagination. This is called **phenomenology**. Bortoft encourages us to *dwell in the phenomenon*. The primary organ of perception for this is the heart, followed by the brain and more. Read Buhner's *Secret Teachings of Plants* for details around this.

Going inside to learn about the outside creates a different world. I have come to realize that we modern people have become engulfed in a conceptual world. I encourage us more and more to put the medical industry, economics and other institutions on the periphery of life, not at its current central position. Read Ivan Illich *Medical Nemesis* and *Deschooling Society* for deep reflections on these topics.

We are our best healers most of the time, after all. What do I mean? One of my plant teachers, 7Song, says, “70% of the time your body will return to health even if you ignore your symptoms.” I figure that your return to health would be in the 90th percentile if you made the efforts during illness to stay hydrated, get extra rest, monitor urination and bowel movements, eat minimally, reduce stress and pay attention to what you should not be doing. Add basic herbal knowledge of the weeds and garden and only rarely would someone need to consult a doctor or take a medicine.

Literature Review

“Thus I considered all my activities which my hands had done and the labor which I had exerted, and behold all was vanity and striving after wind and there was no profit under the sun.”

- **Ecclesiastes 2:11**

The Earth is Immense

Just back from hauling wood...the earth sort of engulfed me. The world can so easily engulf us. Have you ever dug a hole into the earth? We speak of digging to China. Most people couldn't even bury themselves before the earth consumed them. The Earth is immense!

I was not prepared for how this literature review would carry me along the path of healing ways. Well-written books have challenged my assumptions and perspectives on just about everything.

Primary List

Four particular books form the core texts from which I am presenting my insights here. I have happily had the first book, *Planetary Herbology* by Michael Tierra, by my side for over sixteen years. This author planted the first awareness in me of integrating separate healing modalities (indeed, that there even were *other* healing systems!). I have traveled far since those days and yet this text still holds a prominent place and has the tattered look of much handling. I am still impressed when I look for information on an obscure herb and find something there. Three quarters of the herbs I asked about in my questionnaire are discussed in the book, even though it makes no claim to encompass the modalities of the world. However, Tierra does discuss in detail Chinese medicine, Ayurveda and Western Herbalism, wonderfully linking them together.

Only a few years ago I came across *Medicinal Plants of the World*. I had read enthusiastically the five volumes of Ben-Erik van Wyk on human relationships with South African plants. I had already

read his impressive *Food Plants of the World*. So I was delighted to come across this work. I was stunned upon first looking it over. It seemed he had already done the work I had been engaged in for nearly ten years. But upon closer examination I saw how my areas of focus were different. It has proven to be a wonderful support for my work and has given me a point of reference in an area where I had previously found none. The work of Wyk has enhanced my contribution here.

Ben-Erik van Wyk offers the reader a number of different medicine systems, then profiles 320 plants and follows with a summary of over 900. All but two of the plants I asked about in my questionnaire are described in *Medicinal Plants of the World*. The latter part of the book describes prevalent health disorders with herbal treatments and an overview of secondary metabolites and their effects.

The third cornerstone book is the unpublished doctorate dissertation of Morgan Brent in anthropology from 2001. It is entitled, *Spiritual Ecology and Medicinal Plants: Contemporary U.S. Herbalism as a Neo-Indigenous Revitalization Movement*. Brent's work has helped me to understand the U.S. herbal medicine movement as part of the Gaian Revolution. His research involved interviewing many key herbalists and has inspired a similar approach within my work. His dissertation puts words to important unnamed realities emerging. I refer to it often to keep my mind tuned in.

In the fourth book, *Planet Medicine* by Richard Grossinger, I was greatly challenged and intrigued. He writes in his preface, "Disease perception and healing both touch the core of our human meaning. How we locate disorder, and remedy it, is an aspect of how we imagine our existence as body and mind.... That is, there are deep and urgent collective images, both personal and cultural, which cannot be expressed except as variations and difficulties of health. Their 'philosophical' meaning is akin to that of the genes themselves, which also carry a biological message into the human world." (preface pg. x) "This book is...an attempt to revise assumptions, both academic and popular, about what the process of disease and cure is." (preface pg. xi)

In accordance with this second quote, I see my dissertation as presenting a palette of world healing systems from which healers can learn new stories about plants and healing techniques. From this palette, I will inquire into the modern herbalist culture and ask

questions to determine familiarity with these traditional cultures and plant medicines. On pages *xiii-xiv* Grossinger describes his definitions for holistic medicine, alternative medicine, and planet medicine. His descriptions helped me to better “see” what I was studying. “Our perception of other cultures and their medicines is born of present reality and bias. There is no actual account of the peoples of this planet. We have only a series of current images, for anything—the origins of healing as much as the origins of life or the first languages.” This is perhaps why one of my main teachers at Schumacher, Brian Goodwin, encouraged us regularly to “tell good stories and know your audience.” So in a sense the new wave of global consciousness—Gaian Awareness—is built on traditions of the past. But this integration is also novel. Our stories of the past are really contemporary expressions, as Grossinger says above. We certainly cannot rely solely on written records. The focus of my travels around the world these last twelve years has been to embody through actual experience the living medicines of the world. Distilled experiences from all those journeys can be found in my accounts “Plants and Healing Systems of the World series- volumes 1,2,3.”

Grossinger’s list of people who influenced his thinking is broad and very alternative (page *xvi*). On that same page, he has a nice discussion of where in academia this subject fits. It seems as though planetary medicine is the foundation for ethno-medicine. He merges this with psychoanalysis. On page *xx*—“The crisis of medicine and health care that underlies this book is primarily a crisis of definition.”

Secondary List

Those first four books really humbled me. I need to mention another round of three books for their contribution to this dissertation, although the ones already discussed were the major influences. These three books really drove home how limited my understanding was of the research that had already been done on the topic of planetary medicine. They left no doubt that a trail had already been blazed. Big thinkers have come along pondering what types of plant medicines cover the earth and how different cultures utilize them.

The Yoga of Herbs by David Frawley has held a strong place in my library for many years. It was the only book I brought in my bloated pack when I flew on a one-way ticket to India back in 1997. My goal at that time was to find out what Ayurveda was really about. The introduction very clearly explains Ayurveda. A comprehensive list of Ayurvedic terms is defined in western terminology and a listing of western herbs is explained in Ayurvedic terms. The bridging of herbs into different modalities is so important and Frawley's book was one of the early works to do this.

Also central to my dissertation were two books by the same title of *World Medicine*. The first book of that name is by Bellamy and Pfister and is entitled *World Medicine: Plants, Patients and People*. I noted the cultural areas of medicine they discussed that I had not been including: Islamic, Jewish, Egyptian, Sri Lankan, Chinese, as well as areas I have traveled including India and the West. I appreciated their covering the far-reaching and unfamiliar areas. The postscript really impressed me with a listing of healing plants of the world by botanical family. I had not seen that done so well. Their work, combined with the botanical work of Alan Kapuler on orders and higher, shows the *family resemblance* (as Henri Bortoft calls it) of the plants. One of my projects for the next four years is to compile a genus list focused down the same trail these amazing books have blazed. I envision taking the impressive work on North American families by Thomas Elpel called *Botany in a Day* to a planetary level with the working title: *Botany Everyday: Learning the family resemblance of plants around the world*.

I came across *World Medicine: The East West Guide to Healing Your Body* by Tom Monte, et al. again as I was coming to closure on the research aspect of literature review. I realized then that I had briefly met this book years before. It stands as one of the few western books I have seen that broke from the bubble of western thought stuck within the Greek paradigm. The table of contents reflects more accurately the order of influence from the ancient medicines: first Chinese and Ayurvedic, then (thousands of years later) Greek, Homeopathic, Naturopathy, and finally Conventional Western Medicine (CWM). I appreciated his inclusion of CWM within this context, though I find myself more critical and questioning about this modality. I have strong reservations about his painting of Louis Pasteur's work as "standing among the greatest achievements in medicine." Yet, at the end of that chapter (pg 56), he quotes Pasteur

on his deathbed saying, “Bernard is right. Microbes are nothing, the soil is everything.” Strange paradoxes are encountered in a journey through the ocean of literature.

Tertiary List

Recently I came across Lesley Tierra’s *The Herbs of Life* and was very impressed by it. It startled me to realize that I had honored the work of her husband for so many years and had remained ignorant of her wonderful way of bridging worlds through her writing. Relationship building between different cultures is an important skill for those of us living in the Aquarian Age and transitioning from the Age of Pisces. Fortunately, we have a few hundred years to go through the metamorphosis. This is only *the dawning of the age of Aquarius* after all. It is still early in the process of transformation. It is important that we honor and pay attention to the bridges being made and the seeds being planted.

As much as I appreciate her comparison of Chinese and Western Herbal Medicine, I appreciate even more the Aquarian language she uses. Such language is even better represented in Sandor Katz’s *Wild Fermentation*. When I read in that style it brings me in and carries me through like a gourmet meal with good friends where the hours pass unnoticed. Tierra’s planetary message is clearly expressed: “Chinese, East Indian Ayurvedic, Tibetan, Middle Eastern Unani and Native American Cherokee medicines are all founded on an energetic basis.... To use herbs energetically, we look beyond the symptoms of the disease to alleviating the underlying imbalance that caused the disease.... all aspects of a person are taken into account, not just the disease itself.” (pg 4) By *energetic* she means, “hot or cold effects, tastes, properties, colors, growing conditions, chemical constituents and so on.” I read this and see so clearly its absence in most aspects of western medicine that I encounter.

American Herbalism, edited by Michael Tierra, contains some excellent essays by many of the premier herbalists of North America. This book came to me relatively late in my research but I am glad I was able to glean some important insights from it.

The last reference comes from an assistant who rightly felt this book would add richness to my work. *Ecological Medicine* is a compilation of thirty **Bioneers** conference speakers. In the forward,

the editor Kenny Ausubel writes that this book is “...a collaboration of essays on medicine and health, and not just medicine in the ordinary sense...” The subtitle, *Healing the Earth, Healing Ourselves*, allows you to imagine how these thoughtful words of the edge walkers have danced in my head and mingled with my thinking, thus flavoring the work before you.

The above-mentioned texts are supported by a large body of knowledge, some of which I was already aware and others that humbled me. Praise to all those who have come before and nurtured the knowledge forward so we can now begin to grasp our planetary being. Please refer to the Reference and Bibliography sections for a complete listing of the written works that have influenced this dissertation.

The books fall into a number of categories worth mentioning. First, there are the herbals that are often rooted in one tradition rather than pan-modalities. They are rich in wisdom and experience. I use the term **Herbal** loosely, meaning books focused on plants used by humans for medicine/food and often some reference to other uses. This is different from a **Flora**, which is focused on botanical identification. Finally, **Botanical treatises round out the categories**. Too many influences exist to mention all of them. The work of James Duke does come to mind, though. His focus on active constituents has taken him all over the world. This world travel is what prompted our first meeting in 2002 and we continue to meet and occasionally co-teach. I always learn so much from him on many levels. His most famous book, *The Green Pharmacy*, is a classic planetary herbal. It is shaped by the realities of what is available to people from the shops and afield. His life story is also fascinating.

There are a slew of other herbalists that have influenced me including Michael Moore (the herbalist, not the filmmaker), Susun Weed, Gregory Tilford, Terry Willard, David Hoffman, Christopher Hobbs, and many others. The woods wisdom of Doug Elliott in writing and in person has shaped me considerably, as well. Books are secondary to primary experience in many ways, but they are still important. I appreciate that each person is a living library.

A sizeable number of books in the bibliography have been building blocks for my foundation. Though they are hard to pigeonhole, they have been influential nonetheless and provide more context for this work.

Good Aim

My Aim:

To assess the degree to which herbalists in the U.S. and U.K. are integrating traditional medicines into their practices.

Healing Modalities of the World

“There have been literally thousands of traditional medicines described...in all continents throughout the world.”

-Packer, Herbal and Traditional Medicine

I find it hard to conceive of thousands of healing systems. I have tried below to geographically delineate the systems of the world of which I am aware. I often say that there are hundreds of healing systems still in practice on the planet, which treat most of the people. I imagine this is hard for Westerners to comprehend. We have been indoctrinated to think that contemporary western medicine (CWM) is not just the only reputable system, but indeed has evolved from the best that has ever been. This worldview will be remembered as one of the great myths perpetuated even after hundreds of thousands die yearly from the shortcomings of the CWM modality. One can quickly find out the realities of this viewpoint with some research. As the old saying goes, “it is hard to awaken someone who is pretending to be asleep.”

There are books and internet resources which cover the history and particulars of most of the healing modalities of the world. I do not want to take up space rewriting easily accessible information. This section will serve instead to delineate the healing systems of the world. Included also are any comments I have to make from my own experiences with them.

I have had some quality time with over a dozen healing systems and their derivatives around the world. I have been humbled and

amazed many times by them. Yet, I am reminded by Satish Kumar that the divisions of the mind are not reality. There is no Hinduism, no Christianity, no Buddhism. We can catch a glimpse of the divine, if we can keep in mind this paradox between the left and right sides of the brain.

One kind of healer I have spent time with, as I mentioned earlier, is a sangoma. Sangoma is a general term for healers with a spiritual focus in southern Africa. There are hundreds of thousands of sangomas. Every family has a sangoma. To think of this as one system would be misleading. I am sure that within the sangomas there are dozens of prevalent traditions and in the microcosm each healer is unique. However, a lot unifies us as a species with many varieties, within the macrocosm. This is important to keep in our awareness as we delve deeper into the subject of healing systems.

Diversity between and within cultures is quickly being eroded. So much has been lost already. Still, I feel greatly enriched from my eleven years of visiting with the various native peoples of the world. Listening to the stories from the cultures still with us is some of the most important work ahead. My hope is that some of you reading this will feel the call and leave your familiar home, to travel foreign lands and engage the indigenous peoples of the world. This, so that we, the neo-indigenous, can grow through their wisdom. I pray now that this message gets to YOU.

The true wealth of the planet is vast, way beyond our comprehension. We humans are part of that. What are our roles here? We have many, it seems. James Lovelock is always putting forth interesting observations he has made. He recently commented that the urination of humans seems to run contrary to evolution's impulse. Perhaps this is true if you look at it competitively, but if you see it cooperatively an understanding emerges. Our urine of fixed nitrogen as food for plants, fungi and micro-organisms seems to be one of our important contributions, though perhaps off-gassing of urea may be easier on humans. Imagine this. We feed the plants and through the cycles of time they come back to feed us. Look how many times we do it each day as we move about the garden. I am glad that Dr. Lovelock is still with us at nearly 90. Aho!

The time for western herbalism to rejoin planetary herbalism has come. In most places I have been, people are ignorant of the weeds around them. Yet, their work is to heal us along with the land. The USA needs 300 million people living closer to the land in their

daily life, rather than 50 million farmers. The plants are our teachers. They live in one place, yet their seeds travel the world and make homes on Gaia wherever they can. We are like the plants. We are the seeds.

I see all the healing modalities I have encountered as an aspect of plants combined with one of the four elements. Some modalities are primarily based on certain kinds of elements with special mention of an aspect of earth (or its own category), metal. The five-element philosophy of traditional Chinese medicine deals well with the foundation map of human and universal health. As with the Apollo pictures, we can see for the first time the whole of humanity's health systems. From this full palette we can coordinate our Gaian future.

I will present in this section some major healing modalities of the world. This will give you a flavor of the diversity feeding into our future. These represent the healing systems serving most of the people on the earth. Each one has its unique plant medicines and treatments. Some have been around for thousands of years and some for hundreds. I offer reflections for each modality gained from studying world cultures, as well as insights from teachings and readings at Schumacher College.

When studying and integrating these systems into our lives, we must remember the cultural context of the modality as well as the philosophy that underpins the plants and the techniques used. Both the mindsets of the healer and patient as well as the setting in which the work takes place supersede the activity of plant or technique. This is at the core of healing practice.

At the center of these healing modalities sit two systems: Ayurveda (of India) and Traditional Chinese Medicine (TCM). They are complex, diverse and serve over a third of the world. Each is more than 5,000 years old; each is a world unto itself. Let us start our review of the modalities with these.

Ayurveda: The Knowledge of Life

“The Ayurvedic paradigm shows how body, mind and spirit interactions can be predicted, balanced and improved to enable us to live gracefully, harmoniously.... Ayurveda’s greatest treasure, however, are its theories of health and disease, which are remarkably compatible with the models espoused by ‘post-modern’ medical thinkers.”

-Robert Svoboda, Ayurveda: Life, Health and Longevity

I have spent about a year of my life in India including two separate trips in 1997 and 2004. Still, I am young in my journeys of knowing that world. When I returned from my first journey there and began to tell my stories of India and Ayurveda, I quickly realized that most people knew little of India and had never heard of Ayurveda. That is what prompted me to start writing about my explorations. I cannot begin to do justice to describing this healing system within the scope of my dissertation. I can only hope that you will take the time to do some research with the books suggested below.

See Ayurveda as an ancient, 5000+-year-old, codified system of healing with even more ancient roots in **Siddha** of southern India and Tibetan Ayurveda in the Himalayas for the purpose of this work. “The principles of Ayurvedic Medicine and the medicinal uses of herbs are contained in thousands of poetic hymns.” within the Vedas from 2000B.C. (Wyk, 2004, pg 11).

You would see many healing systems available to choose from if you walked down the streets of the cities in India. Some of these include Ayurveda, Homeopathy, Unani (Muslim), Western Medicine and Faith Healing.

Aspects of Ayurveda have made inroads into the U.S. culture through several routes. Some catalysts include the Maharishi Mahesh Yogi-Transcendental Meditation program, yoga, dozens of ashrams around the country, a few Ayurvedic schools and some well-known champions such as Deepak Chopra and Vasant Lad. Ayurvedic cooking has some important contributions to health and is making some inroads in yoga programs.

My first encounter with Ayurveda was in 1994 when a chiropractor trained in Maharishi Ayurveda introduced me to the **tri-**

doshic system of vata-pitta-kapha. He recommended that I reflect on my lifestyle and eating habits compared to the recommendations based on my **prakruti** (birth constitution). I found the ideas he presented fascinating.

I later studied Ayurveda in herb school in 1995. By 1997 I was ready to immerse myself into the extremely different culture of India for nine months. I went back again seven years later for two months. I have embodied the Ayurvedic approach into many aspects of my life, though I do not claim to be an Ayurvedic practitioner. The emphasis on digestion and diet, matching lifestyle with constitution, a focus on prevention, and a huge apothecary of herbs and treatments all appeals to me. However, I also see some limitations and biases.

The cleansing branch of Ayurveda, called **pancha karma** (five actions), assists people in releasing chronic conditions and excess **ama**. Pancha karma is preceded by **palliative** actions to prepare the body and followed by **rejuvenative** actions to reinstate healthy function of the body.

Ayurveda practitioners have a large number of famous herbs in their apothecary and some well-known formulas such as Triphala, Chyvanprash, and Trikatu. Some of the well-known herbs include ashwaganda (*Withania somniferum*) shatavari (*Asparagus racemosus*), pippali (*Piper longum*), brahmi (*Bacopa monieri*), amalaki (*Phyllanthus emblica*) and neem (*Azadirachta indica*).

All books by Robert Svoboda and Vasant Lad are useful resources for further study. Also, look into the books *The Yoga of Herbs* by Frawley (the only book I brought to India the first time I went!) and *Planetary Herbology* by Michael Tierra.

Chinese Medicine

“No other medical system deserves the title ‘traditional’ more than Chinese medicine. Modern Western medicine, which we often refer to as ‘traditional’ is only two centuries old. Chinese medicine, on the other hand, is at least 3,000 years old, and is still being used to treat tens of millions of people in China and other places around the world.... Chinese medicine is based on the view that humanity is

part of a larger creation, a greater body, that is the universe itself. Each of us is subject to the same laws that govern the stars, the planets, the trees, and the soil.”

- Monte, World Medicine (pg 19)

I was surprised by all the ambiguous information regarding healing arts in China when I researched this ancient culture. What adds to the confusion for me is that I have not been to China yet. Therefore, I need to rely on stories to form an image of not only the history of Chinese medicine but also the contemporary situation.

Nonetheless, it is apparent to me that Chinese medicine will continue to contribute fundamentally to the healing systems of the world. Fortunately, through dozens of colleges, the modern Chinese medicine system has made huge inroads into American culture these last 30 years. A good number of books describing this system for the western mind have also come along.

“For thousands of years the Chinese have observed life processes and relationships between man and his environment. From this observation, the art of Chinese medicine has developed vocabulary to describe myriad subtle body patterns, a method of description not available to Western medicine because of its emphasis on disease states. The Chinese approach is a more holistic consideration of health and disease and of the delicate interplay between these opposing forces.”

-Kaptchuk, The Web that has No Weaver

Robert Duggan, founder of Tai Sophia Institute, challenges the whole notion of “systems of healing” as an abstraction. He speaks of how TCM is really the story of thousands of people who stuck needles in people and gave them herbs to eat. He emphasizes that to take those stories and conceptualize them, looking for common patterns, is an abstraction that can lead us astray from reality. Henri Bortoft spoke of this as the common state of modern living where we live downstream of reality in **counterfeit wholes**.

There are clear, comprehensive descriptions of the history and details of Chinese medicine, as seen in books referenced below. It is a complex history, including a significant shift in the last 59 years with the coming of the “cultural revolution.” Mao Tse-Tung stripped Chinese medicine down to the western approach of herbs and

needles. “Since the Communist revolution, Chinese medicine has tended to eliminate the psychological and spiritual components of healing, emphasizing the efficient and effective treatment of physical symptoms.” (Tierra, M., 1988 pg 39). Though this has been effective at bringing TCM into the western world, we mustn’t forget the energetic aspects that have been presented to the west in the form of Worsley’s Five Element Approach.

It behooves us to consider the contributions of both ways, as well as other approaches found around vast China, as our cultures intermingle more and more. I intend to visit Southern China in the next couple of years as part of my studies of plant genera around the world. Again, I cannot summarize Chinese medicine here in any comprehensive way. Instead, let me put out a roadmap with significant points to ponder.

Within the one is the duality of yin and yang followed by the five elements. This is at the core of TCM and Five Element Theory. Within this system’s model of the human body there are very different meanings to the word organs. These are connected by **meridians**. Digestion is governed by the triple-burner. Within the kidney organ there are energetic centers containing Jing (birth energy), Shen (spirit), and Qi (Chi or Ki)(life force energy). This system has very different definitions of blood and the other fluids. These qualities can be experienced and shifted in many ways including acupuncture, herbal medicines, and/or burning herbs in moxabustion.

The sheer breadth and depth of Chinese medicine holds its place as a cornerstone in ensuring our collective health. “The most complete reference to Chinese medicine came out in 1977. It listed 6000 drugs with 4800 being of plant origin.” (Wyk, 2004 pg. 10) I have many questions about TCM, especially regarding how they process herbs and make medicines. I aim to find out much more when I am there. It will be a busy time meeting the genera of plants and witnessing the rural and urban cultures. What do they eat? What medicines do they use? Who do they go to for healing? Do they all do Tai Chi in the morning?

There are other healing systems in China and around the orient including Korean Traditional Medicine and Japanese Traditional Medicine (called Kampo). I know little about them.

Some significant herbs I use and recommend include the medicinal mushrooms shiitake (*Lentinula edodes*), turkey tail

(*Trametes versicolor*), and ling zhi (*Ganoderma lucidum*). Plant medicines include ginseng (*Panax* spp.), dong quai (*Angelica sinensis*), jiaogulan (*Gynostemma pentaphyllum*), jujube (*Ziziphus* spp.), codonopsis (*Codonopsis pilosula*), he show wu (*Polygonum multiflorum*), and *Astragalus*. Some argue that yin chaio is the most consumed medicine formula on earth.

Books to look into in addition to those mentioned include *Planetary Herbology*, by Michael Tierra, *Herbs for Life*, by Leslie Tierra, *Between Heaven and Earth*, by Harriet Bienfield, and *Healing with Whole Foods*, by Paul Pitchford.

Western Herbalism

(Galenic/Humoral/Greek Medicine/Traditional European Medicine)

Western herbalism (all of western culture, actually) traces its roots to the Greek civilization. It was implied that the Greeks were the oldest, most advanced civilization and that the rest of the world was barbaric and primitive in my early education. Many advanced civilizations preceded and seeded the Greeks by *thousands* of years, as you have seen above in the discussions of herbal history. Some of these cultures have continued into the modern times. These cultures shaped Greek culture at its core and ultimately us. It is time we expand our understanding of herbal medicine to include these ancient cultures. We need to look indeed out into the entire world to understand our collective roots. Every culture that preceded the modern one throughout the world has a history involving plants. Many of those relationships are relevant today to assist us in the challenges before us.

I am not very knowledgeable of European herbal history. I look forward to knowing more in the years ahead. I look forward to visiting the Caucasus Mountains and Italy in the next few years. I know there is a strong history of **phytotherapy** alive in Europe.

I found through researching that written records of Sumerians (4000-2000 BC) described medicinal uses of specific plants. Greek and Roman herbal remedies were described by Hippocrates (460-377 BC) and later by Galen (129-199 AD). “Hippocrates was an advocate of using simple plant preparations along with fresh air, rest and

proper diet to help the body's own 'lifecycle' to eliminate problems. Conversely, Galen promoted the use of direct intervention to correct imbalances that cause disease..." -Auerbach, *Wilderness Medicine*

The earliest written European compendium of medicinal plants is *De Materia Medica* by Greek physician Dioscorides (40-90 AD). His work described 600 plants and remained the authoritative herbal reference into the 17th century.

Serturmer, a German pharmacist, isolated the alkaloids of opium in 1806. This began a quest to isolate more compounds through the 1800s into the 1900s.

Most of my knowledge rests in U.S. history with a deeper exposure to U.K. history in the last year in terms of Western culture and herbal medicine,. So let me discuss....

Herbal Medicine in the United States

People are believed to have come to the Americas from Siberia 15,000 years ago over the Bering Strait. Upon arriving they quickly traveled over both the north and south continents. They hunted to extinction many mammals and tended large areas of land the colonialists thought were wilderness when they arrived. Read *1491: New Revelations of the Americas Before Columbus* by Charles Mann for more information on this matter.

The western herbal movement in the U.S. began with the Spanish explorers who arrived in the mid-1500s. They brought botanists and ethnographers who recorded the habits of the native people. Nearly an entire extinction of the native people upon contact with the Europeans from diseases brought with them and their animals occurred.

When the colonialists began "settling" North America in the 1600's herbalists came with them. Read *The Cartoon History of the United States* by Larry Gonick for many perspectives of how this came about. Some of the settlers "went native," becoming white cure doctors. One famous healer named Samuel Thomson created the Thomsonian School of Medicine. He had over three million supporters by 1839. In *World Medicine* he is credited with being a "pioneer in self-help medicine."

"Before a professional medical class was established, most illnesses in America were treated within the family and extended family network." (Auerbach)

Eventually, a couple of Thomsonians traveled back to England and re-invigorated the herbal medicine movement there. Read Simon Mill's *Essential Book of Herbal Medicine* for a good rendition of this story. Basically, the herbal tradition of England had been shattered as a consequence of the Industrial Revolution, when people left the country with its forests and hedgerows to venture into the city. Ironically, these city dwellers then needed doctors. The Thomsonians arrived to help fill that need. To this day roughly half of the English herbal apothecary is made up of North American herbs!

The Eclectic School of Medicine opened back in the states, which sought to unite the Thomsonians, the allopathic doctors and traditional herbal medicine.

In the early 1900s things began to change when the newly created pharmaceutical companies funded the allopathic colleges. The newly founded American Medical Association (a private organization) began an attack campaign against other forms of healthcare at the same time. The government-sponsored Flexner Report on medical education in 1910 emphasized allopathic principles and the modern pharmaceutical industry. This study was funded by the Carnegie Foundation. Allopathic medicine moved to an almost total monopoly over the century. Synthetic drugs replaced herbal medicine and surgery and radiation became the norm. By 1939 the last eclectic college closed. The famous herbalist Michael Moore comments that the movement “survived for a century, was famous (or infamous) for its vast plant materia medica, treated the patient and NOT the pathology, a sophisticated model of [vitalist](#) healing.” There were a few amazing exceptions that persisted like Jethro Kloss' *Back to Eden*. Read *When Healing Becomes a Crime* by Kenny Ausubel and *The Hundred Year Lie* by Randall Fitzgerald for details about this. Over 200 plants were listed in the *U.S. Pharmacopeia* in 1936 and less than 40 remain.

Since the 1960s there has been both an explosion of technology and biomedicine *and* at the same time an emergence of what anthropologist Morgan Brent calls a “neo-indigenous revitalization movement.” I will be drawing from his dissertation in this work. Brent has outlined well the details around the herbal movement in the U.S. over the last hundred years and its implications towards the future.

The revitalization movement was initiated by the hippies, who were looking to reconnect with nature. Each of those whom Morgan

calls the **spring herbalists** describes an awakening time when they were **gaia'd** and took on the work of sharing knowledge about the green plant beings. It started becoming profitable in the 1990s and there has been a struggle ever since between embracing the **active constituent** path or the **whole plant** path. Each path has a very different future. The struggle continues to this day. One of the well-known herbalists in Brent's work comments, "We feel more connected when we are back to the heart connection with plants and animals. That's why I have so much trouble with herbs becoming something you go to a store and buy in a bottle. There's no nature connection there.... Standardized herb is an oxymoron. Standardization is a marketplace creation issue.... To me potency does not come from the white coats and stainless steel, but from the relationship, the harvest, the connection...." (pg 136) Brent lists ten similarities that spring herbalists share with indigenous people (pg 230-232).

The green witch Susun Weed in her book *Healing Wise* describes three traditions of healing present in western society today. "The *Scientific* 'Trust my machine'; the *Heroic* 'Trust me' and the *Wise Woman* 'Trust yourself' are ways of thinking, not ways of acting. Any practice, any technique, any substance can be used by a practitioner/helper in any of these traditions.... The practitioner and the practice are different.... The intent, the thought behind the technique points to the tradition: scientific fixing, heroic elimination, or wise womanly digestion and integration.... As the wise woman way becomes more clearly identified, it opens the way to an integrated whole, sacred, peaceful global village, interactive with Gaia, mother, earth. As each discipline spins anew its wise woman thread, we reweave the web of interconnectedness with all beings." (pg 1)

Native American Medicine

There are records of over 1,000 separate nations who have lived in the Americas and hundreds still exist. Each has their own approach to healing and each has their own unique relationships with the plants. I will write of the North, Central, and South Americas separately.

North American

“Certain great and powerful Medicines are very touchy. They cannot have anyone with the least bit of disbelief in them see them. Nor can you speak of them to anyone who has this disbelief. Disbelief dilutes any Medicine to the degree of the disbelief.”

- Ted Williams, *Big Medicine from Six Nations* (pg 29)

“If you and I were sitting in a circle of people on the prairie, and if I were to place a painted drum or an eagle feather in the middle of this circle, each of us would perceive these objects differently. Our vision of them would vary according to our individual positions in the circle, each would be unique.

“Our personal perspectives of these objects would also be dependent upon much more than just the different positions from which we looked upon them.”

Hyemeyohsts Storm, *Seven Arrows* (pg 4)

Much turmoil has befallen the native peoples of North America since Europeans first arrived 500 years ago. They brought plagues, battles and cultural genocide. Today only remnants remain and, although rich, they only hint at the societies that once ruled.

Our understanding of history has changed in these last twenty years. The theory of human origin has shifted to focus on Africa instead of several parallel evolution areas around the world for example. I was at the Smithsonian Museum of Natural History in D.C. some years back and saw them taking down the old exhibit and putting up the new one. Another great example is the notion of the Americas as a vast untamed wilderness. It has been dismissed in the face of knowledge about huge settlements and millions of people inhabiting the continent.

My own education of the last twenty years has involved acquiring living Native American knowledge through my association with a back-to-the-land movement that started in the 1970s called the Rainbow. It was at one of these Rainbow gatherings in 1994 that I went on my first plant walk. This opened me to the true abundance of nature. I have not only met thousands of plants but have been trained in healing techniques such as sweatlodges, peace pipe ceremonies, medicine wheels, smudges and vision quests within these gatherings.

I have heard many stories of our origins and of how to walk the **red road** of honorable living.

Many of the plants in North America (20,000 spp. total) (Kartesz) have Native American stories associated with them. Some plants that are well known from this continent include *Echinacea*, sunflowers (*Helianthus* spp.), pokeweed (*Phytolacca americana*), white sage (*Salvia apiana*) (a mint), sagebrush (*Artemisia* spp.) (a composite), osha (*Ligusticum* spp.), tobacco (*Nicotiana* spp.), yerba santa (*Eriodictyon* spp.), slippery elm (*Ulmus rubra*), and *Grindelia*.

In addition to the books mentioned above I recommend *Black Elk Speaks* by John Niehardt.

Central America and Caribbean

My only exposure to the countries along the Isthmus of Panama is three journeys to Costa Rica. I encountered lush rich lands and much experimentation in organic food production, permaculture and birthing of the Aquarian Age. The local people of Hispanic descent by and large seem kind and peaceful, living out their version of Spanish culture. I have seen a few indigenous people in the towns but have not had occasion to engage them yet. I am sure some plants and healing techniques shall come forth from the six countries of Central America. I am told that there are some intact indigenous tribes in Panama and look forward to time with them.

In the Caribbean Sea I have visited Jamaica, Dominica and Puerto Rico. My two times there have dispelled any preconceptions I had about the Caribbean being only full of sunbathers. The Caribbean contains thousands of islands and most have endemic plants. In Jamaica and Dominica I got a sense of thriving herbal cultures especially from the Jamaica bushman and the Carib Indians.

South America

I have made four journeys to Peru and one to Ecuador over the past nine years. Each journey was filled with adventure and discovery. I see South America as an immense continent to learn from in the decades ahead. I cannot speak of that world in any continental way. I

can convey some insights about Peru and the healing cultures there, including two connected branches. These are the healers of the Andean Mountains with their Incan roots and the Amazonian cultures with their tribal peoples. This is all mixed up with the dominant Hispanic culture and a smattering of Asian and Indian (as in India) influences. I think of my main teacher there, the Ayahuasco Don Juan Paima, as a mirror of this. His grandfather was Chinese and on the walls of his healing hut hung posters of Mother Mary.

Both the Andean and the Amazonian cultures have access to powerful, diverse foods, medicines and sacraments. There is a growing awareness in the west of these practices and their wonderful contributions to the modern world. Their food plants already encircle the world and feed it. Their medicines and healing ways have and will continue to do the same.

The Amazon represents a place to feel the wild and abundance despite the onslaught upon it! You feel a different healing modality than in the urban centers of India or Europe in the jungle of South America. The plant spirits rule and humans are clearly only one species amongst the multitude in the wilderness. We have much to learn from the Amazon and the South American continent.

I recommend reading *Wizard of the Upper Amazon* by F. Bruce Lamb and *One River* by Wade Davis to begin the journey of understanding the richness of that world.

African Medicine

I have been to southern Africa twice in 2002 and 2006. I spent time in eight countries studying plants and native ways. That was enough time to know not to take the name *Africa* lightly. Any way you look at Africa it appears overwhelming. The continent contains 61 countries/territories, is four times the size of the U.S., has hundreds of cultures and about a billion people.

When I speak of African medicine my experiences are from southern Africa and they are memorable. I feel the healing modalities of Africa have hardly been approached yet by the Western world. The world will soon be tapping into the knowledge of Africa with the same fervor of its relatively recent enthusiasm for Indian and South American medicines with the works of Ben-Erik van Wyk at the helm

and teachers like the ethnobotanist Dale Millard. This is good in many ways because the modern approach to health lacks some of what Southern African medicine offers, which is an emphasis on **set/setting** and creative ways to shift the energies in people. They have many approaches to healing as well as a powerful and diverse apothecary.

The African medicinal systems are the oldest in the world. Ben-Erik van Wyk's work has a good emphasis on the medicine of northern Africa and the Middle East. I have very little to say on this as I have not spent any time there nor focused on it yet. I spent time with the Moslem culture in India. That is the closest I have come to experiencing Unani medicine and the many other traditions of the African tribal people and the Middle Eastern peoples. I look forward to walking ancient trails through the cradles of civilization. There are many medicines (poppy (*Papaver somniferum*) and senna (*Cassia* spp.) and spices (onion (*Allium cepa*) and asafetida (*Ferula assafoetida*) and foods (grapes (*Vitis* spp.) and almonds (*Prunus dulcis*), sesame seeds (*Sesamum indicum*) and pomegranates (*Punicum granatum*) to experience on the journey to discover what ancient ways are still alive.

I have little experience with Western Africa. I have looked at a few books, talked with some explorers and know of some plants. Certainly Africa is a huge endeavor. Perhaps a whole lifetime's worth? The adventure continues. Some plants to note from Southern Africa include *Aloespp.*, *Acaciaspp.*, buchu (*Agathosma*), rooibos (*Asplathus*), African potato (*Hypoxis*), and devil's claw (*Harpagophytum*).

Polynesian Traditional Medicines

This healing modality encompasses many islands as the name Polynesian (Poly-many; nesian-islands) states. All of these islands are located in the southern Pacific Ocean. The Pacific ocean covers 1/3 of the earth. Most of the islands are tropical in location, with the exception of Hawaii to the north, Easter Island and Rapa to the far East and New Zealand (NZ) to the far south. These are categorized as sub-tropical to temperate. They form the outer perimeter in what includes over 1000 islands.



www.answers.com/topic/polynesia

The Polynesians who settled New Zealand a thousand years ago were culturally shaped by the temperate climate and the continental rock. Most of the islands are volcanic in nature. This can be seen through their evolution in the face of different environmental needs and unique populations of plants.

My experience with Polynesian cultures is limited to Hawaii and New Zealand. Before going to NZ I had often heard NZ/Australia referred to in the same sentence and assumed they had similar histories. But nothing could be further from the truth.

I noted the Polynesian influence when I arrived in NZ. I learned more of NZ's history and how Polynesians had come in long boats from the north. The islands were first settled by groups from Easter Island. I began to have a clearer sense of its origin. I remember standing on the north island looking to the north and feeling all the islands and energy between NZ and Hawaii far away. It was humbling to see limits to my journeying in this lifetime.

Despite the wide distribution of the islands and populations, the knowledge of healing seems to follow similar streams. I first noticed this when I saw the NZ Maori equivalent of kava kava (*Piper methyisticum*), that the Polynesians called kawakawa (*Macropiper*). I was amazed to learn the story of the sweet potato and its migration around the islands while maintaining its ancient name (kumara) from the Andes. Later, I learned many plants and ways of being that shared the names and uses of Polynesian cultures.

Spanish expeditions discovered the Polynesian islands in the late 1500s. They brought with them diseases (a familiar story all over the world) that decimated the populations. But, resistance grew and the populations recovered.

The Polynesians have important healing plants and methods to bring to world awareness. Early accounts of the native Tongan healers referred to their herbal medicine as rudimentary and secondary to their magico-spiritual ritualistic healing. Hence, it was discredited and largely ignored while being culturally destroyed. More recent research has revealed that the medicine path was a secretive one and the explorers and settlers were not privy to this.; Thus, they missed the complexity and subtleties of the healing practices.

I was impressed by their knowledge of hydrotherapy in my own research in NZ. They have seven different kinds of water-based treatments using steam, hot water, cool springs and ocean for many kinds of ailments. Whistler writes in *Polynesian Herbal Medicine* that “Polynesians believe that spirits are repelled by strong odors often administered in a wide array of water treatments.” (pg 45)

I took a course on Maori medicine and learned how they harvested medicine from the part of a plant that catches the first light of the rising sun. Their collection of herbal medicines is impressive. It includes amazing conifers such as askauri (*Agathis australis*), rimu (*Dacrydium cupressinum*), totara (*Podocarpus totara*), miro (*Prumnopitys ferruginea*) and more. Other plants are cabbage trees (*Cordyline*), and tea trees (*Leptospermum*). Tea trees are not used for tea tree oil but by bees to make manuka and kanuka honey. When the Maori king heard from Captain Cook that there was no NZ Flax (*Phormium*) growing in England, he asked, “How can you possibly live there?” Ironically, NZ Flax is now grown widely in southern England. Lots of interesting members in the Ginseng family (Araliaceae) and other fascinating genera are native to these magical islands. They also have hot springs, volcanoes, glaciers and more!

I appreciated that the Maori had three levels of growing and tending to plants—good years, okay years and lean years. In lean years they had to rely primarily on wild food to live. I was excited to read and hear about their wide eating of ferns (over 200 spp. there) and orchids. Around NZ grow over 600 species of seaweeds of which 40% are endemic.

Aboriginal Medicine

I will include the aboriginal modality here, near the Polynesian section as done by Wyk and Wink. This is merely convenience as it is important to remember that the human history in Australia is a separate one, much more ancient than the one in New Zealand. Aborigines crossed from the mainland into Australia 60,000 years ago.

I am sure we will learn more from this diverse ancient culture with over 200 separate groups throughout Australia and neighboring islands as we try to repair the last hundred plus years of genocide. The modern culture there appalled me, but perhaps changes are afoot with the new government. I never felt I could bond significantly with the native people encountered within urban settings. My own inroads came in bonding with the plants directly and through the teachings from bushtucka (wild food) experts in the alternative white cultures.

Many plants made strong impressions on me, especially in the NE which has the oldest tropical rainforests in the world. Also plants around Perth and south of Darwin. The forests of eucalypts (+700 spp.) and the paperbarks/tea trees (*Melaleuca* +200 spp.) were amazing. The ancient plant balga (*Xanthorrhoea*) had a big influence on me and told me important stories.

Hybrids of the Foundational Modalities

When I talk about the dominant systems of medicine, a Westerner would inevitably think of CWM One's *doors of perception* have hopefully been cleared and one can see that western medicine is a kind of hybrid from earlier systems after exploring the modalities discussed above. Actually, it can be seen more as a stripped down system that relies on technological solutions and logic in its methodology. The focus is on symptoms and ignores constitutional conditions.

Schumacher teacher Brian Goodwin described that in phase transitions, "right at the point that liquid/vapor is in its own state, various aggregates form and disperse *exploring the potentials of*

expression.” He pondered that this is perhaps “how water properties are different in homeopathy.” He generalized from this scientific observation, “living organisms have similarities to this...also culture and literature.”

These hybrids of the foundational modalities may also be exploring the potentials of expression. A good example of this is Nature Cure, which is discussed below. Another example is the Five Element Theory. J.R. Worsley traveled through China gathering the discarded strands of the streamlined TCM system supported by Mao. With the “western science with needles” approach, the Neo-Chinese culture has spread around the world. Worsley gathered some of the missing pieces and presented Five-Element to the world in a way the west could understand. Macrobiotics brought to the west by Michio Kushi represents another example. I would add to that list CWM.

Many of the hybrids that come forth will prove not to be resilient. They will fall away like hybrid plants that have come out sterile and do not endure. But a few will live and can offer alchemical insights into the global system rising.

This is what is unfolding in the ongoing Planetary Healing System. We glean what we can from the past and combine it with the insights of the present so we can be better prepared for what befalls humanity. One challenge though, is that our collective memory of the past is quickly falling away as the older generations of people die without passing along their healing wisdom.

I read recently that there are a quarter of a billion indigenous people left on the planet. That may sound like a lot but in the pool of billions they represent less than 4% of humanity. This treasure trove of humanity’s history contains our living collective knowledge and it is being eroded away at an alarming rate.

The death of each indigenous adult is like losing a map of our origins. What can we do about this? I see that it would be hard to keep up traditions that are not mirrored in the world around when I try to imagine an indigenous person’s point of view. How is one motivated to spend a couple days carving a bowl when the modern world presents durable plastic ones for so little of this “thing” called money, for instance? The youth are tempted by the glitter of modern living and are not called to carry on the old ways, though the elders might see the loss. Jerry Mander in the *Absence of the Sacred*, points out several pages of distinctions between indigenous and contemporary cultures (Table 1 below).

Ivan Illich in *Deschooling Society* takes this further showing us the indoctrination of education:

“Medical treatment is mistaken for health care, social work for the improvement of community life, police protection for safety, military poise for national security, the rat race for productive work...Everywhere the hidden curriculum of schooling initiates the citizen to the myth that bureaucracies guided by scientific knowledge are efficient and benevolent...instills in the pupil the myth that increased production will provide a better life.”

We do not even have a firm foot to stand on as we try to discern the course of humanity. An impossible task I know, but I feel perhaps there are whiffs and hints of things to come that we can pick up on if we can listen and communicate, reflect and discern. We are manipulated at every level—education, religion, medicine, community, and relationship. An old friend of mine often says that modern people are “damaged goods,” to remind us of the challenges of being here.

Table 1: Distinctions between Indigenous and Contemporary Cultures

Area	Technological Peoples	Native Peoples
Land	private property as basic value	no private owning land
Means of Exchange	currency system-abstract value	barter system-concrete value
Average workday	8-12 hours	3-5 hours
Economics	growth required	steady state
Nature viewed as	a resource	a living being
Reverence for	the young	the old
Focus on	saving and acquiring	sharing and giving
Human and Earth	superior and dead	alive and in the web of life

How do we decide for ourselves what is the best course of action, not just to survive but to thrive? Ivan Illich said in a speech given to new volunteers coming to Mexico to “help” underdeveloped villagers that, “I am here to suggest that you voluntarily renounce exercising the power which being an American gives you. I am here to entreat you to freely, consciously and humbly give up the legal right you have to impose your benevolence on Mexico. I am here to challenge you to recognize your inability, your powerlessness and your incapacity to do the ‘good’ which you intended to do.”

So what to do? We are not in a static situation from which to reflect. Everything is shifting.

As Illich and others suggest, the best course is not to go forth to “help” but to initially agree that things have got to change and start from there. Gustavo believes our greatest challenge ahead has to do with “dialoging between cultures.” Self-reflection, action, communication and change are all necessary. How, when, why, where and who (you?) will make it happen?

I can sympathize with *The Shaman’s Apprentice* author Mark Plotkin’s efforts to legitimize the owners of the indigenous wisdom. Protections are needed for the forest and native peoples in the face of the corporations who come in and steal knowledge, claim patent rights, and capitalize on it. Plotkin’s group is trying to establish the Amazon healers as the true owners of that knowledge with rights and royalty claims from the corporate profit. Of course, it is hard to imagine a shaman holding onto his/her **indigeneity** with a million dollars in a bank account. That seems like a band-aid fix when we need a paradigm shift. Modern people, and their non-being entities like corporations, have been extracting from the native peoples for hundreds of years. Raiding bands of sky worshipers began destroying the Gaia-worshiping cultures thousands of years ago. Read mythologist Jules Cashford for details regarding this history.

So what can we do about it? Spread the word. Be a model of simple and natural living. Challenge the corporate paradigm at every level. Engage local community and make little changes while adapting and adjusting along the way. Stay open.

I in no way want to disregard the efforts made by humans for a better world. No one knows where this Gaian lifeboat is going and what skills and abilities we will need for the challenges ahead. We can look around and see that many things are not working. Our experiments in individual accomplishment over collective good, neo-

technological solutions, and attempts to separate ourselves from Nature have brought us into a world that is polluted and out of balance. We will have already evolved a long way if we can agree that fundamental changes are necessary. Brian Goodwin reminds us that, “We are not only learning for ourselves, we are learning for Gaia.”

Nature Cure

*“Foremost among medical systems that are influencing the industrial allopathic, drug-oriented model at present are TCM and Traditional European Medicine (TEM). I have coined this last name, based on the ancient Western traditional system of therapeutics using herbs and **nature-cure** (water, foods, and other natural therapies).”*

-Christopher Hobbs, *American Herbalism* (pg 270)

Eddies of hybrid systems have been forming at the base of the two great healing systems of TCM and Ayurveda. We are blessed by the fruits of evolution as new systems of healing come to life and share their messages with us. Hobbs calls this *modern transcultural polymedicine*. For me, a quintessential one is Nature Cure.

I came across one of the two government-sanctioned clinics of Nature Cure along Varkala Beach in Kerala, India during my last visit there in 2004. With some research I learned that Nature Cure was created by Gandhi (of course!). He amassed research on health in the U.S. and Europe. These early discoveries later developed into Naturopathy and later became popular in health retreats. He combined these ideas of diet, hydrotherapy, color therapy, and much more with ideas from the rejuvenative branch of Ayurveda called Swaasthya. All this together made up Nature Cure.

I met with a couple of other private Nature Cure practitioners in Kerala and later traveled to Hyderabad, A.P. to meet with Dr. Bapuji. He is both an MD and Nature Cure doctor and has been a teacher for many, including the Nature Cure Doctors I met in Kerala.

His parents were followers of Gandhi and trained in the principles of Nature Cure. They are said to have walked into Hyderabad with only an enema can and the clothes on their back as renunciants of materialism. They went door to door offering to ease suffering for people and did this so successfully that eventually a

hospital and then a school of Nature Cure came forth. Through all this they maintained their austerity.

I was very impressed with what I experienced from NC. I appreciated their approach of having a patient fast or eat lightly, rest and hydrate. Their focus is on supporting the body's functions, cleansing, and rejuvenation with an emphasis on lifestyle.

Contemporary Western Medicine

“As I watched the healer use plants to treat everything from colds to cancerous tumors, I began to realize that my focus on government-approved pharmaceutical drugs was far too narrow.”
–Joel Swerdlow, Nature's Medicine

“The influence and power of industrial medicine has peaked and we are now realizing this old order, ‘old paradigm’ medicine, has been a major contributor to environmental destruction. One need not look too far to see that industrial wastes from the manufacture of synthetic drugs and the use of hi-tech medical diagnostic devices, such as X-ray and radiation treatment machines are not environmentally sound. This is not to say that all technological medicine is worthless and should be discarded... However, embracing a more simple, environmentally-responsible, less technologically-oriented person-contact medicine can by no means be counted as a regression in the overall health of the people or the planet.”

–Christopher Hobbs, American Herbalism

“The germ is unimportant: it's the terrain which matters,” said Louis Pasteur on his deathbed.

“Modern western medicine has not heeded the final verdict of Pasteur: its focus has been on the disease itself rather than on the person suffering it.”

–Barbara Griggs, Green Pharmacy (pg 365)

It is tempting to compare the healing modalities of the world to Contemporary Western Medicine (CWM). However, I feel that simply brings more energy to a focus that already has too much emphasis and prevalence in the modern world.

What is CWM really? It is yet another emergent system arising from the cornerstone systems mentioned above (Ayurveda, TCM and the Galenic System), expressing its potentiality. Several situations led to its dominance. These include patentability of synthetic medicines, mass production, and standardization, to name a few. It also rode the rise of the industrial revolution. CWM gained the support of the corporations, governments and Christian church. Through these institutions it aggressively destroyed the presence of other healing modalities in its rise to dominance.

These factors aside, one can more easily assess the efficacy of CWM. One can see what this system gave up to appeal to the above interests and to separate itself from the leading systems of the time of its conception. The world has changed quite a bit in the last 300 years of CWM. Its rise to power is startling to study. Read *When Healing Becomes a Crime* by Ausubel, *The Hundred Year Lie* by Fitzgerald and *Green Pharmacy* by Griggs to get details on this.

The story of this emergent system shows us possibilities of how we can evolve, and warns us of unhealthy combinations. With the overwhelming side affects of CWM we have to thoroughly examine how we have gotten into this situation. The deaths from CWM are so prevalent that a special term has been created to describe them, this term is iatrogenic, which is Greek for “caused by the doctor,” and coined by Illich). This is acknowledged, quietly, by even the *Journal of American Medicine*:

“In the United State alone, recorded deaths per year (2000):

12,000—unnecessary surgery

7,000—medication errors in hospitals

20,000—other errors in hospitals

80,000—infections in hospitals

106,000—non-error, negative effects of drugs

Based on these figures, 225,000 deaths per year constitutes the third leading cause of death in the United States, after deaths from heart disease and cancer.”

--Starfield B (2000) "Is U.S. health really the best in the world?"

Journal of the American Medical Association **284** (4): 483–5

CWM focuses on disease and symptoms rather than the patient’s constitution. It also relies on technological solutions to problems, believes in the “germ theory,” and ignores the energetic aspects of

healing. The death rate from this modality exposes the medical crisis upon us. Ivan Illich's critique of CWM in his book, *Medical Nemesis*, is a must read to understand our plight.

This system is so entrenched in modern society that change will have to be fundamental. Einstein has shown us that the world is not a clock. Lovelock has shown us Gaia is alive. We need to see that living beings are not machines to be tuned and parts replaced. We shall see a transformation and repositioning of CWM within the planetary context as I have said earlier, with the metamorphosis of Western Science into Holistic Science.

Homeopathy/Flower Essences/Energetic Healing

These kinds of healing modalities came into my consciousness during the 1980s. I had seen homeopathic Arnica cream work. I went to a food co-op conference and a homeopath shared with us the basic theories and philosophy of that approach. I saw that although homeopathic medicine is physically only sugar pills, it worked consistently with children and animals. Over the years I have opened much more to the energetics of healing by seeing placebos not as tricks but as tools to aid patients in believing in their healing process. I have grown to see psychosomatic effects not as some kind of false illness but as essential and fundamental to health and healing.

I carry some basic homeopathic medicines and flower essences in my medicine kit. I have been treated with homeopathy on several occasions to help with such ailments as malaria and kidney stones. I sought advice from several homeopaths on what remedies to bring my first time to Africa. Many books about these healing modalities have been written. Homeopathy is well established, with libraries and colleges supporting the path. Explore these healing ways and inform yourself.

I see homeopathy as a branch of herbal medicine. Indeed, mother tinctures of the remedies are basically plant and other things extracted into alcohol. The mother tincture is diluted from zero to many times and **potentized** through a shaking movement called **proccussing**.

I am very impressed with the homeopathic diagnostic manuals compiled from collaborative observations of thousands of people for example, Boericke, 1917. Ironically, if these books outlined the collection of the behaviors of another animal species, they would be

considered a great scholarly work. But since it focuses on humans it is largely ignored by Western science.

Interest in homeopathy was reignited in me when I was in India and saw firsthand how its presence was so strong there. I have heard numerous times that Homeopathy has thrived best in India.

I would call flower, as well as other biota and mineral essences, an aspect of homeopathy which is itself a branch of herbal medicine. Generally speaking, I see these treatments as focused on the emotional body and mental states. I would include in this group Aromatherapy and Color therapy. These are all well developed paths that need care and attention. The energetics reside within the greater **feng shui** of life. Gardens, water flow, smells, and arrangement of objects all create the setting that enables or disables healing. In a tranquil environment, the subtle shifts of the energetics of many of these therapies can be profound and can be the context for cathartic experiences. Each of these reactions ripples through the body.

The realm of hands-on healing is vast. The healer forms a channel through the patient's body for spiritual essence. In some ways this is beyond the scope of the current work. However, as in yin/yang, the spiritual nature of all things underpins its physical presence. I have certainly had my time with Reiki, which is one of the more famous of these healing arts and acknowledge its clear channel. One lesser-known system is Body Talk. I have engaged with this through a healer in California who was very helpful in tuning me into the emotional and karmic aspects of my passing many kidney stones. My body was able to avoid creating more of them once I dealt with these aspects.

Medicine of the Earth: The People's Medicine

(a discussion of the green path walkers—non-professional hedgerow gatherers who teach, harvest, advise on the living plant knowledge)

“Herbs have both broad food-like qualities as well as specific medicinal effects. The traditional herbalist recognizes the value of integrating both their general and specific properties by using the whole herb in its natural state, in specific preparations, or combined with other herbs in formulas.

“The broad effects of foods and herbs will be described energetically using systems that classify them according to their

heating or cooling qualities. This approach is integral to nearly all traditional wholistic systems of herbal healing, but most highly developed and evolved by the Chinese herbalism and East Indian Ayurvedic medicine. It also was used by the ancient Greeks and Romans, and by herbalists throughout Europe until the 17th century.” --Michael Tierra, Planetary Herbology

Hippocrates, the father of contemporary western medicine, is credited with the saying, “Let your medicine be your food, let your food be your medicine.” The paths of nutritional therapy along with several cooking schools, such as the Natural Gourmet in New York started by Annemarie Colbin emphasize this viewpoint. There are also the body manipulation healing paths—chiropractors and the many varieties of massage therapies from all over the world. Reflexology and Osteopathy represent others. These are perhaps kinder and gentler aspects of what Susun Weed calls the heroic path of healing.

These are exciting times with the metamorphosis of western culture into Gaian consciousness. Many healing ways I have failed to mention. May each of those chapters come forth to find their place within the planetary story. I am aware that there are hundreds. The world is big and we are connected with it. We form a neural network around the planet like the mycelia, to which we are related. Each of us has the capacity to help hold our collective identity. Feel and live into it.

How many millions of these non-professional green men and women are there in the world=? Millions walk in accordance with the earth, rely on Gaia for sustenance *and* are conscious about it. No modality encompasses their paths. Yet, they model for us another way that relies on nature for support rather than society.

Anthroposophical Medicine

Anthroposophical medicine is mentioned in several of my central texts including Tierra and Wyk. I have yet to explore the medicinal branch of Anthroposophy as espoused by Rudolf Steiner, although I have been influenced by it in general via Waldorf and Biodynamics. This form of medicine is holistic and focuses on enhancing the healing powers of the body as I understand it.

“The wisdom that created nature is also at work within the human being.... Art is an indispensable part of human life. Out of Anthroposophical Medicine, specialized disciplines of Therapeutic Eurythmy, Rhythmical Massage, clay modeling, painting and music therapy have evolved.... Every treatment aims to enhance the life force of the patient as an axis for improved health and deepened self-knowledge.” - www.chisuk.org.uk (I found this website helpful in describing many forms of healing.)

Results

Methodology

The gathering of data came together in two stages. Initially I conducted interviews with plant medicine experts. From these interviews and my own research a questionnaire was created.

I trialed this questionnaire with a small sampling of herbalists and made some adjustments. Then I sent out a request to hundreds of herbalists in the U.S. and the U.K. via a number of networks including herbalist listserves, recommendations from people filling in the questionnaire, and local/regional herbal associations.

My goal was to receive over 25 responses. I am thankful in going through them to behold the revitalized energetic plant medicine movement that has taken root in the West. I could feel it in the large amount of information shared by the participants. I could see it in the handwriting and word choice, the commitment and enthusiasm to birth our world into the Gaian culture. It can all happen so fast and smoothly. One, two, three...let's go!

The Interviews

The interviews I conducted with six well-known herbalists and plant researchers: five men and one woman; five U.S. and one U.K. were a key aspect to creating the questionnaire.

My advisor, Simon Mills, offered excellent advice as I prepared my interview questions. His recommendation was to not lead those I interviewed with my terminology and presentation. Though this sounds obvious it was still a challenge. As a corollary of this he emphasized that I try to stay open with where the interviewee took the conversation. In other words, to not have the interview results predetermined or even to feel hopeful that the results come a certain way. This left me a bit nervous, as it opened the work to flowing down unexpected paths. Nonetheless, it was a good lesson in letting the reins free and seeing where it would take this work. His advice has

proved to be useful and I have applied it generally to the work at hand. The questions can be read in Appendix A.

My central inquiry into the questionnaire is:

How are practicing herbalists knowledgeable and experienced with the primary plant medicines and healing techniques of traditional cultures?

The Questionnaire

Thirty-one people responded to the questionnaire. It was divided into four sections (see Appendix B):

- Introduction
- Plant list
- Personal history/perspectives
- Closing

Introduction and Closing

The introduction and closing sections provided basic information on the project and asked for specifics on the person filling out the questionnaire. In addition, I included questions 1b and 3b, as they also provided information on how people came to be herbalists.

Plant List

The plant list consisted of 64 herbs of which the person was asked whether s/he knew the plant, had personal experience with it, and/ or recommended it to others. These herbs were compiled from three sources: 1) Herbs mentioned during the interviews 2) Herbs prominent in countries where I conducted research and 3) Herbs prevalent in the literature (see bibliography).

Personal History and Perspectives

The third section moves into muddy waters, possibly quicksand, in how to tabulate people's opinions into something cohesive. I fully support interpretation from the investigator. However, I feel it is best stated explicitly so we all know *that we know*. That leaves us still with the question of how to interpret 31 people's perspectives.

At Schumacher we were presented with Francoise Wemelsfelder's approach to grasping at qualities using a statistical package. This method shows density of response around words chosen to describe one's observations and feelings. The treatment of animals was the example in her case on. I found this interesting and my colleague, Sebastian Burch, is applying this approach to reactions one has upon looking at land. I would appreciate seeing my research data applied to that model.

The results data can be reviewed in Appendix C.

Results Discussion

"In the times of my grandmother, Geese-a-geese, every family had a sensible knowledge of remedies that took care of all the common afflictions of that time. Unless anyone planned to be what my father was called, an Indian doctor, why would you study and accumulate a large collection of herbal Medicines, especially if you hardly ever got sick?"

-Ted Williams, Big Medicine from Six Nations (pg 240)

"We have a habit in writing articles published in scientific journals to make the work as finished as possible, to cover up all the tracks, to not worry about the blind alleys or describe how you had the wrong idea first, and so on. So there isn't any place to publish, in a dignified manner, what you actually did in order to get to do the work."

-Richard Feynman

Questionnaire as Hermeneutical Inquiry

I spent time reflecting on what the data was revealing to me as I tallied the results each round. It was as Henri Bortoft described. I noticed as meaning came forth into a sentence with each word. Answers began to flow like weather patterns as the tally sheet began to build up. I left with a larger sense of what was being presented to me with each round of tallying.

From my journals:

---I am noticing now 40% of the way through the questionnaires that most people do not wildcraft or grow their own herbs, yet dream of doing it. This amazes me and shows me how deeply entrenched we've become in our consumer world. May this be an area of big change in the years to come as we build resilience and multi-skill ourselves.

---Two-thirds of the way through the questionnaires I notice all sorts of biases and assumptions that influenced this pool of 31 people from the potential of thousands. It was not random, nor an open pool. I did not seek that but it is important to note this selectiveness.

Some barriers to people filling out the questionnaire includes the need for a high level of literacy in English and computer skills as well as herbal and botanical lexicons. As the feedback has shown so far there is a huge list (over 100) of additional herbs I could have asked about.

In a similar fashion, the breadth of the healing modalities was certainly expanded with many suggestions. There are many common names for plants. I may have skewed the data a little by selecting the common names that I did. Hopefully, the addition of the genus helped those who understand botany. I wish I had asked a question on how much people eat/buy/make fermented foods, as this seems very relevant to how we move from knowing the name of a plant to actually bringing it into our lives practically. And more details about seaweed varieties. These techniques of food preservation (and so much more) are an essential bridge between the plants and human health.

As I bring forth this data from the questionnaires, I sense how delicate and rich it is. I am hesitant and humble myself to simple

awareness now and plan to pursue deeper understanding in future work.

For now some obvious patterns are popping up. How much of the data that can be extracted is living and relevant? Let me draw forth some of these data riches and see what meaning it has to this work and our lives.

This is not some abstract work destined for the closet, I hope. May it live through us and inspire our work through this transition time.

*---Some observations of the data with 23 out of 31 tallied. Let me do the equivalent of the **Lamm** holiday (which is now quickly approaching) i.e. assess the flow and predict what the harvest may look like.*

When I look at this questionnaire, I see perhaps one-third of the data is excessive to this work. I will not dwell much on those results.

As far as options given for people to respond, I feel it succeeded at one of its aims, to not be a burden on the people filling them out. Generally I've received good feedback on the questionnaire.

Soon into tallying I realized that anyone who personally used an herb (P) also knows it. At first I felt it was a bigger oversight for I felt anyone who recommends an herb not only knows it, but also has used it. I see that this is usually the case but not always true.

Though it logically makes sense that someone who uses an herb frequently (F) both knows it (K) and uses it personally (P). I would also like to believe that they recommend it to others (R), though this is not always the case. These peculiarities have shaped the results a little bit, though they are uniform assumptions across the data.

Though not appropriate to expound upon here, it seems a worthy discussion amongst the plant people to share the knowledge that works for us. It also draws out a discussion about how we need to be clear with how we share all this. When we recommend something we need to share if it is from personal experience, something we've read, or heard from others.

There are deeper levels of knowing beyond the "facts." What is the living knowledge? What do people actually believe in?

---As I come to tallying my last two questionnaires I feel an excitement and anticipation of what will come forth from this pool of potentiality. The feeling reminds me of fertile soil planted with the

seeds of a forest. How will it express itself? What will come from the efforts?

---As I sit here about to review again the results I wonder how to best do this representation of data? Simple and straightforward? What aspects elucidate my query about contributions of herbs and techniques from traditional cultures?

Alchemizing Raw Data into Relevant Information

I feel the responses are significant for this study. The fact that each question had been thought out thoroughly is mirrored in the data. The direct results give us a strong basis for focusing our collective attention over the next few years. The richness of the data is impressive and I hope to make it available for other studies in the future, as I commented earlier. The framework through which this data has been gathered could be modified based on the responses from this initial inquiry, not only on the data.

I did not have wider motives in asking the nationality, sex, and age of the respondents other than to get a sense of the snapshot in time I had taken and to get a sense of who these people are. About one half of them I know personally. I did hope to have both the U.S. and U.K. well represented. Being from the U.S. I felt I could achieve its presence easily. Thanks to the help of my new English community I was able to network and feel content with the U.K. presence. I did not expect the pool to be balanced in gender and am happy to see that more than a quarter of the respondents were male. I was very happy to see the average age over 43 with 15 years of herbal medicine experience. This gave me a lot of confidence that the results reflect a mature, experienced representation of the modern herbal movement.

Plant Section Discussion

Central to my work is a focus on the thousand plants closest to humanity. I have approached this through meeting as many of the 15,000 genera in the world as I can. Some genera are tight in their presentation, i.e. the characteristics and qualities of the genus are closely shared among the species. *Lavandula* is an example. Others go very broad such as the extreme case of *Euphorbia*. Knowing this gives us a sense of how interchangeable the species are for medicine.

There are countless volumes that have been written on the 64 herbs asked about in the questionnaire. These medicinal herbs sit amongst humanity's main plant allies at the world level. The degree to which the respondents were familiar with them and used them in their lives provides a wonderful platform from which to look into the future of modern herbal medicine and emerging planetary medicine.

I have focused on three areas for this dissertation. First, looking at the core herbs that most of the respondents were familiar with and used often. Then the herbs that have a high potential that people are aware of but have not had experience with, and lastly, the unknown group of herbs.

Core Plants

These 23 core plants are known and utilized by almost all the respondents. They are (+ indicates herb is *not* in the tables below):

Aloe

Garlic (*Allium sativum*)

+Oatstraw (*Avena sativa*)

+*Arnica*

Ginseng (*Panax* spp.)

+Plantain (*Plantago* spp.)

+Ashwaganda (*Withania somniferum*)

Goldenseal (*Hydrastis canadensis*)

St. Johnswort (*Hypericum* spp.)

+*Astragalus*

+Hawthorn (*Crataegus* spp.)

+Skullcap (*Scutellaria* spp.)

+Burdock (*Arctium* spp.) +Mint (*Mentha* spp.)

+Turmeric (*Curcuma longa*)

Cayenne (*Capsicum annum*)

+Motherwort (*Leonurus cardiaca*)

Valerian (*Valeriana officinalis*)

Echinacea

+Mullein (*Verbascum thapsus*)

+Yarrow (*Achillea millefolium*)

+Elder (*Sambucus* spp.)

+Nettles (*Urtica dioica*)

In addition, here is a list of 14 supplementary herbs that are known and utilized regularly by at least 80% of the respondents. They are:

- +Dandelion (*Taraxacum officinale*)
- +Poppy (*Papaver somniferum*)
- +*Ganoderma*
- Saw Palmetto (*Serenoa repens*)
- Ginger (*Zingiber officinale*)
- +Schizandra (*Schisandra chinensis*)
- Ginkgo biloba*
- Siberian Ginseng (*Eleutherococcus senticosus*)
- Kava Kava (*Piper methysticum*)
- +Slippery Elm (*Ulmus rubra*)
- +Marshmallow
- +Yellow Dock (*Rumex* spp.)
- Mugwort (*Artemisia vulgaris*)
- +Osha (*Ligusticum* spp.)

These lists when compared to Table 2, Table 3 and Table 4 below show us that this questionnaire is an accurate mirror of the herbal movement. **Bold** are core plants; *Italics* are supplementary herbs.

The most commonly used therapeutic herbs (Table 2) are all included in the core and supplementary herb lists. This shows a strong correlation between the questionnaire and the herbal movement of the last ten years.

The medicines that herbalists keep on hand (Table 3) and the top selling herbs (Table 4) include all the core and supplementary herbs above. Over half these herbs were suggested by the respondents (see data section). I did not ask about the ones not included.

In addition, there are 23 herbs listed above (+) that are not listed in the tables below. Sixteen of these are naturalized plants. The rest are famous ones in Chinese, Ayurveda or Native American modalities. It is important to increase the knowledge of these plants within our culture. Many are common and efficacious. The others represent high healing potential.

It is important to note that the common plants may not get the attention of the herbal industry and by association the media due to their ubiquitous presence. Some examples include weeds or popular

garden herbs that are of low economic value. This does not take away from their importance in people's lives as aids to health and efforts. We need to broaden our awareness of the common plants in particular because they are not being promoted by industry and media.

With this strong correlation between the respondents of the questionnaire and the modern herbal culture we can look at the other comments by the respondents about the future of herbal medicine and be able to make accurate predictions.

Also, it emphasizes the importance of teaching these central plants in the schools so that they grow in their awareness within modern culture. Many are common plants within the gardens or the wild. Most are easy to grow.

Table 2: The Ten Most Commonly Used Therapeutic Herbs

Echinacea

Ginseng (*Panax* spp.)

St. John's wort (*Hypericum perforatum*)

Goldenseal (*Hydrastis canadensis*)

Ginkgo (*Ginkgo biloba*)

Aloe

Garlic (*Allium sativum*)

Siberian ginseng (*Eleuthrococcus senticosus*)

Saw palmetto (*Sabal palmetto*)

Valerian (*Valeriana officinalis*)

Source: Mar, C., Bent S. An evidence-based review of the 10 most commonly used herbs. WJM 1999; 171:168-71.

Table 3: Top Herbs that Herbalists Keep on Hand

The six types of remedies the herbalists chose to have on hand are: liver protectants; adaptogens; digestive aids; analgesics; tonics; and antimicrobial herbs. Within these categories, 12 herbs were far and away the favorites.

Echinacea

Garlic

Ginger

Saw Palmetto

Tea Tree

Red Pepper

Milk Thistle

Chamomile

Aloe
Ginseng
Sweet Annie
 Licorice

Source: Vegetarian Times, Sept, 1997 by Penny King

Table 4: Top Selling Herbs in the United States

Herb (Millions of \$)

<i>Ginkgo</i>	147
St. Johnswort	104
Ginseng	84
Garlic	77
Echinacea	72
<i>Saw palmetto</i>	45
<i>Kava kava</i>	18
Soy	18
Valerian	10
Evening primrose	9
Grape seed	8
Milk thistle	8
Bilberry	6
Black cohosh	6
Pycnogenol	5
<i>Ginger</i>	2

SOURCE: Drug Store News, May 2000

High Potential Plants

This very exciting list contains 11 plants well known to the respondents but with which they have had little experience. In other words, they have read/heard about the plants but they are not available enough for people to have the personal experience. They are:

Pasque flower (*Anemone* spp.)
 Pau d'arco (*Tabebuia* spp.)
 Ayahuasca (*Banisteriopsis caapi*)
 Quinine (*Chichona* spp.)
Baptisia

Roseroot (*Rhodiola rosea*)
 Black Haw (*Viburnum prunifolium*)
 Toothache Plant (*Acmella oleraceae*)
Calamus
 Marijuana (*Cannabis* spp.)
 Cascara Sagrada (*Rhamnus purshiana*)

Efforts need to be made to have the seeds and starts of these plants available for people to grow and bring into their personal experience. Several of the herbs mentioned so far are illegal to possess in certain places and this brings up the point that the herbal movement needs to lobby for the rights of people to possess plants for medicine and other relationships.

“Every Flower has a Right to be Blooming.”

-Michael Franti

A well-illustrated case is with *Cannabis*. It is currently legal to grow and possess in 18 states of the U.S. with a prescription. This even though the federal government classifies it as a class 1 drug having no medical use and despite thousands of years of empirical evidence.

We need to increase awareness of these issues as efforts abound to restrict people’s access to herbal medicine. People need to be informed about **codex alimentarius**, which is approved in Europe. Several attempts have been made to make it law in the U.S. as well.

Another example is the situation of kava kava (*Piper methysticum*) being banned in Europe. On Wikipedia they summarize some of the issues around it: “...monopoly-driven pharmaceutical companies, concerned with competition in anti-anxiety drug sales, and kava-exporting nations of the Pacific Islands as well as disagreements between the medical establishment and proponents of herbal and natural medicine. The German Federal Institute for Drugs and Medical Devices (BfArM), which in 2002 temporarily inactivated kava registrations...”.

We have to decide whether we believe governments and industry has a right to determine whether a plant can be deemed legal to grow or possess and then act accordingly.

Unknown Plants

There was a small list of four herbs that the respondents hardly knew. These herbs include African potato (*Hypoxis*), cancerbush (*Sutherlandia*), hardy rubber tree (*Eucommia*) and pepperbark (*Warburgia*). All are well known in their countries of origin. *Eucommia* is famous in TCM and the other three are from southern Africa. These plants exemplify the thousands of herbs used in traditional medicines around the world. They have yet to cross the cultural divide of our current world though they are famous in modalities that use them.

Education, cultural exchange, an international apprentice program, a seed/plant exchange, gardening collectives and books/articles written will help disseminate knowledge of the world's modalities and herbs. These are essential ways for us to increase our collective resilience.

Modalities Section

What are the different healing modalities that have influenced your practice?

Results from this question show that herbalists are confident of their western herbal medicine knowledge as well as nutritional therapy. Other traditions known to many of the respondents were Chinese (87%), Native American (87%) and Ayurveda (84%).

The modalities respondents lacked knowledge of included Polynesian (10%), Aboriginal (10%) and African (19%). Generally the knowledge of the healing systems had a direct correlation with how well the respondents knew the herbs from that modality.

Responses to this question provided not only a sense of the influence of the modalities listed, but also provided many responses not listed. A handful of other modality choices made themselves apparent from this study and they can be added to future questionnaires.

International healing techniques, methods and stories can be shared by traveling schools of the various disciplines. Healers will be encouraged to adapt regionally to the needs and challenges of the

local population. For instance, Chinese Acupuncture could be taught by a traveling school of acupuncture teachers. Graduates in any region will be encouraged to bring their living knowledge into the conditions prevalent in a region. For instance, treating damp conditions for people living in cool, wet places. Those skills that increase our sense of place will strengthen that region and will also increase resilience for all of humanity.

Qualitative Comments

This section allowed the respondents to fill in some more qualitative answers. This was trickier to draw accurate conclusions from but also provided a rich collection of input. It gave forth the depth, diversity and dynamism that make this study meaningful.

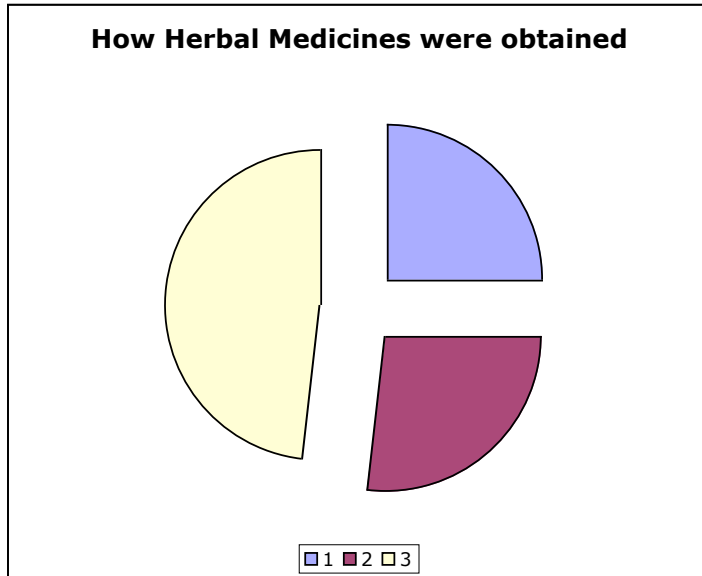
Describe how your herbal knowledge and training has come to you. How do you see your herbal medicine practice changing over the next five years?

Beneath the unique individual responses, there is a common theme of sharing knowledge and remedies with the increasingly interested masses. Interest in herbal medicine is growing due to its effectiveness, the availability of herbs, and the shortcomings of CWM. This pool of herbalists represents a living expression of those lineages that have been revitalized by efforts of the Spring Herbalists since the 1960s.

What percentage of herbal medicines do you: Grow? Wildcraft? Purchase?

This question begins to draw a picture of how we prioritize our ways of bringing herbs into our lives. Unfortunately, but not surprisingly, nearly half the herbs are being purchased in a wide array of forms. This points toward a vulnerability from our reliance on purchased medicinal products. Buying herbs produced from afar is a risky way to maintain health.

Chart 1: How Herbal Medicines Were Obtained



1-grown 25% (27 respondents)
 2-wildcrafted 27% (26 respondents)
 3-purchased 48% (29 respondents)

Medicine Feet

“As the Empire building of predatory capitalism begins to crumble beneath the weight of its excesses, and many First Nations people disappear or become radically changed before the ongoing forces of colonization, we find the world awash in cultural fragments and detritus. It is out of this broth of identity nutrients, this compost heap of social possibilities, that an archetype of human renewal is arising. I call this the 'sylva' (of the forest, and in its expanded sense, Nature) 'politan' (citizen of). The sylvapolitan is a bridge figure, alchemizing balance, and often synthesis, between the colonizers and colonized; the techno-rational mind of modernity and perennial wisdoms; reason (eagle) and spirit (condor), male and female knowledges. The sylvapolitan represents our potential to survive this era of great extinctions, to act as co-creative partners with the great Evolutionary intelligences of the planet, and flourish as a species.”

- Morgan Brent, anthropologist

The reality is unsettling that medicine for most westerners is synthetic and produced in some far away factory given the complex of issues of peak oil and climate change. This points us towards the vulnerability of a very important aspect of living, our health. Even those who use natural medicines still purchase most of those medicines. Educating ourselves about these issues brings upon us the awareness that how far a food or medicine travels is essential. Consciously aware people (of whom I imagine you count yourself among) already have been counting their **food miles** and their **ecological footprints**. However, Rob Hopkins, founder of the Transition Culture Movement, warns us to start counting **food feet**. *How many feet are your foods traveling?* The same can be asked of our medicine. We need to count our medicine feet!

Most of our food and medicine needs to be grown locally. This can be accomplished sustainably by implementing the principles of **Permaculture** and **Agroforestry**. Learning to grow and care take forests is critical to our species thriving. The harmony of our species can occur at the edge of forest and field. There are at least five ways that we can obtain our plant medicines more sustainably.

First, we must remember that humans have always traded. Even with hardships we will exchange goods amongst ourselves. Thus, some medicines will still come from afar but they will be available less frequently and will cost much more.

Second, we need to learn thoroughly the local native plants and weeds from the elders in the region. The time to start is now. With each passing month more and more elders pass on and more and more wild places get “developed.” You do not have to go far to begin walking the green path. Start with the weeds beneath your feet! Eating weeds will take care of most of our food and medicine needs. I am horrified each time people tell me they’ve been told that acorns and nettles are poisonous! I tell people it takes three to five years of learning about plants to be skilled in knowing them. Walking the green path is of course a life long journey. These are some of the skills we needed to have been taught as children. As adults we need to reconnect that missing link and pass it on to the next generation.

Most people’s needs will be met if we keep our population densities down and care take the forests. This is the opposite of what we have been doing these last few hundred years. Read Thomas

Berry's *The Great Work* to get a sense of the tipping point we are now at as a species.

Third, seeds and starts of the desired medicines can be brought from afar and grown under similar conditions. Creative low energy designs for greenhouses, cold frames and such will widen the selection of herbs available. This can be done slowly over the generations, starting near the plant's native habitat and spreading out from there. Pre-Incan civilization used terracing techniques to migrate plants from the jungle to the Andes and visa versa. We must be conscious and try not to reinvent the wheel by being diligent at revisiting our past while bringing innovation into the modern flow. Simple is often appropriate.

Fourth, one can learn the healing stories of the well-known world plants and bring that knowledge to the local species of the same genus and experiment to discover their similarities. When species of the same genus share similar qualities they can be thought of as **analogs**. Thereby, the local species can be substituted for a well-known medicinal species of another area. This kind of research is central to my work of the last thirteen years. An example of an analog would be substituting the famous dong quai (*Angelica sinensis*) with one of the 21 *Angelica* species native to North America.

Lastly, we can establish a relationship with the plants around us and they will tell us how they can be useful as medicine. **Plant Spirit Medicine** and **Shamanism** need to be reinstated as legitimate ways of knowing. Through approaches such as **Phenomenology** we can reawaken our connection to nature. The famous George Washington Carver communicated with plants and introduced hundreds of ways to receive food, medicine and more from the **plant kingdom**.

If you love it enough, anything will talk with you.

I love to think of nature as an unlimited broadcasting station, through which God speaks to us every hour, if we will only tune in.

-George Washington Carver

Luther Burbank communicated with plants with great success, asking them to grow bigger for our benefit.

Flowers always make people better, happier, and more helpful; they are sunshine, food, and medicine to the soul.

We must return to nature and nature's god.

-Luther Burbank

It is of immediate concern for any community seeking resilience to assess what herbs are used and in what quantities by the local population. Within your household, how many pounds each of nettles (*Urtica dioica*), purple cone flower (*Echinacea* spp.) and ginseng (*Panax* spp.) are consumed a year? How about within your community? We need to make land and resources available to grow these herbs locally in substantial enough quantities to meet these needs. Start with current use but know the needs will grow so plan for that. Disperse the skills and means to make small yet significant gardens throughout the area. Make the changes on the grassroots level. The transition town of Totnes in England has a Health and Wellness Group that is looking into these issues and is moving forward the building of a community medicine garden. Check out their progress at:

<http://totnes.transitionnetwork.org/healthandwellbeing/home>

Space needs to be made for monthly and seasonal herb markets where abundant herbs are traded away and desired herbs brought in.

All these issues are expressions of global local, local global (glocal). One acts and lives very locally and also keeps an awareness alive of humanity's collective knowing while applying it when appropriate to local conditions. There are many levels from local to global.

Through the awareness brought by looking at our medicine feet, we can see that our collective resilience is low. By approaching our health with the suggestions above we embark on a path of becoming neo-indigenous. Let us begin it now.

“Maximum Freedom to the individual, Maximum coherence to the Whole.”

-Mae-Wan Ho, The Rainbow and the Worm

In the future do you feel the presence of herbal medicine in modern people’s lives will be Same? More? Less?

Not surprisingly there was an almost unanimous response (27 out of the 31 respondents) that herbal medicine would be more in people’s lives. However, some felt this might be more hopeful projection than realistic. Many expressed that herbal medicine is of the people (grassroots) and will not go away even if it is driven again underground. Many comments were expressed that the cost and side affects of western medicine and the amount of information of alternatives available via the internet and other media were opening people up to herbology.

One respondent summed up a common response, “With economic collapse and healthcare expenses on the rise, more people will turn to plants and herbalists for their health care needs.” Another added that this increase in herbal medicine’s presence will come from, “Greater interest, need for nature, need for meaning and understanding one’s particular story in dis-ease, growing OTC market, dissatisfaction with orthodox medics and drug costs post peak oil. In the UK, possible statutory regulation may raise the profile of professional herbal medicine as safe and effective CAM (complementary and alternative medicine).

Conclusions

“We need to have faith in Gaia.”

-James Lovelock

Global local/Local global

Mexican elder, and spokesperson for the Zapatistas, Gustavo Esteva, says, we are coming into a totally “new world.” He lectured to us, “Changing the world is hard if not impossible. A new world is coming with no set design and a large degree of uncertainty.... One of the lessons of the 20th century is that leaders, no matter how great, have failed.... Keywords are hope, surprise, friendship and humility.”

What has been and what is now is not to be. When my thoughts and visions come forth I see many feasible ways for humanity to survive these coming times. We must take back the basic everyday medicine found in plants in terms of healthcare in the modern world after peak oil and climate change. This is already true for a majority of the world!

Thinking at the level of institutions does not ultimately serve us. I do not feel the healthcare industry and government need to be central to our lives. I see those rare health needs that get beyond a personal level being helped at the family and extended family level. In India and Southern Africa each family has a healer associated with it, with whom council is taken when needed. Extraordinary cases can be taken care of at the community level. I do not support the existence of large institutions, not even in cities. I see it all networked out to the human level.

“Ever bigger machines, entailing ever bigger concentrations of economic power and exerting ever greater violence against the environment, do not represent progress: they are a denial of wisdom. Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful.”

“Education can help us only if it produces ‘whole men.’ The truly educated man is not a man who knows a bit of everything, not even the man who knows all the details of all subjects (if such a thing

were possible): the 'whole man' in fact, may have little detailed knowledge of facts and theories, he may treasure the Encyclopedia Britannica because 'she knows and he needn't,' but he will be truly in touch with the centre."

"[A modern economist] is used to measure the 'standard of living' by the amount of annual consumption, assuming all the time that a man who consumes more is 'better off' than a man who consumes less. A Buddhist economist would consider this approach excessively irrational: since consumption is merely a means to human well-being, the aim should be to obtain the maximum of well-being with the minimum of consumption. . . . The less toil there is, the more time and strength is left for artistic creativity. Modern economics, on the other hand, considers consumption to be the sole end and purpose of all economic activity."

*-E.F. Schumacher, **Small is Beautiful***

These medicine plants, like the food plants, will be valuable to the degree they are locally available. A major determination of what medicine will be available for you will be how many medicine feet it is from harvesting to preparing to administering an herb. As Rob Hopkins says, "Small is not only beautiful, small is also inevitable." Emergencies and crises will once again need to be handled in more local ways. Can we stay conscious globally and live fully into wherever we are?

The name *Gaia* has not crossed enough lips in a meaningful way. Not enough people have been **gaia'd**. May this come to pass. May a new age of humanity come into being; a time we seek to become self-aware at the planetary level. Holistic science has shown up, reaffirmed, and indeed, introduced us to principles from which to live, explore and find meaning within Gaia.

"As we learn to grow our medicines, they grow us."

-James Duke

We are in a dance between the development of self and the service to the community. Within that there is a merging into collective/self. Our journey now is to balance the global and the local/the local and the global.

Trusting the Plants

“There is so much to learn about herbs and healing. How can we assure ourselves of our own competence? ... Do we need a system of diagnosis interlocked with categories of herbs? ... These are questions that have concerned healers for thousands of years and still concern us today.... The answer lies in our commitment to ourselves as whole human beings and our commitment to ease suffering of others, in truth and beauty, in change, in compassion. When we commit to the wholeness in ourselves, we become open to the wholeness of all life, especially the wholeness of the green nations. Science divides things into parts so we can comprehend them. Art and nature teach us wholeness.

“Yes, the final say on how to use them is the plants themselves. The ultimate authority in herbal medicine is not a teacher, nor a book. The information you can trust is ‘from the horse’s mouth,’ in this case, the plant’s mouth.”

-Susun Weed, Journal of Northeast Herbal Association summer/fall 2004

I was impressed during several of my interviews with the herbal medicine experts that the theme kept coming back to the importance of food as medicine. When I asked about important herbal medicines from the world, they would speak of spices, common plants, and what’s in the kitchen more often than the latest discovery of some famous or ‘soon to be famous” herbal super hero. As Susun Weed is famous for saying, “What you need most grows out your back door.”

If this work leaves you unresolved, that is because it is. We are just beginning again. Let us draw from the past, come fully into the present and walk bravely into the future. In some ways we are well prepared to lift our consciousness to a global level and in other areas we are very ignorant. This work sheds light on areas to focus our attention if we are to thrive in the coming times. The longer we live the more we will see the Aquarian Age come forth. Let us help the Piscean Age fall away gently. We are being asked to be both hospice worker and midwife in these transitioning times. May Gaian consciousness reign forth and guide us with the plants as our allies.

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Appendices

Appendix A: Interview Questions

Opening

You are well known for _____

What are you engaged in now?

How would you describe the work/projects you are into now?

Getting into It

If you had the opportunity and resources, what would you like to do to extend your work?

If you had more time in the day how would you spend it?

Where do you see your work contributing most to health care?

Plants

What are the most common and the most important plants used in your practice?

What do you use these for? Why are they important to you?

What plants/remedies would you say are most useful internationally? Are there any that could be generally useful but are not now well known?

Are there any other plants you would like to mention?

Wrap Up

Where do you see medicine/health care evolving?

Would you say we are in an herbal renaissance?

What do you want to be remembered for?

Appendix B: Questionnaire

Name:
 Phone:
 Email:
 Address:
 Years practicing herbal medicine:
 Age:

Herb Section: This is a list of both commonly known and currently less known herbs in the western herbal medicine world. Please place a check next to all those you know, whether you use them personally and/or recommend them to others. Place an F if you use the herb frequently. Any short comments on them would be appreciated if you are so moved.

K-Know of
 P-Use personally
 R-Recommend to others
 F-Use and/or Recommend the herb frequently

Herb (Genus)	K	P	R	F	Comments
African Potato (Hypoxis)					
Aloe					
Amalaki (Phyllanthus)					
Andrographis					
Anemone					
Arnica					
Ashwaganda (Withania)					
Astragalus					
Ayahuasca (Banisteriopsis)					
Baptisia					
Black Haw (Viburnum)					
Burdock (Arctium)					

Calamus (Acorus)
Cancerbush (Sutherlandia)
Cannabis
Cascara Sagrada (Rhamnus)
Cat's Claw (Uncaria)
Cayenne (Capsicum)
Coca (Erythoxylum)
Dandelion (Taraxacum)
Devil's Claw (Harpogophytum)
Echinacea
Elder (Sambucus)
Eucommia
Ganoderma
(Other Mushrooms?)
Garlic (Allium)
Gentian (Gentiana)
Ginger (Zingiber)
Ginkgo
Ginseng (Panax)
Goji (*Lycium*)
Goldenseal (*Hydrastis*)
Hawthorn (*Crataegus*)
Jiaogulan (*Gynostemma*)
Kava Kava (*Piper*)

Lousewort (*Pedicularis*)

Marshmallow (*Althaea*)

Mint (*Mentha*)

Motherwort (*Leonurus*)

Mugwort (*Artemisia*)

Mullein (*Verbascum*)

Nettles (*Urtica*)

Oatstraw (*Avena*)

Osha (*Ligusticum*)

Pau d'arco (*Tabebuia*)

Pepperbark (*Warburgia*)

Plantain (*Plantago*)

Poppy (*Papaver*)

Quinine (*Cinchona*)

Ragweed (*Ambrosia*)

Rehmannia

Roseroot (*Rhodiola*)

St. Johnswort (*Hypericum*)

Saw Palmetto (*Serenoa*)

Schizandra

Shatavari (*Asparagus*)

Siberian Ginseng (*Eleutherococcus*)

Skullcap (*Scutellaria*)

Slippery Elm (*Ulmus*)

Spilanthes

Turmeric (*Curcuma*)

Yarrow (*Achillea*)

Yellow Dock (*Rumex*)

Valerian (*Valeriana*)

Other Herbs you feel are important?

Questions:

1a) What are the different healing modalities that have influenced your practice? (Please check those modalities that have contributed to your knowledge and a number { 1 (little) 2 (some) 3 (lot)} to indicate the amount of its influence. Any comments appreciated.

Ayurveda

TCM

Five-Element

Western Herbalism

South American

African medicine (region?)

Native N. American

Homeopathy

Macrobiotics

Australian Aboriginal

NZ Maori/Polynesian

Nutritional Therapy

Others?

1b) Describe how your herbal knowledge and training has come to you:

2) What percentage of herbal medicines do you:

Grow?

Wildcraft?

Purchase (in what forms)?

3a) In the future do you feel the presence of herbal medicine in modern people's lives will be:

Same?

More?

Less?

Comments?

3b) How do you see your herbal medicine practice changing over the next five years?

Additional Comments?

Appendix C: Results Data

The following are the basic results from the questionnaire I sent out to several hundred herbalists and other medicine plant people. I received a total of 31 responses—eight men and 23 women. 22 respondents are from the U.S. and nine are from the U.K. Their average age was 43.5 with a mean of almost 15 years of experience working with herbal medicines.

Results from **the Plant Section:**

K-Know of

P-Use personally

R-Recommend to others

F-Use and/or Recommend the herb frequently

Herb (Genus)	K	P	R	F	Total	%
African Potato (<i>Hypoxis</i>)	7	1	-	-	8	26
<i>Aloe</i>	8	3	5	15	31	100
Amalaki (<i>Phyllanthus</i>)	9	3	2	3	17	55
<i>Andrographis</i>	9	1	4	3	17	55
Pasque flower (<i>Anemone</i>)	17	1	3	8	29	94
<i>Arnica</i>	2	3	5	21	31	100
Ashwaganda (<i>Withania</i>)	5	3	6	17	31	100
<i>Astragalus</i>	4	2	7	18	31	100
Ayahuasca (<i>Banisteriopsis</i>)	19	5	1	-	25	81
<i>Baptisia</i>	12	6	6	6	30	97
Black Haw (<i>Viburnum prunifolium</i>)	11	2	9	9	31	100
Burdock (<i>Arctium</i>)	1	3	12	16	31	100
Calamus (<i>Acorus</i>)	12	4	8	6	30	97
Cancerbush (<i>Sutherlandia</i>)	12	-	-	-	12	39
<i>Cannabis</i>	12	7	5	7	31	100
Cascara Sagrada (<i>Rhamnus</i>)	11	6	7	4	28	90
Cat's Claw (<i>Uncaria</i>)	9	3	6	4	22	71
Cayenne (<i>Capsicum</i>)	5	6	5	15	31	100
Coca (<i>Erythroxylum</i>)	10	5	4	2	21	68
Dandelion (<i>Taraxacum</i>)	1	2	5	18	26	84
Devil's Claw (<i>Harpogophytum</i>)	11	1	4	6	22	71
<i>Echinacea</i>	1	3	5	22	31	100
Elder (<i>Sambucus</i>)	-	3	5	23	31	100
<i>Eucommia</i>	7	-	-	2	9	29
<i>Ganoderma</i>	4	3	11	8	26	84

Other Mushrooms mentioned:

Shiitake (<i>Lentinula edodes</i>)	7		Morels (<i>Morchella</i> spp.)	2		
Turkey Tail (<i>Trametes versicolor</i>)	5		<i>Poria cocos</i>	1		
Maitake (<i>Grifola frondosa</i>)	4		Chaga (<i>Inonotus obliquus</i>)	1		
Chicken of Woods (<i>Laetiporus sulphureus</i>)	3		Chantrelles (<i>Cantharellus</i> spp.)	1		
Oyster (<i>Pleurotus ostreatus</i>)	2		Shaggy Mane (<i>Coprinus comatus</i>)	1		
Cordyceps	2		<i>Psilocybe</i>	1		
			Lobster (<i>Hypomyces lactifluorum</i>)	1		
Garlic (<i>Allium</i>)	-	2	5	23	30	97
Gentian (<i>Gentiana</i>)	9	2	4	13	28	90
Ginger (<i>Zingiber</i>)	-	-	4	23	27	87
<i>Ginkgo</i>	4	4	8	13	29	94
Ginseng (<i>Panax</i>)	6	3	6	16	31	100
Goji (<i>Lycium</i>)	9	4	4	10	27	87
Goldenseal (<i>Hydrastis</i>)	1	4	9	16	30	97
Hawthorn (<i>Crataegus</i>)	4	4	6	16	30	97
Jiaogulan (<i>Gynostemma</i>)	14	1	4	3	22	71
Kava Kava (<i>Piper</i>)	8	4	9	7	28	90
Lousewort (<i>Pedicularis</i>)	7	5	2	8	22	71
Marshmallow (<i>Althaea</i>)	8	5	4	14	31	100
Mint (<i>Mentha</i>)	-	5	4	22	31	100
Motherwort (<i>Leonurus</i>)	2	4	5	19	30	97
Mugwort (<i>Artemisia</i>)	3	5	10	13	31	100
Mullein (<i>Verbascum</i>)	1	4	10	16	31	100
Nettles (<i>Urtica</i>)	1	2	3	24	30	97
Oatstraw (<i>Avena</i>)	1	3	8	18	30	97
Osha (<i>Ligusticum</i>)	8	3	8	12	31	100
Pau d'arco (<i>Tabebuia</i>)	10	3	8	6	27	87
Pepperbark (<i>Warburgia</i>)	4	-	-	-	4	13
Plantain (<i>Plantago</i>)	2	4	7	18	31	100
Poppy (<i>Papaver</i>)	9	5	9	7	30	97
Quinine (<i>Cinchona</i>)	18	5	1	2	26	84
Ragweed (<i>Ambrosia</i>)	11	1	8	1	21	68
<i>Rehmannia</i>	7	4	1	9	21	68
Roseroot (<i>Rhodiola</i>)	17	1	2	3	23	74
Saw Palmetto (<i>Serenoa</i>)	4	5	11	11	31	100
<i>Schisandra</i>	6	4	7	12	29	94
Shatavari (<i>Asparagus</i>)	7	3	7	4	21	68
Sib. Gin. (<i>Eleutherococcus</i>)	7	1	6	15	29	94
Skullcap (<i>Scutellaria</i>)	2	2	5	22	31	100
<i>Acmella</i>	11	2	5	5	23	74
Slippery Elm (<i>Ulmus</i>)	5	5	6	14	30	97
St. Johnswort (<i>Hypericum</i>)	1	2	8	19	30	97
Turmeric (<i>Curcuma</i>)	-	5	6	20	31	100
Yarrow (<i>Achillea</i>)	2	2	8	19	31	100
Yellow Dock (<i>Rumex</i>)	7	1	3	12	23	74
Valerian (<i>Valeriana</i>)	4	2	9	16	31	100

Additional Herbs Suggested

(**bold** are herbs mentioned more than once)

<i>Albizia</i>	<i>Ephedra</i>	<i>Parietaria</i>
Alfalfa	Evening Primrose	Partridge Berry
<i>Anemopsis</i>	False Unicorn	Passionflower
<i>Angelica</i>	Fennel	Peony
Bai Shao Yao	Flax	Picrorhiza
Barberry	<i>Foquieria</i>	Pokeweed
Black Cherry	Fu Ling	<i>Populus</i>
Black Cohosh	Galega	Red Clover
Black Tea	Goldenrod	Red Root
Black Walnut	Gotu Kola	Rose
Bloodroot	Gou Qi Zi	Rosemary
Blue Cohosh	Grindelia	Sages
Blue Vervain	Ground Ivy	Seaweeds
Blueberry	Gymnema	Shepard's Purse
Boneset	He Shou Wu	Solomon's Seal
Butterflyweed	<i>Hibiscus</i>	Spikenard
<i>Calendula</i>	Hops	<i>Stachys botanica</i>
California Poppy	Horehound	Thyme
Catnip	Horseradish	<i>Tilia</i>
Chai Hu	Huang Qi	<i>Tribulus</i>
Chamomile	<i>Iris</i>	<i>Trillium</i>
<i>Chilopsis</i>	Lady's Mantle	Tulsi
<i>Chinanthus</i>	Lambsquarter	Unicorn Root (<i>Aletris</i>)
Cilantro	Lemon Balm	<i>Usnea</i>
Cinnamon	<i>Lespedeza</i>	Violet
Cleavers	Licorice	<i>Vitex</i>
Codonopsis	Lobelia	White Lettuce
Coltsfoot	Lomatium	White Peony
<i>Corydalis</i>	Maca	Wild Yam
Cotton Root	Marshmallow	Willow
Couchgrass (<i>Agropyrum</i>)	Meadowsweet	Witch Hazel
Cowslip	Milk Thistle	Wu Mei
Crampbark	Myrrh	Yaupon
Creosote Bush	Olive	Yerba Buena
Dan Shen (red salvia)	Oregano	Yerba Santa
Elecampane		Yellow Root

Total of 107 herb suggestions (Some additional herbs to consider include: Jujube, Sarsaparilla, Spirulina and Tea Tree.)

(1a) What are the different Healing Modalities that have influenced your practice?

Modality	Little	Some	Lot	Total	%
Ayurveda	12	10	4	26	84
TCM	8	13	6	27	87
Five Element	11	6	2	19	61
Western Herbalism	--	2	29	31	100
South American	10	4	2	16	52
African (countries experienced: RSA, Nigeria, Ghana, Senegal, Tanzania, and Kenya)	5	--	1	6	19
Native American	9	12	6	27	87
Homeopathy	9	9	4	22	71
Macrobiotics	9	9	4	22	71
Australian Aboriginal	3	--	--	3	10
Polynesian	3	--	--	3	10
Nutritional Therapy	--	4	20	24	79

Other Modalities Mentioned:

Unani
 Flower Essence
 Spiritual Studies
 British Folk Medicine
 Plant Spirit Medicine
 Healing Touch/Massage
 Wise Woman Tradition
 Folklore of the Appalachian Region
 Psychology
 Aromatherapy
 Kinesiology
 Direct Communication with plants
 Wicca
 Psychedelia
 Drumming/Shamanism/Ritual

2) What percentage of herbal medicines do you:

Grow? 25% (27 respondents)

Wildcraft? 27% (26 respondents)

Purchase? 48% (29 respondents)

What forms purchased:

Dried Bulk	19	Creams	2
Tinctures	11	Infused Oils	2
Pills	10	Homeopathic	2
Powdered Extracts	5	Juices	1
Fresh	3	Syrups	1
Essential Oils	3	Elixirs	1

3a) In the future do you feel the presence of herbal medicine in modern people's lives will be:

More? 27

Same? 2

Less? 1

Not Sure 1

“He finally hopped around to the pond again from which he had begun a while back...his pond. Neither he nor the pond was the same and yet a presence persisted. His pond was so special to him because of the details and memories he brought to it each day. And with that he had a beer and was hoppy.”

from the short story “Frog Ponds”

Glossary

active constituents: A belief that a plant's constituents can be separated, isolated and tested to determine which ones are active in treatment of disease. This is one of the main driving forces behind the current herbal movement in the economic market. This view can be in conflict with the belief that the whole plant is the agent of healing.

ama: Within Ayurveda, the toxins within the body which arise from impurities in air, water, food.

analogs: Local plants that can be substituted medicinally for well-known plant medicines within the same genus.

Bioneers: A conference held each autumn in Northern California presenting the alternative research of the previous year around a wide range of new-age topics.

botanical treatises: Scientific studies done in depth in certain locations or ecosystems or on populations of plants. Though often encoded in the language of Botany, they are filled with detailed observations of that which is studied.

codex alimentarius: The World Health Organization developed Codex to ensure international food standardization and labeling including supplements and vitamins. It has been adopted by the EU and has been brought before the US Congress at least four times for consideration. The concern is in determining who has the right to decide whether vitamins become prescription items instead of over-the-counter supplements, whether the price of vitamin C becomes \$140 because of this, and whether multinational corporations with hidden agendas should regulate and attempt to standardize items that have traditionally been regarded as foods, herbs, or supplements, not drugs or pharmaceuticals.

counterfeit wholes: A term made popular by Henri Bortoft in which one can notice a lack of presence in something that seems perhaps externally complete but is missing qualities which comprise its authenticity.

Earth jurisprudence: First introduced by Thomas Berry, a philosophy of law and human governance that is based on the idea that humans are only one part of a wider community of beings and that the welfare of each member of that community is dependent on the welfare of the Earth as a whole.

feng shui: A Chinese phrase that encourages us to look at the context and setting that creates an overall impression of a situation. This can be seen and discussed by considering the qualities that make up something, including but not limited to color, texture, size...to create an overall sense of balance and health.

Flora: A botanical book of the plants within a region with a key to provide a means for identifying specimens.

food feet: A term to bring awareness to the fact that the amount of energy required to bring food to our door from afar is costly. (In the U.S., for every calorie of food delivered it takes ten calories to produce and transport it). In a post-petroleum era this understanding will be crucial to our having food available. Introduced by Rob Hopkins of Transition Culture.

food miles: A term much popularized among alternative cultures to raise awareness of how far one's food travels. Though important, it is more important to look at Food Feet as explained above.

fractal: A repeating pattern found in nature, most clearly illustrated by the roots of a tree or the tributaries of a river but also in the veins of the human body.

gaia: Gaia is both the Greek mythical name of the first goddess to come from the original god Chaos, and the name given by Dr. James Lovelock to initially a hypothesis and later a theory about how the earth is self-adjusting to maintain an environment favorable to life.

One of Lovelock's primary students is Stephan Harding, a core professor at Schumacher.

gaia'd: This is a term I first heard from Stephan Harding, used to describe the gestalt that takes place as people realize that Gaia is alive and that we are part of Gaia.

gaian awareness/consciousness: This is the state in which a human is aware of his/her interconnectedness with Gaia, indeed that we were created by and have evolved with Gaia.

Goethean science: The missing perspective from western science that embraces the intuitive and feeling aspects of phenomena. It is named after the famous German genius, Wolfgang von Goethe, whose studies of nature have created techniques for us to subjectively explore nature.

green path: A way of living life that works in harmony with nature's web of life.

grok: A term first used by Robert Heinlein in *Stranger in a Strange Land* to describe the embodiment of an understanding.

holistic science: This science honors the logic and rationality of western science but also embraces the intuition and feelings of phenomena and seeks to understand them in their complexity and inter-relatedness.

indigeneity: The belief that indigenoussness is directly related to a sense of place and how one lives his/her life.

kindom: Since the 1960s, the number of kingdoms of organisms has grown from two to over thirty with a new level over that called Domains. Well, why not free up the lexicon some more and get rid of the royalty allusions and acknowledge our kinship to everything. This term embraces that notion.

Lammas: The halfway point between the summer solstice and the autumnal equinox. It is the time of the first harvests and a time to assess what the autumn harvests will be like.

magico-medico: The combination of ritual and spiritual contexts found in many healing modalities.

meridians: Within Chinese Medicine, the energy lines that run throughout the body carrying chi to the different organs. In acupuncture and acupressure, it is these channels that are being influenced.

morphic fields: Fields that provide the blueprints from which the genes are instructed to bring forth matter. Rupert Sheldrake is a scientist studying this and proposing hypotheses to explain these fields.

nature cure: This fascinating healing modality came into being through Gandhi's efforts to improve the health of Indians. He combined the healing/rejuvenative branch of Ayurveda with the natural methods of healing being experimented with in the US and Europe at the turn of the 20th century.

palliative: Within the healing modality of Ayurveda there is the cleansing path of pancha karma. Prior to the actions of pancha karma comes a phase of preparing the body called the palliative. This may include medicated oil massages, certain herbal teas and a restricted diet as well as other techniques aimed at preparing the body to be cleansed.

pancha karma: In traditional Ayurveda, the five actions done to cleanse the body. This is done after the body is prepared with palliatives and is followed by rejuvenatives to rebuild weakened systems.

pan-psychism: The philosophy that everything is sentient and there are either many separate minds, or one single mind that unites everything that is.

permaculture: A philosophy developed in the 1970s in Australia, which integrates the historical innovations around the planet in holistic manner to create a sustainable culture. It is now being practiced worldwide by over 100,000 people who have been certified.

phenomenology: A study of the world in which one acknowledges the subjectivity of everything perceivable and approaches understanding through immersion and interchange between the observer and the observed.

phytotherapy: Broadly, this term refers to the use of plants for medicine. There are many approaches one can take within this definition, from looking for active constituents to meeting the whole plant as an ally. It is a term popular in Europe.

planetary culture rising: An awareness spreading worldwide, recognizing humans as connected to each other as well as part of a much larger network of all living beings. The internet can be seen as a technological expression of this growing awareness.

post-Newtonian physics: A collective term which encompasses the physics developed since Einstein began to challenge Newton's connotation that the universe is mechanical. Some post-Newtonian theories include the Relativity theories, Chaos theory, Complexity theory, etc..

prakuti: In Ayurveda, one's birth constitution within the tri-doshic model. This is one's natural state.

procussing: The procedure of potentizing a homeopathic mother tincture by shaking it on a daily basis.

potentized: The energy that comes into something through an action as in this case, the making of homeopathic medicine.

red road: A Native American term which indicates one is leading a life of dignity and moral righteousness.

rejuvenative: Within Ayurveda, the process of cleansing the body is called pancha karma. Following this cleansing is a phase called rejuvenation in which you take tonic herbs and practice yoga to rebuild your systems.

sangoma: In southern Africa, a term to describe healers. There are hundreds of thousands of sangomas. Each family has one. They are a kind of shaman who connects to the spirit realm to assist in healing.

Schumacher College: A college in Devon, England established in 1992 by Satish Kumar in honor of the famous economist, E.F. Schumacher. It offers short courses throughout the year and a masters program in Holistic Science, in which I participated.

set/setting: The realization that the primary determiners of how someone will react in a particular situation rests with their **mindset** and the **setting** in which the situation is occurring.

Siddha: Though most people think of Ayurveda as the traditional medicine of India, it actually has come from earlier traditions. One of these is Siddha, which originated in pre-history in Tamil Nadu. Siddha focuses on five qualities rather than three. It also relies on alchemical preparations for its medicines.

shamanic: The word shaman (originally from Siberia) has been universalized to mean healers who interact with the spiritual realm to assist in curing people.

spring herbalists: The hippies defined by anthropologist Morgan Brent as those who got gaia'd and realized the importance of knowing plants as whole beings. They spurred on the health food movement and are the people who established the first herbal schools and made available the herbal knowledge now prevalent throughout the western world.

silvaculture: The practice of using trees in obtaining our needs—it is broadly defined so it can mean monoculture tree farms. However, I prefer the vision presented in agroforestry of a more integrated relationship with forests.

transition culture: A movement formed in Ireland by Rob Hopkins, now centered in Totnes, England. In the last several years it has gone worldwide with over a thousand communities awakening to the realities of peak oil and global warming and the paradigm shift needed to adapt.

tri-doshic: In Ayurveda, all manifestations in the universe are made of three doshas, or forces—Vata, Pitta, and Kapha—which are combined in varying amounts to express various qualities. Living in harmony with nature and having a balanced dosha are the keys to vitality and longevity in this system,.

whole plant: A holistic philosophy in which the medicinal impacts of a plant in its natural state are greater than those of isolated “active constituents.” It recognizes that there are meta-levels, energetic qualities and a vital living spirit present in a plant that can be lost through isolating parts.