

THE RESOUNDING BODY: EPISTEMOLOGIES OF SOUND, HEALING, AND
COMPLEMENTARY AND ALTERNATIVE MEDICINE ON CANADA'S WEST COAST

by

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Abstract

The main claim of this dissertation is that practices of sound healing are driven by a skepticism towards how conventional medicine conceptualizes and treats the body. Therefore, sound healing in thought and practice may be seen as revolving around an implicit desire to redefine the body, health, and listening. I refer to this as “negating the biomedical body” and show how it is underscored by frequent recourse to medical concepts adopted from complementary and alternative medicine.

This dissertation illustrates how practitioners’ negating of the biomedical body as well as their deeply embodied conception of listening and sound bear surprising consistency across a variety of sound healing practices. In this sense, sound healing is caught up in changing values regarding health, medicine, and healthcare delivery in the contemporary west. Notwithstanding its antithetical stance, however, sound healing can also be further understood when its dialectical relation to science and medicine is considered. In practice this unstable and problematic relationship is most pronounced in the contradiction between practitioners’ negating of the biomedical body (rooted in embodiment and indeterminacy) and popular appeals to science (rooted in representation and objectification).

Ultimately, I argue that in lieu of recognition from established medicine, a distinguishing role for sound healing rests on resolving this dialectical tension. This it accomplishes through the formulation of a new vernacular— hinging on terms such as “vibration,” “frequency,” and “resonance”—and a privileging of the body’s immaterial and energetic dimensions (a process I term the “naturalization of energy”). I suggest that one outcome of this dialectic is the new “body-as-vibration,” a conceptual model of the body that

is believed to be amenable to science but that still preserves sound healers' need to formulate a new epistemology for the body and health.

Preface

This dissertation is based on 14 months of field research that I as sole author undertook in Vancouver from 2011-2012. All engagement with human research subjects—including practitioners of sound healing, complementary and alternative medicine, and professional medicine—was approved by the Behavioural Research Ethics Board at the University of British Columbia under certificate H11-01353 (*The Resounding Body*).

Table of Contents

Abstract.....	ii
Preface	iv
Table of Contents.....	v
List of Tables	viii
List of Figures.....	ix
List of Illustrations.....	x
Acknowledgements	xi
Dedication.....	xii
CHAPTER 1: INTRODUCTION.....	1
Prior Research	12
Summary of Dissertation	21
PART I	
SOUND HEALING IN TRADITIONAL CHINESE MEDICINE: A CASE STUDY	34
CHAPTER 2: THE BODY-AS-MACHINE, THE BODY-AS-GARDEN.....	36
Understanding Traditional Chinese Medicine	38
From Acupuncture to Acusonics.....	46
The Mechanic and the Gardener	53
CHAPTER 3: “CONVENTIONAL” OR “COMPLEMENTARY”? A PATIENT’S PERSPECTIVE	63

The Rise of Complementary and Alternative Medicine	69
Medicine of the Material	76
 PART II	
NEGATING THE BIOMEDICAL BODY	82
 CHAPTER 4: LISTENING WITH THE BODY, MYSTIFYING THE BODY:	
REDEFINING SOUND AND THE BODY	84
The Listening Body	88
The Body Mystified	94
 CHAPTER 5: FROM PHARMACEUTICALS TO FREQUENCIES, FROM SURGERIES	
TO SOUNDS: REDEFINING HEALTH.....	107
Holism	109
Naturalism	113
 PART III	
DIALECTICS OF SOUND HEALING AND SCIENCE	120
 CHAPTER 6: FROM SMOOTH TRADITIONALISM TO SCIENTISM: SOUND	
HEALING AS SCIENCE?	122
“Finally Catching Up”: Historicizing Sound Healing, Consecrating Sound Healing.....	124
Scientizing Sound Healing	128
The Sound Healer: “Physician for Times to Come?”	139
 CHAPTER 7: SOUND HEALING AND THE NATURALIZATION OF ENERGY	
“Frequency,” “Resonance,” “Vibration”	153
The “Body-As-Vibration”	159

CHAPTER 8: CONCLUSION 165

BIBLIOGRAPHY 172

APPENDIX 1: “Report of Findings” form used by Dr. Shen to record patient diagnostic and other information. 193

List of Tables

Table 1.1: Taxonomy of sound healing practices.....	3
Table 3.1: Prime factors in the growth of CAM.....	77
Table 8.2: The “Body-As-Machine” and the “Body-As-Vibration”	164

List of Figures

Figure 5.1: Kathy Cameron leads a gong bath in Vancouver in June 2012.....	90
Figure 4.1: Megha Ratna Shakya gives a singing bowl demonstration in Vancouver in March of 2012.....	102

List of Illustrations

Illustration 2.1: West vs. East: The “Body-as-Machine” vs. “Body-as-Garden”	55
Illustration 7.1: Caduceus symbol	123

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Dedication

To my family—Carmen, Fernando and Paola—for their unconditional support.

To Babette for enduring with me.

Sound [is] a modality of knowing and being in the world. Sound both emanates from and penetrates bodies; this reciprocity of reflection and absorption is a creative means of orientation, one that tunes bodies to places and times through their sounding potential. Hearing and producing sound are thus embodied competencies that situate actors and their agency in particular historical worlds. These competencies contribute to their distinct and shared ways of being human; they contribute to possibilities for, and realization of, authority, understanding, reflexivity, compassion and identity. (Feld 2000:184)

CHAPTER 1: INTRODUCTION

We have arrived at a historical moment in the west during which the normative values and assumptions surrounding health—including how it may be defined, measured, and acquired—have begun to re-orient themselves. Caught in the rift between established norms and changing views, “sound healing”—the topic of this dissertation—is a relatively new and lesser-known terrain within the Western health care landscape that continues to take root. Broadly defined, sound healing refers to a range of non-professional practices concerned with the application of sound frequency and vibration using sound-producing instruments or technologies to address malady, or to restore or maintain health. Despite their eclecticism, then, sound healing practices are usually organized around a common belief in the inherently medicinal properties of sound.

This dissertation shows how sound healing practices are caught in an unstable and often problematic interplay between emerging views of the body and health (frequently shared by users of complementary and alternative medical approaches) and the more normative practices of Western biomedicine.¹ Because my main interest is how knowledge pertaining to sound and healing is derived, articulated, and put into practice, this dissertation takes an epistemic focus by attending to what has been said or written about sound healing

¹ Complementary medicine refers to non-conventional medical modalities, services, or products that are taken as an adjunct to conventional medicine. Alternative medicine, on the other hand, refers to those non-conventional medical modalities, services, or products that are used independently or in place of conventional medicine. Biomedicine refers to clinical medicine rooted primarily in biology, physiology, chemistry, and the natural sciences. In this dissertation, I will use the term “conventional medicine” to refer to biomedicine.

by its practitioners. In this respect, one could say that what I have sought through my research is an “acoustemology” of sound healing.²

Sound healing takes place privately behind closed doors—either alone or between a sound healer and client—or publicly in groups during sound healing performances, and its occasion often involves a financial transaction. It is practiced in yoga studios, homes, places of worship, and community centres, and less often in clinics, rented commercial venues, classrooms, and wards. Quite often sound healing may employ the voice in various non-verbal techniques of intoning, chanting, or overtone singing, or it may involve instruments such as singing bowls, gongs, didgeridoos, and tuning forks that are struck or sounded in varying ways so as to produce elongated tones. Less often sound healing may simply involve playing a recording that has been created or is intended to be listened to with the specific intention of healing.

In its perhaps least tenable form, sound healing employs specially manufactured technological devices designed to direct sound frequencies and vibrations into the body for therapeutic or curative purposes. These include Rife machines (devices purported to be able to kill various pathogenic organisms in the body); bioresonance machines (such as Cymatic Therapy machines that use focused vibrations to restore human cells, organs, and tissues back to a healthy “vibratory state”); and vibro-acoustic furniture (capable of mechanically translating music and sound into tactile sensations for therapeutic purposes; for a further taxonomy of sound healing practices see Table 1.1 below). Although the term “New Age” has often been applied to sound healing, it was never once used by any of the practitioners I

² In “Sound Worlds,” Steven Feld defines acoustemology as a combining of acoustics and epistemology through which we may “investigate the primacy of sound as a modality of knowing and being in the world” (2000:184).

interviewed to describe their activities—suggesting the term to be more of a label applied by those outside of sound healing communities.

Table 1.1: Taxonomy of sound healing practices. Compiled from Mary Scovel 1996.

Self-generated sound: vocal sound produced by toning, overtone chanting, and recitation of mantras or vowel sounds.
Projecting sound into the body: applying sound frequency directly onto the body through physical contact (such as in Cymatic Therapy and the use of tuning forks).
Sounding the body: directing sound frequencies or vibrations into the body based on a reading of the state of the body and its energy fields (such as in Siren Technique, Resonant Kinesiology, and Bio-Acoustics).
Listening techniques: methods used to strengthen perception of sound in order to improve cognitive and social abilities and remediate short attention span, lack of concentration, poor organizational skills, impaired memory, and problems with motor functioning and balance (most notably those developed by French physician and otolaryngologist Dr. Alfred Tomatis).
Healing compositions/sound combinations: traditional, indigenous, and contemporary approaches to healing using singing, chanting and rhythm (for example medicine songs, drumming, and Therapeutic Voice Work)
Sound Environments/Vibrotactile apparatuses: specially designed vibratory equipment including chairs, recliners, and beds that provide auditory input and vibrotactile stimulation to the whole body and are occasionally enhanced by immersive environments utilizing sensory stimulation or deprivation (including the Om System and Music Vibration Table).

Although no demonstrable unifying explanatory model exists that encompasses the complete range of sound healing methods, practitioners’ explanations of their healing efficacy often revolve around sound’s ability to influence the body at the energetic or “vibrational” level, to help restore “balance” (read as “health”) to the body, to induce heightened states of relaxation and reduce stress in a listener, and to mobilize or strengthen the body’s natural healing ability. In practice, a defining characteristic of sound healing is that practitioners are usually required to lie down or sit in a meditative posture (often with eyes closed) while listening, which is understood to predispose them to heightened

awareness of the body's sensitivity to frequency and vibration. This aspect of sound healing is even more pronounced in cases where the instrument is physically placed on the body while being played. In such a case the practitioner's engagement with sound extends beyond the realm of hearing (audioception) and into the realm of sensing with the body (somatosense), which involves the various receptors and processing centres in the body through which one derives a sense of touch, temperature, body position, vibration, and so forth. This complex overlapping of the various human sensory modalities with the ability to hear sound comprises a little-researched terrain in sound healing.

The example most akin to sound healing that people may be most familiar with is music therapy ("Sound healing—is that the same as music therapy?" is a question often posed by those inquiring about my research). Despite the limitations of comparing the two ("Well, sort of..." is the answer I usually give), unpacking the differences between sound healing and music therapy provides a useful point of entry into understanding sound-based healing practices. Perhaps the first thing to say about sound healing is that it does not necessarily involve music (although it certainly may). More to the point: though all music necessarily consists of sound, not all sounds are perceived as music.³ This simple logic implies that sound healing must be considered separately from music. This may or may not be an obvious distinction, but it nevertheless impacts on the way we talk about, analyze, and ultimately arrive at an understanding of sound healing. This is especially relevant considering that sound healing activities frequently call upon the use of drone-producing instruments (i.e., instruments capable of producing only single, prolonged pitches). Taken on

³ Inspired by Zen Buddhism and Indian philosophy, John Cage was the earliest Western composer to suggest that music is the product of selective listening, whereas noise consists of those sounds we wish not to listen to.

their own, the sound of a singing bowl or a gong will not normally be perceived as music, and neither would the barely audible hum of a tuning fork applied to a limb (to cite some of the examples from this dissertation).⁴

As of January 12, 2012, the website of the American Music Therapy Association, on the other hand, defines music therapy as “the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program” (<http://www.musictherapy.org/about/musictherapy/>). A string of terms present themselves here—“clinical,” “evidence-based,” “therapeutic,” and “professional”—which together suggest a distinction between music therapy and sound healing. Whereas therapy is defined as “techniques of intervention involving distinct goals and desired outcomes,” healing is construed as the more equivocal process of making strong or whole again (Crowe and Scovel 1996:22; Gouk 2000a:3). As some scholars have argued, to make this distinction is to be cognizant of a dualism that places activities of a “professional” kind on one side and activities of a “non-expert” kind on the other (Gouk 2000a:2), though in practice music therapists may sometimes be found adopting sound healing methods.⁵

Correspondingly, music therapy’s sanctioned and professional status is emblematic of its mainstream and generally accepted status in Europe and America, as are the rigorous techniques through which it addresses a host of ailments spanning “asthma, AIDS, Aphasia, autism, bereavement, cancer, deafness, dental problems, depression, dementia, eating disorders, emotional disturbance, epilepsy, inflammatory bowel disease, kidney failure,

⁴ Curiously this predisposition for drones is an aspect of sound healing that practitioners in Vancouver were unanimously unprepared to account for.

⁵ In my research, I met one accredited music therapist who used singing bowls and who consciously identified with a sound healing ethos.

schizophrenia, multiple sclerosis, [and] sexual abuse” (Horden 2000b:13). The “non-expert” aims and methods of sound healing, on the other hand, make them difficult to pinpoint in any precise manner and do not typically necessitate the intervention of a trained and/or accredited therapist or the implementation of specifically defined or measured goals and outcomes.

Sound healing is also oriented towards a different logic and methodology than music therapy because it often premises itself on the idea that health and malady are contingent and arise from a complex and holistic interplay involving biological, psychological, social, emotional, spiritual, and environmental factors that is not always easily utilized in music therapy (not to mention science-based) research and practice. Here again, however, the boundaries between professional and non-professional may become blurred as more accredited health practitioners in complementary and alternative medicine integrate sound healing into their practice (see Part I). As Penelope Gouk points out, “It can be argued that any musician is potentially a healer, almost anywhere,” since “even just listening to music—for example in the concert hall, in the privacy of one’s own home, or even in a hospital ward” may be regarded as having beneficial results (2000a:11).

Against the broad cultural backdrop of biomedicine and Euro-American modernity, the idea that sound—or indeed any other type of intervention—may be viewed as healing or therapeutic is also shaped by the values, beliefs, and practices most widely regarded in Western society as being legitimate (what has been termed “worldview” or “social paradigm”; see Handa 1986 and Kuhn 1996). The extent to which the concept of healing—and by extension sound healing—is deemed acceptable or relevant is patterned not only by its practitioners, but also by the activities of lay groups, institutions, governments, educators, funding agencies, and the media. For these reasons, the variety of non-mainstream practices

associated with sound healing activities might be more adequately referred to as “heterodox” (Horden 2000b:8) and have not always received the same degree of approval or commendation.

The question that has most concerned me throughout my research is: Why do some people perceive sound as healing? In search of an answer, I spent 2011-2012 in Vancouver on Canada’s West Coast observing and participating in the activities of individuals who have either tried to earn a partial living or reputation from sound healing activities, or who have made sound healing a regular pastime. During this time I attended various public sound healing events and was also permitted to observe intimate private sound healing sessions behind closed doors. The majority of these meetings took place in yoga studios and private residences. Other sites included community centres, churches, hospitals, a private health facility for individuals living with cancer, and an acupuncture clinic. Much of my time in the field was also spent interviewing participants at length about how their views on sound healing were derived. What were their beliefs regarding the efficacy of sound as a conduit for healing? What experiences in their lives led them to have these views? In what ways did they inform themselves about sound healing? And what compelled them to continue their sound healing practice even without recognition or substantiation from the cultural or medical mainstream?

The sound healing practitioners I interviewed suffered from a diversity of afflictions spanning depression, chronic pain, post-traumatic stress disorder, cancer, HIV, and physical and psychological trauma. They were a moderately diverse group in terms of background and occupation, if not their ethnicity and racial background, save for the following important exceptions: they all used complementary or alternative medicine and they all practiced some

form of yoga and/or meditation. Through my research, I came to learn of Dr. Shen, an acusonics practitioner and licensed doctor of Traditional Chinese Medicine (hereafter TCM) who practices in a health clinic near one of Vancouver's major general hospitals.⁶ It was Dr. Shen who acquainted me with Pam, a patient who specifically sought out her acusonics treatments as a response to living with cancer as well as another patient named Maria. Through Dr. Shen I also met sound healing instructor Samantha Jennings (who wished to be identified), a long-time practitioner of TCM who frequently travels across North America leading acusonics workshops. I also became acquainted with a small community of individuals using gongs for healing purposes, including Kathy Cameron, Paul Bissonnette, Tascha Stubbs, and Christine Vautour (who all wished to be identified), Karl, and Vikky; vocalists such as Laurel Murphy, Matthew Kocel, and Jerry desVoignes (who all wished to be identified) and Lela who used voice in a healing context; and Megha Ratna Shakya (who wished to be identified) and Nadia, who regularly used singing bowls as part of their sound healing practice.

The use of sound for healing, however, is not a common practice and its origins in the west have not been documented. This is because sound healing is heterogeneous, pluralistic, and often professes to be premised on cultural views or practices about which little is known in the west.⁷ A likely watershed, however, was the rise of the American counterculture that spread from California during the 1960s and which saw an unprecedented number of baby

⁶ Traditional Chinese Medicine (also known as TCM) is a system of medicine intended as an “energetic intervention designed to reestablish harmony and equilibrium for each patient according to the holistic principle” (Kayne and Booker 2010:121). “Acusonics” is the term I use in this dissertation to refer to the medical use of tuning forks by doctors of TCM as an adjunct to acupuncture treatments.

⁷ In *Sounds of Healing* (1999), for example, author Mitchell Gaynor cites among his many influences *Qi Gong*, *Dzogchen*, yoga, meditation, *Veda*, *Kabbalah*, shamanism, and the writings of the Sufi Pir Vilayat Anayat Khan.

boomers seeking spiritual re-invigoration travel to the east. Although the phrase “East meets West” is a tired one, it does hold relevance here (as we will see in the remainder of the dissertation). As young Westerners began to haunt the ashrams of India and the markets of Nepal, they encountered the new and exotic sights and sounds of gongs, singing bowls, chanting, flutes, and the like. And, as is often the case in first encounters between cultures, these spiritual adventurers were able to take back to their homes reports of their discoveries that offered both fact and caricature. As tourism and migration to the east increased, the landscape of Western musical technologies was also expanded as foreign instruments were brought back and, decontextualized from their original cultural frames, new meanings and purposes were sought for them which reflected the interests of their new users.

During this same period beginning in the late 1960s and spanning the next several decades, a cultural flow of ideas from east to west began to open—symbolically touched off by The Beatles’ first visit to the east in 1964 and followed by President Nixon’s first visit to the People’s Republic of China in 1972. For the first time the teachings of Asian intellectuals and spiritualists such as D. T. Suzuki, Yogi Bhañan, Baba Hari Dass, and Jiddu Krishnamurti began to earn increased recognition overseas. For many in the west their work fulfilled a wish for a new set of philosophical and moral values to adhere to, and provided a window into a more enchanted and less materialistic way of living. As “karma,” “chakra,” “Feng Shui,” and similar terms entered the American vernacular, they provided new ways for Westerners to talk about life, happiness, fulfillment, and, most significantly, health.

As the number of aging baby boomers began to balloon in the following decades and exert increasing pressure on the North American health care system, their participation in 1960s counterculture predisposed them to experimenting with non-conventional medical

approaches (Gesler and Kearns 2002). Nowadays these influences persist through the popularity of spiritual icons such as the Dalai Lama (who has explicitly engaged Western scientists and academics in the promotion of a more expansive understanding of health and happiness); the proliferation of a lucrative market of self-help products (including books, recordings, and talks) often professed to be steeped in “Eastern” thought; the growing pervasiveness of yoga and the meditative arts in the Western world; and—most significant for this dissertation—the steady growth of complementary and alternative medicine (hereafter CAM) in the west that every year welcomes more users spending increasing amounts of money on it. As I will show, all of these have left their mark on the culture of sound healing in Western cosmopolitan centres such as Vancouver.

In a newsletter to the National Association for Music Therapy, Barbara Crowe (a former president of the National Association for Music Therapy) and Mary Scovel (a former music therapy professor and Complementary and Alternative Medicine practitioner) propose that, despite their diversity, two prevailing theoretical principles underlie most sound healing practices (Crowe and Scovel 1996). The first concerns the concept of the bio-physical resonance of the human body. This holds that the body is constituted by “frequencies, sounds, and biological, mental and emotional rhythms in a state of continuous flow which seek to achieve and maintain the state of perfect balance and equilibrium” (McLellan 1991:38). This dimension of the body and its natural processes is considered to make it particularly susceptible to sound. The second principle hypothesizes the existence of a complex, subtle energetic system—also known as the “aura” or “etheric body”—both within the body and surrounding it. Popularized by authors such as Richard Gerber, M.D. (1988), the concept

suggests that such an energy has been alluded to repeatedly in countless traditional worldviews and has now begun to be measured empirically by researchers.

In my research it became apparent that both these ideas underscored the high degree of consistency that characterized the way most research participants spoke about sound's ability to heal both mind and body. Time and again explanations centered on the body, its constituents, and why they should be influenced by sound. Meanwhile, the body was virtually always described in ways at odds with conventional medical knowledge and scrutiny, hinging instead on notions of an intangible energetic life force (or "breath, life force, vigor, and animating principle," as Crowe puts it in another publication; 2004:290), which held as much significance for the health of the body as its physical or material constituents.

This view of the body as an energetic as well as physical entity, however, is not an idea invented by sound healing practitioners to support their views (though it certainly does). Rather, it has been an enduring staple of many CAM practices as well as traditional and non-western epistemologies not oriented towards a mind-body dualism or a separation of metaphysics or subjective experience from medicine (I will use the example of TCM in Part I of my dissertation to highlight this aspect of sound healing in greater detail). In turn, the idea of a bodily energetics has re-entered public consciousness via the many forms of CAM and mind-body practices such as yoga and meditation that share similar epistemologies.

Correspondingly, two themes continually surfaced during my time in the field. The first has to do with the influence of Eastern and pre-Enlightenment medical and esoteric traditions on understandings of the body and health, where an emphasis on interconnectivity and balance among the various parts of the body—material or otherwise—takes precedent over a reductionist understanding rooted in chemistry and biology. This ties into a second

theme regarding the often problematic relation between sound healing and science and comprising a critique of modern Western medicine by sound healing practitioners. At the heart of this critique lies a fundamental debate about whether to treat the body—both within and beyond medical contexts—as a dead or spiritless entity (what Foucault [1975] called the “man-as-machine” model) or as a living, intending entity whose primary engagement with the world is bodily (what has been more recently termed the “lived body”; see Leder 1992:25).

Prior Research

While increasing attention from the sciences has been given to understanding the influence of music and sound on human cognition and emotion, virtually no research outside of science has been produced on sound-related healing practices in a contemporary western setting.⁸ Subsequently, I have deliberately brought thematically relevant studies from the social sciences and humanities to bear upon my research. These include ethnographic studies that have connected music with health and healing, and studies that demarcate and theorize the relationships between the body and culture, society, and history. Neither of these streams, however, has considered sound as a distinct research topic. Field research that has illustrated the use of music for healing, for instance, has been carried out by anthropologists and ethnomusicologists for well over a century, but attempts to separate out sound, per se, have been minimal. Research focusing on the body, undertaken primarily by anthropologists,

⁸ Scientific research programs with a focus on music and cognition include EBRAMUS (European BRAin MUSic), Finnish Centre of Excellence in Interdisciplinary Music Research, the Music Cognition and Action lab at the MARCS Institute, and the Neuroimaging lab at Harvard Medical School.

sociologists, and philosophers of medicine, has also given ample attention to matters of health but it, too, has not considered the significance of sound.

Since at least the time of Frances Densmore's research on American native music in the early 20th century (1918), a relatively steady stream of ethnographies have called attention to the use of music for healing in traditional or non-Western societies (Koen, Barz and Brummel-Smith 2008:6). To date, however, the most explicit engagement with music-related practices of health and healing in varying cultural settings has been in medical ethnomusicology, which has defined itself as "a new field of integrative research and applied practice that explores holistically the roles of music and sound phenomena and related praxes in any cultural and clinical context of health and healing" (Koen, Barz and Brummel-Smith 2008:3).⁹ In a landmark volume of essays highlighting ethnomusicology's engagement with anthropology, music therapy, education, healthcare, biomedicine, traditional medicine, and complementary and alternative medicine titled *The Oxford Handbook of Medical Ethnomusicology* (Koen et al. 2008), Koen et al. spelled out their vision of a collaborative and integrative field of research engaging three central themes: 1. Interrelationships between biological, psychological, social, emotional, and spiritual domains of health, healing, illness, and disease; 2. Collaborative, integrative, and holistic research (on health, healing, curing); and 3. Current cross-disciplinary discourse on music, medicine, culture, health, and healing (2008:5).

Medical ethnomusicology shares with its predecessor, medical anthropology, the important agenda of advancing a more all-encompassing definition of medicine through a

⁹ Although sound, as distinguished from music, is mentioned in this definition, no study produced by researchers in medical ethnomusicology to date has focused exclusively on sound as a medical phenomenon in its own right.

foregrounding of culture.¹⁰ Both commit to taking stock of the diversity of beliefs and practices encompassing health, healing, disease, and illness on a global scale. Koen, Barz and Brummel-Smith remark, “Just as music is culturally contextualized and its meaning far from uniform, so too are ‘medicine’ and ‘medical’... to approach a deeper understanding of music’s potential power to promote health or healing within diverse cultural and clinical contexts, multiple ontologies, epistemologies, and methodologies must be considered” (2008:13). Medical ethnomusicology, then, embraces a diversity of approaches to understanding health and healing by calling attention to the core meaning of the term “medical”: to heal, to cure, or to make whole (2008:13).

A more expansive definition of medicine and a greater inclusion of culture in understanding health and healing is implicit in virtually all of the studies that have been cited in the medical ethnomusicology-related literature. One such study is *Healing Sounds from the Malaysian Rainforest* (1991), Maria Roseman’s ethnographic account of the use of music, sound, ritual, and dance for curative purposes by the rainforest-dwelling Temiar in Malaysia. In *Healing Sounds* Roseman connected Temiar concepts of illness etiology, diagnosis, and treatment with indigenous views on musical composition, speech, performance, and affect in order to understand how their convergence constituted a form of illness intervention in Temiar society. A short time later, Roseman, along with Carol Laderman, published a volume of essays entitled *The Performance of Healing* (1996). This collection of

¹⁰ Gregory Barz had Baer et al.’s (1997) definition of medical anthropology in mind when he defined medical ethnomusicology as “a branch of research grafted onto ethnomusicological and biomedical studies that focuses on factors that cause, maintain, or contribute to disease, illness, or other health-related issues, and the complementary, alternative, or supportive musical strategies and performative practices that different communities have developed to respond to cultural conceptualizations of disease and illness, health and healing” (Barz 2006:61).

predominantly anthropological writings explored emerging themes in performance, practice, experience, and embodiment and underscored the performative aspect of healing. Using examples in varying medical, holistic, and religious settings, each contributor to the volume illustrated in varying ways how efficacy in healing practices hinges on sensory engagement as enhanced through the dramatic elements of performance.

Ngoma: Discourses of Healing in Central and Southern Africa (1992), by John Janzen, is another frequently cited ethnography that explores the drumming-dancing-singing constellation of practices known as *ngoma*. Like *Healing Sounds*, it emphasizes understanding healing as a “culturally particular institution” (1992:3). African cultures of healing and medicine are also the subject of *Dancing Prophets* by Steven Friedson, who asks what it means to “dance a disease” and “drum a diagnosis” in Tumbuka healing (1996:xi). Friedson’s study of Malawian music and divination trances has a phenomenological slant that lends a purposeful attention to music as an *experience*. Friedson was also able to bring to the fore the often taken-for-granted categories of “medicine” and “aesthetics” into which healing and musical practices are respectively placed in Western thinking (categories so often not presumed in cultures outside of the west such as among the Tumbuka).

Following the publication of *Dancing Prophets*, the journal *World of Music* published a special issue entitled “Music and Healing in Transcultural Perspective” that illustrated a diversity of music-related healing practices from *Ebó* ceremonies in Bahian *Candomblé* in Brazil to music therapy in the contemporary west. Bearing in mind the varying beliefs regarding humans, nature, world, cosmos, and harmony evident in each example, the essays lent credence to the idea of health, illness, and healing as heterogeneous and culturally entrenched categories (Baumann 1997).

Beyond the Roof of the World: Music, Prayer, and Healing in the Pamir Mountains, also by Benjamin Koen, is another recent work placing ethnomusicology at the intersections of CAM and medical, cognitive, and applied approaches to health, while taking stock of the influence of “science, religion, spirituality, belief, culture, music and experience” (2009:8). Incorporating physiological experiments into his otherwise ethnographic research, Koen’s study focused on the integration of music, prayer, and meditation in particular preventive and curative practices in Pamiri society.

As shown in the few examples cited, ethnographic studies have made important contributions to understanding how differing social and cultural norms determine music and healing practices. Yet because of the disciplines’ particular histories and inclinations, examples have tended to be relegated to non-Western and/or traditional societies. Hence the Tumbuka drum their *Vimbuzza* in Malawi, the Shipibo sing their *icaro* in the Amazon, and so forth. I believe this has contributed to the notion of using music or sound for healing outside of clinical settings as something of a cultural remnant. Within the exoticized, historicized frame inherited from early ethnography, the use of music and sound for healing is plausible. Taken beyond this frame, however, few ethnographers take the idea seriously. As Penelope Gouk similarly notes, an understanding of music and sound’s healing capacity within the west can “only take place in relation to other times and other places, as part of historical or anthropological discourse rather than a reality of contemporary Western society” (Gouk 2000b:191). The resultant academic blind spot has contributed to the view that the modern west provides an unlikely setting for healing using music or sound and an even less likely topic for serious inquiry. This, in turn, has meant anthropology and ethnomusicology, despite

being early champions, have fallen short of understanding how the use of music and sound for healing may be expressed as a living, breathing culture in contemporary Western society.

Another limiting characteristic of research is also inherited from the earlier preoccupation with exotic or remote settings. Whereas the popular view of music and sound's ability to heal as a near universal (see Chapter 7) has earned much attention both inside and outside academia, how related practices have diverged or competed over time has not been given extensive consideration. As Peregrine Horden has commented in his edited volume, it is a relatively easy task to evoke music and sound's long-heralded transformative and healing powers in a tidy and consistent universalizing manner—a tendency he terms “smooth traditionalism” (2000b:32; see Chapter 7). To understand how views on the subject have been constructed, positioned, or contested in varying times and contexts, however, is a much more haphazard endeavour.

Part of the reason for this limiting characteristic arises from the observation just stated: the majority of ethnographic studies have located practices of music and sound-based healing in culturally and often temporally distant societies, leaving aside the more complex, multi-ethnic, postmodern setting of the industrialized west. Instead, studies have gravitated towards engaging with music and sound healing practices as much more localized, homogenous, and culturally bounded phenomena. Within such a setting, music's affiliation with health and healing is more likely to be taken for granted amongst its practitioners.

There are some exceptions. *Music as Medicine*, a volume of music therapy-focused essays by Peregrine Horden (2000a), follows a more critical and constructivist trajectory through its historical approach. Scrutinizing written medical texts, treatises, and commentaries dating back to the Middle Ages from European, Judaic, Islamic, Indian, and

Southeast Asian traditions, Horden interrogates music therapy's unproblematic historical continuity through careful consideration of changing social and intellectual settings. One of his main claims is that in practice, the application of music for bona fide therapeutic or medical purposes (at least according to written traditions) was tenuous at best. Music's medical powers instead were most often expressed through abstract and speculative thinking by philosophers and religious thinkers rather than through serious medical practice (Horden 2000a:44).

Penelope Gouk's *Musical Healing in Cultural Contexts* (2000), a cross-disciplinary companion to Horden's text, is similarly conceived as a critical historical study on music and healing-related practices, but with an emphasis on the "non-expert" kind (meaning those practices that existed before the establishment of Western music therapy; Gouk 2000a:2). Like Horden, Gouk situates music and healing in distinct cultural and historical settings. In her analysis of the heralded volume *Music and Medicine* (1948) she notes how early writings on the subject are chiefly attributed to either music theorists with no medical training or authority, or conversely to medical authors whose recreational engagement with Western music had more to do with the trappings of the mid-20th century medical profession than with serious practice. Gouk also pointed out how the absence of any religious, spiritual, or non-biomedical views on the subject revealed much about the various authors' positioning within distinct institutional and intellectual settings.

The second stream of research that I engage with, on the other hand, follows a lineage of medical writers informed by an epistemological concern for how boundaries between the body and nature, culture, and society are demarcated and how these shape medical knowledge and practice (see, for example, Freund 1982; Strathern 1996; Synnott 1993; and

Williams and Bendelow 1998). This research populates the literature of medical anthropology, social theory, and the sociology, history, and philosophy of medicine, and is often characterized by a commitment to “decentering the physical body of the basic sciences and questioning the epistemological assumptions entailed in the production of natural facts” (Lock 1993:134).

Despite its prominence in research on human culture, the body in anthropology up until the mid-20th century was treated as (more-or-less) universal, biologically determined, and unquestioned and its study more appropriately given to the sciences. This changed with efforts to establish an anthropology of the body in the writings of Douglas (1973), Benthall and Polhemus (1975), and Blacking (1977), to name just a few. During this time writers also began to draw attention to the body as conceptually fluid and difficult to define (at least in any finalized sense). Accompanying this was an increased sensitivity to reflexivity in ethnographic methods and a breaking down of Cartesian dichotomies including, most notably, “mind/body,” “nature/culture,” and “self/other” (Lock 1993:134). More conceptual space began to be made for pluralist and dialectical representations and the problematizing of such dichotomies. Meanwhile, critical analysis of medical texts and the conscious politicization of the female body by feminist scholars contributed to a radical re-framing of representations of the body and their relationship to discourse and practice (Bordo 1993; Davis 1997; Lock 1993; Haraway 1988; Scheper-Hughes 1987).

Such changes were reflected in writings such as “The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology” by Nancy Scheper-Hughes and Margaret Lock (1987). In this article, the authors proposed three overlapping, conceptual modes with which to think about the body: 1. the individual body (pertaining to phenomenological views of the

lived self); 2. the social body (pertaining to symbolic and structuralist views); and 3. the body politic (pertaining to post-structuralist views; 1987:7-8). Rather than presume a universal and biologically predetermined entity, the authors conceptualized the body as “simultaneously a physical and symbolic artifact, as both naturally and culturally produced, and as securely anchored in a particular historical moment” (1987:7). The authors foreground the longstanding Cartesian distinction between spirit and matter in Western science and medicine, and its contrast with more holistic epistemologies. Scheper-Hughes and Lock ultimately proposed the development of a new epistemology of the “mindful body” through which the conceptual lens of their “3 bodies” could be applied.

Lock subsequently published, in partnership with Shirley Lindenbaum, a volume titled *Knowledge, Power, and Practice: The Anthropology of Medicine and Everyday Life* (1993). This collection highlights the cultural construction of illness, the body, and medical knowledge, and calls into question “the unexamined authority usually assigned to contemporary biomedical knowledge” (Lindenbaum and Lock 1993:xi). This was a subversive development for medical anthropology, a field that Lindenbaum and Lock argued was accustomed to championing the social and cultural construction of health-related knowledge and practice in culturally remote contexts while continuing to embrace Western biomedical knowledge as self-evident.

In the volume *The Body in Medical Thought and Practice* (1992), Drew Leder relates contested views of the body and health to the wider sphere of current medical practice, urging readers to critically examine the underlying “metaphysics” of medicine (1992:3). Noting both their gains and shortcomings, Leder established five main causes for current dissatisfaction with medicine and healthcare in the modern west: economics,

bureaucratization, technology, specialization, and the medical training system (1992:2). These, in turn, are due to a distinct concept of self and the body that is a product of post-Enlightenment thinking.

In *Embodiment as a Paradigm for Anthropology* (2002a), an analysis of charismatic ritual healing in contemporary North America, Thomas Csordas argued that the body is best perceived as a *subject* of culture, or the “existential ground of culture,” rather than as an *object* existing in relation to it (2002a:58). With its phenomenological orientation, the author ventured beyond the mere collapsing of mind/body dualism by outlining a non-dualistic paradigm for the study of culture (2002a:64). This project involved avoiding “the assumption that phenomena of perception are mentalistic (subjective) while phenomena of practice are behavioristic (objective) by approaching both within a paradigm that asks how cultural objectifications and objectifications of the self are arrived at in the first place” (2008a:82).

Summary of Dissertation

This dissertation combines fieldwork rooted in participant observation and interviewing with comparison and analysis of secondary sources such as popular books, articles, manuals, and web pages. Most of the fieldwork entailed attending public or private sound healing performances, participating in adjunct activities such as meditation or yoga, or attending self-development workshops lasting one or two days. At other times it involved simply observing a private session between a client and a sound healer and/or licensed practitioner of complementary or alternative medicine. Additionally, I conducted 25 partly scripted, open-ended recorded interviews lasting 1 hour to 1-and-a-half hours with 20 sound

healing practitioners and one doctor and professor of clinical medicine and pathology (who was interviewed by e-mail). These were embellished with excerpts from personal journals shared with me by two sound healing practitioners via e-mail. The dissertation does not include data from additional interviews I undertook with a chanter, a percussionist, a licensed physiotherapist, and a professor of physical therapy.

In order to recruit research participants, I sought permission to place posters at various yoga studios and bookstores across Vancouver as well as at one complementary and alternative medicine clinic offering sound healing services. At other times during public sound healing events, I was able to introduce myself directly to practitioners/performers or to directly announce to audiences my invitation to participate in the study. All interested individuals were sent a recruitment letter outlining the goals and methods of the study as well as their rights as research participants. From a first wave of initial recruits, a number of additional sound healing practitioners were also personally recommended to me, some of whom became involved in the study. Written consent was sought from all participants using consent forms before conducting participant observation and interviewing. Unless indicated, the anonymity of all research participants has been maintained in the dissertation using pseudonyms.

Most of the practitioners I interviewed were involved with sound healing either as paid facilitators or as paying participants or clients. In other cases, they practiced either alone or in groups in the privacy of individuals' homes, in which case the distinction between "healer" and "patient" did not always exist. Some of these practitioners attempted to cope with depression or poor concentration through use of gongs and singing bowls, while others used them to aid meditative or yogic practices. Still others used them to alleviate the

symptoms associated with post-traumatic stress disorder. Two other practitioners living with cancer, meanwhile, received acupuncture-styled tuning fork treatments from a doctor of Traditional Chinese Medicine. A number of sound healing practitioners also using voice for healing purposes did so as part of a spiritual practice, to cope with trauma, as an adjunct to alternative treatments such as *reiki* or massage therapy or, in one case, to aid in recovery from a brain injury.

It is worth mentioning that of the 20 sound healing practitioners interviewed, 14 were women. This over-presentation of women in sound healing was also reflected in attendance at public sound healing events where they virtually always out-numbered men. Although I have not commented more explicitly on this gendered ratio in the body of the dissertation (I hope that other writers take up this mantle), it is worthwhile to note that the pervasive focus on critiquing modern medicine's concept and treatment of the body—partaken by both women and men during interviews—has much in common with the feminist orientation of critical discourses in the social sciences (see, for example, Bordo 1993; Davis 1997; Lock 1993; Haraway 1988; Scheper-Hughes 1987).

I am often asked how I arrived at my interest in sound and its potential as a healing agent. To begin with, I would have to guess that endless childhood hours spent listening to audio cassette-recorded versions of my favourite films sparked an early fascination with attending to the nuances of sound. Growing up, my father's career in radiology also exposed me (albeit in a tangential manner) to a somewhat enigmatic world where x-rays, electromagnetic frequencies and sound waves are used for medical purposes. More recently, the deterioration of my hearing due to otosclerosis and my subsequent reliance upon hearing aid technologies has perhaps also prompted me to consider a more expansive conception of

hearing—one where not only the ears but the entire body and its various sensing capacities are used to listen.

Regarding sound's possible healing efficacy, it might seem plausible that being a practitioner of Buddhist meditation and some of its associated practices of prayer and mantra recitation has afforded me a vantage into sound as a transcendent force. However, healing, per se, has rarely in my own studies of Buddhism been explicitly linked to its goals (though written and oral stories of miraculous healing certainly abound in the Buddhist tradition). Rather, it would be more accurate to say that the fleeting esoteric references to sound and vocalization as technologies of Enlightenment that I have encountered in the texts, commentaries, and treatises of Indo-Tibetan Buddhism—many of which have now been translated into English—have served to continually pique my curiosity.

There is yet another dimension, however, to my interest in sound and healing that I believe taps into a growing public sentiment towards the modern pursuit of health: that health is somehow more than what established medicine—with all of its expertise, quantification, and sophisticated technologies—tells us. As readers will note in the following chapters, this type of skepticism held much sway for practitioners during interviews. Bearing in mind the degree to which the critiquing of conventional medicine and health professions is given attention by sound healers in my dissertation, it must be stressed that much of this critiquing posits more rigid boundaries than what may actually exist between what can or cannot be considered “scientific” (Roscoe 1991). For my part, such critique is not countered in the dissertation by extensive recourse to published research in medicine and science with a focus on sound or healing, nor to the views or opinions of medical or scientific practitioners (although I have included some references in the footnotes to point interested readers to some

useful starting points). This is not meant as an affront to the value and practice of professional medicine and I hope that it goes without saying that a totalizing critique of modern Western medicine rooted wholly in Cartesian dualism, positivism, and reductionism would be far too simplistic to entertain without haste (Carrithers 1990; Nichter 1992; Roscoe 1991).

What I do hope to have taken in my dissertation, however, are the modest first steps towards a “first principles” for sound healing rooted in knowledge of the body, health, and sound and how it is derived, articulated, and put into practice by sound healers. As some readers may already know, one of the defining developments in ethnography has been the shift away from writing about cultures as more or less static, uniform, and self-contained towards an emphasis on fluidity, boundaries, local-global processes, and the critiquing of power. Accordingly, rather than discuss sound healing as a cultural phenomena *sui generis*, I attempt to show how its practices are caught in an unstable and problematic interplay between emerging views of the body and health and the more normative practices of conventional Western medicine.¹¹ Consequently, the main claim of my dissertation is that sound healing practices are driven by a skepticism towards how conventional medicine conceptualizes the body and its treatment. This is countered through frequent recourse to views of the body and health that are antithetical to conventional medicine and usually borrowed from CAM and so-called “mind-body” practices, such as yoga and meditation, that continue to gain ground in the west. For this reason, I have attempted to understand sound

¹¹ I use the terms “unstable” and “problematic” since the boundaries between what are considered medically conventional and non-conventional are often blurred or changing and because these are often premised on reified terms such as “Western,” “traditional,” “scientific,” and so forth that serve to minimize intercultural variability and resistance (Comaroff 1983; Nichter 1992).

healing largely through its capacity to redress the many perceived detriments of conventional medicine via the formulation of new epistemologies. This is expressed through conceptual models of the body, health, and listening that are construed in terms of embodiment (or *being-in-the-world*, to borrow German philosopher Martin Heidegger's term)¹² and drawing attention to the body's immaterial or energetic dimensions using language (or *representation*; see Csordas 2002).

Such an emphasis is motivated by a characteristic concern on the part of some medical ethnographers to foreground the relations of power and the production of knowledge inherent to both traditional/ethnic and conventional/Western medical systems (Nichter 1992). This necessitates moving explicitly beyond the traditional, non-Western frames of earlier ethnographies—some of which have been criticized in the last several decades for their non-reflexivity and dependency on “we/other” (often read “West/non-West”) constructions—and into the complex, syncretic terrain of the cosmopolitan west where, not coincidentally, the notion of bounded cultures has held less sway. The expanding of the medical ethnographer's “field” to include the city, however, largely prompted by a turn towards treating Western biomedicine as one amongst many medical modalities or settings, has presented a set of theoretical and moral problems different from other ethnographers working in the city or “at home.” This has been informed by a re-negotiation of the concept of difference in his or her role as writer and researcher and a unique disruption of “we/other” and “West/non-West” dualisms (Hadolt 2010). In my own dissertation, I have tried to remain mindful of being bound up with the very system of healthcare repeatedly called into question by sound healers

¹² Heidegger (1889-1976), whose work is commonly associated with phenomenology and existentialism, used this term to evoke “Being” and “the world” (and by extension “subject” and “object” and “internal” and “external”) as unified, rather than separate, phenomena.

(not to mention my own sometimes unfavourable intimations of modern healthcare) lest I risk perpetuating a so-called “imperialist nostalgia” (according to which the need to call attention to the dehumanizing effects of Western biomedicine is contingent on the construction of an idealized non-Western or “traditional” medical “Other”; Rosaldo 1989). Although to distinguish these types of problems as distinct from other ethnographers’ is not to downplay the onus to respond to them, there is a sense in which the preoccupation with biomedicine and the problems of conceptualizing and representing the body (also characteristic of my dissertation) are justified (Hadolt 2010).

Another legacy of the expansion of the ethnographer’s field into the city is the adoption of methodological and theoretical approaches once employed exclusively in the social sciences and thought better suited to the complex, multi-ethnic settings of (post)modern urban life (Reyes 2007). Correspondingly, I have deemed it suitable to blend the descriptive and exploratory approaches of ethnography with the more inductive and empirical approach of grounded theory methodology. Grounded theory is a qualitative research method developed in the social sciences by Barney Glaser and Anselm Strauss (who honed their method in medical settings) whereby a hypothesis or theory is reverse-engineered from a highly systematized process of analyzing data (Glaser 1978; Glaser & Strauss 1967; Strauss 1987). It also emphasizes identifying the issues that are of importance to research subjects in their respective field of human endeavour by unveiling their “main concern” and how they go about resolving it (in my example, sound healers’ concern for countering conventional medicine’s view and treatment of the body).

Rather than begin with a proposed hypothesis or theoretical orientation against which subsequent data is measured (the more common deductive approach), the distinguishing

feature of this method is its primarily inductive process requiring the researcher to first engage in a meticulous process of collecting, analyzing, and coding data—in my case, written field notes, transcribed interviews, and various textual documents—then formulating conceptual models strongly rooted in the data. In addition to referencing written field notes, theoretical memoing was employed to first focus attention on the prevalence and frequency of particular vernacular terms (such as “balance,” “energy,” and “vibration,”) and concepts (“holism,” or “listening with the body,” for example) across all data. These were further clustered into conceptual categories (“redefining the body” and “appealing to science and medicine,” for example). From this I yielded the dissertation’s defining conceptual models (including “negating the biomedical body” and the “sound healing-science dialect”). My logic in emphasizing an inductive research method is simple: since no exposition yet exists that elucidates sound healing in a contemporary western setting, let us begin by first attending to what has been said and written about sound healing by its practitioners.

One criticism of grounded theory, nonetheless, emphasizes its positivist streak that privileges the notion of emergent truths arisen from a reality pre-existing “out there” (Strauss and Corbin 1994:279) without due regard for the ideas of self-reflexivity and intersubjectivity which have informed ethnographic practices in the last few decades. Bearing this criticism in mind, Kathy Charmaz (a former student of Glaser and Strauss) introduced into grounded theory the idea of the researcher as author, foregrounding the dialogical process between researcher and research participants while giving due consideration to “temporal, cultural, and structural contexts” (Charmaz 2000:254). In my dissertation, I give credence to such an approach through emphasis on epistemology, context, and the constructed and contested nature of medical knowledge and practice.

Of course, there remain limitations to every research agenda that every researcher must face and that I call attention to in my dissertation. One consequence of working in an urban setting, for example, was that the expectation to immerse myself fully in the lives and culture of the research participant was often trumped by his or her busy lifestyle, which placed obvious constraints on participant observation methods and resulted in a lesser degree of immersion. A related challenge arose from the privacy and sensitivities often surrounding matters of sickness, not to mention individuals' personal reasons for pursuing sound healing activities. In the most limiting cases, it was simply deemed inappropriate for me to be present observing or participating in a sound healing event. Conversely, where my presence was permitted, there was often very little that occurred in the way of speech, movement, communication, etc., during sound healing activities which often left me with the problem of having relatively little to write about in the moment. This was compounded by sound healing's often meditative orientation requiring a participant to close his or her eyes and disengage with active intellectualization in favour of the mental quietude deemed necessary for somatosensory engagement with sound and vibration—another requisite posing obvious challenges for the researcher in the field. Just as when “when one is really sick, one can't write about it” (Middlebrooke 1998:55), when one is in a heightened state of relaxation, one is not typically predisposed to jotting notes.

The combined result of these limitations is that the ethnographic focus of fieldwork either shifted to the peripheries of sound healing activities (where, ironically, the “action” was found), or was weighted in favour of interviewing research participants outside the context of sound healing activities where more attention was inevitably given to what was said or thought about sound healing rather than a direct experience or description of it.

Consequently, there remains for both the ethnographer and sound healer the inescapable problem inherent in using text and words to represent what is largely a visceral or subjective dimension of experience. As Thomas Csordas suggests, “Understanding healing in terms of representation is not adequate because... ultimately representation appeals to the model of a text... [and] textual(ist) interpretations remain inflections of experience, slightly to the side of immediacy” (2002:3). While these problems are unlikely to be resolved for academia any time soon (much less within the confines of this dissertation), noting them does help us critically face some of the obscurations which may be the result of a textually dominated mode of inquiry. Nevertheless, with my “first principles” sketched out, it is my hope that those interested may take up the task of critiquing, refining, and ultimately building upon what is presented in this dissertation.

Part I of this dissertation presents a case study that illustrates the recent adoption of sound healing by doctors of Traditional Chinese Medicine (TCM). Chapter 2 focuses on interviews with Dr. Shen, a licensed doctor of TCM who uses tuning forks as an adjunct to acupuncture treatments. It highlights her views regarding the efficacy of sound for treating patients and brings to the surface a number of concerns regarding conventional medicine’s perception and treatment of the body. Here I outline the essential differences epitomized in Dr. Shen’s view of the “body-as-machine” (believed to be the inherited legacy of Cartesian dualism and modern Western medicine) and the “body-as-garden” (seen as an outgrowth of the Taoist worldview of Chinese medicine). Chapter 3 focuses on interviews with Pam, a patient of Dr. Shen, who seeks sound healing treatments to remedy her cancer. This chapter establishes sound healing’s affinity with CAM by demonstrating a number of common values, grievances, and aspirations, and suggests that many of the views articulated by sound

healing practitioners regarding the body and health are derived from this rapidly expanding segment of the health care system.

Part II encompasses a broader array of sound healing methods through interviews with twenty sound healing practitioners in Vancouver. Chapter 4 shows how the underlying concern for critiquing and reformulating conventional medical views of the body evident in Part I—a process I term *negating the biomedical body*—is mirrored in this wider sphere of sound healing. In their stead, two conceptual models of the body—the *Listening Body* and the *Body Mystified*—are posited based on common perceptions regarding the visceral and esoteric dimensions of sound and the healing capacity of the body. Chapter 5, on the other hand, articulates practitioners' corollary views on health, embodied in two prevailing paradigms carried over from CAM practices and also increasingly given attention in professional medicine: *holism* and *naturalism*. Taken together, practitioners' views on the body and health are seen as providing new foundations for medical thought and practice in sound healing communities.

Part III considers sound healing from an even broader perspective by examining the ambiguous and sometimes problematic relationship it establishes with science and medicine. Through a grounded theory analysis of recorded interviews and a survey and comparison of books, articles, websites, and other sound healing-related related documents, Chapter 6 demonstrates a contradictory tension generated from practitioners' negating of the biomedical body and their frequent appeals to science. It suggests that such a dialectical tendency is underscored by a desire to legitimize the concept of sound healing in a scientifically acceptable manner using discourse. Chapter 7 suggests that from the dialectical tension established between sound healing and the tenets of science and medicine, there

arises a signature discourse on the body and health. Here we see a characteristic constellation of terms including “frequency,” “vibration,” and “resonance” that hinges on an underlying desire to normalize the idea of a vitalistic energy believed to be crucial to the body and its health. I term this process the *naturalization of energy* and argue that a very important dimension of sound healing is its attempt to overcome the problematic separation of immaterial from material phenomena in conventional medical thinking. Finally, I present a new conceptual model of the body I term the “body-as-vibration” frequently evoked by sound healing practitioners to help explain the susceptibility of the body to sound while retaining a desire to establish sound healing as a bona fide complementary modality in the broader landscape of Western health care.

To frame sound healing in this way is not to suggest that establishing scientific evidence for sound’s healing efficacy is not possible or that such an endeavor would be futile. Indeed, most of the research participants I engaged were keenly interested in the possibility of a scientifically validated framework for explaining sound healing’s efficacy, assuming this to be the goal of my research. As Alan Watkins, M.D. suggests, complementary and conventional medicine “are not mutually exclusive on a philosophical or a practical level,” rather, “if any of the complementary systems are to be integrated, these systems either have to be proven effective by allopathic mechanisms, or allopathy has to accept that they may work by means of mechanisms that are foreign to the present biomedical model” (2001:206). Nonetheless, it will not be my intention to judge whether sound healing and medicine ever reach such a stage or to predict whether sound healing will ever enjoy widespread acceptance. Before this can happen it will need to pass the point at which its own epistemological underpinnings—its beliefs, values, and judgments—recede into the unconscious background

of the Western worldview. My chief concern, meanwhile, is to illustrate how and why it has not reached this point. Sound healing has much epistemic work to do.

PART I

SOUND HEALING IN TRADITIONAL CHINESE MEDICINE: A CASE STUDY

body *noun* \ 'bā-dē\

a : the organized physical substance of an animal or plant either living or dead: as (1) : the material part or nature of a human being (2) : a dead organism : corpse

b : a human being : person

a : a mass of matter distinct from other masses

b : something that embodies or gives concrete reality to a thing; also : a sensible object in physical space

Merriam-Webster Dictionary Online, s.v. "Body," accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/body>.

sound *noun* \ 'saund\

1 a : a particular auditory impression : tone

b : the sensation perceived by the sense of hearing

c : mechanical radiant energy that is transmitted by longitudinal pressure waves in a material medium (as air) and is the objective cause of hearing

adjective

1 a : free from injury or disease

Merriam-Webster Dictionary Online, s.v. "Sound," accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/sound>.

ma·te·ri·al *adjective* \mə- 'tir-ē-əl\

1 a (1) : relating to, derived from, or consisting of matter; especially : physical <the material world> (2) : bodily <material needs>

2 : having real importance or great consequences <facts material to the investigation>

Merriam-Webster Dictionary Online, s.v. "Material," accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/material>.

im·ma·te·ri·al *adjective* \,i-mə- 'tir-ē-əl\

1 : not consisting of matter : incorporeal

2 : of no substantial consequence : unimportant

Merriam-Webster Dictionary Online, s.v. "Immaterial," accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/immaterial>.

CHAPTER 2: THE BODY-AS-MACHINE, THE BODY-AS-GARDEN

The history of sound implies a history of the body. (Sterne 2003:12)

A subtle organic theme unifies the interior of Dr. Shen's clinic, located on an upper level of a medical building on one of Vancouver's busiest traffic routes. Stepping through its doors, a spotted carpet with gentle earth tones pads my feet as I cross the short distance to the reception desk where a large pine desktop, bamboo plant, and money tree in a beige clay pot await. Waiting for Dr. Shen to finish an appointment, I stand looking through various herbal teas and essential oils for sale, finding a bit of amusement, if not inspiration, tracing sand pictures in the "Buddha Box" on hand for patients in the reception area. Settling down into one of the micro fiber-padded chairs offers me an oblique view of three framed photos depicting a nondescript temple structure and trees, a beach, and a close-up of an herbal plant. The absence of a receptionist at this clinic (the doctors handle their own admin here) adds to the tranquil atmosphere and soon I begin to soak up the room's sense of repose.

The familiar earmarks of conventional medical settings as well as more anomalous paraphernalia come to my attention: intake forms, a small Visa/Debit/MasterCard sign, and a small bowl of candies rest on the otherwise uncluttered reception desk while a small collection of framed certificates from various colleges of Traditional Chinese Medicine are displayed on the wall behind. Alongside these are a City of Vancouver business license and several wood-framed anatomical illustrations depicting the bodily meridian points of Chinese medicine. Also nestled neatly into a number of pamphlet holders are a handful of informational fliers advertising midwifery services, athletic products, relationship counseling,

and spas. On the large pine bookcase facing the waiting area *Myers Anatomy* rubs sleeves with *Anatomy of the Spirit*.

“You know sound is used in Western medicine. They just use it very differently... [because] the way that Western medicine looks at the body is like the doctor is a mechanic and the body is a machine,” Dr. Shen explains with a characteristic demeanour falling somewhere between approachability and no-nonsense. “The Chinese medicine approach,” she continues, “looks at it as a garden.”¹³ This is how Dr. Shen launches her reply when I ask her to indulge me in a laymen’s explanation of Traditional Chinese Medicine (hereafter referred to as TCM). Uttered plainly and without haste, Dr. Shen’s opening statement throws the curtains open on one of the most pervasive yet under-explicated themes expressed by practitioners during my time in the field: the differing views of the body and health distinguishing practices of sound healing and CAM from the established views of conventional medicine.

It is my first interview with Dr. Shen and I have come to her clinic to find out how she came to adopt tuning forks into her practice of acupuncture and TCM (hereafter referred to as acusonics). Dr. Shen came from Ontario to British Columbia to complete a five-year doctorate in TCM (which included a two-and-a-half month practicum in China), finding the regulation of the profession in the province to be of a higher rigour. Despite her disinterest in his activities as a child, her memories as a child growing up in Ontario often revolve around her grandfather—who practiced acupuncture and herbal medicine at home—and his collection of acupuncture charts and garden-grown medical herbs:

When you’re a kid you don’t appreciate it as much... I wanted to be part of Canadian culture and to be accepted, you know? Because I was different and I was treated

¹³ Dr. Shen, interview with author, Vancouver, October 13, 2011.

differently and I didn't want to be treated differently. So actually for a while, up until maybe 14, I tried to reject being Chinese. I didn't want anything to do with it. You know, you get teased in the schoolyard for being Chinese. I had to deal with racism as a kid so it wasn't comfortable for me.¹⁴

A change of heart, however, marked Dr. Shen's transition into college where she enrolled in courses in Chinese religion, an experience that kindled her interest in Chinese and Taoist philosophy. Her later successes treating her allergies and asthma using TCM cemented her decision to shift the focus of her studies from physiotherapy to TCM. "I had been through this medical experience at home with this medicine so I had that kind of understanding of what it can do."¹⁵ Her eventual training led her to a further appreciation of the many aspects of TCM she had been exposed to earlier in life. "I would say it actually helped me understand some of the cultural things that we had growing up but my mom never explained to me... Like there is so much culture and philosophy in the medicine that I think it's missed quite a lot."¹⁶ Completing her doctorate in 2006, Dr. Shen set about building up her practice at a modestly sized commercial space in Vancouver. Outgrowing it within a year, she moved on to a bigger three-room clinic where she now uses specially designed tuning forks as an adjunct to her acupuncture practice.

Understanding Traditional Chinese Medicine

Before considering Dr. Shen's adoption of acusonics and its relation to TCM, it is useful to give some historical context and introduce some underlying tenets. TCM is a generic term encapsulating a number of medical practices used for thousands of years in

¹⁴ Dr. Shen, interview with author, Vancouver, April 19, 2012.

¹⁵ Dr. Shen, interview.

¹⁶ Dr. Shen, interview.

China and other parts of Asia and now most commonly associated with acupuncture and herbal medicine.¹⁷ Both practices were carried by migrant families and merchants traveling from Hong Kong and China to the UK and other parts of the world during the 19th and 20th centuries, not to mention by the large number of Chinese who migrated to California during the Gold Rush of 1849 (Kayne and Booker 2010:122). BC is the only Canadian province to regulate both acupuncture and herbal medicine in addition to training licensed doctors of TCM, and their growing prominence here likely has to do with the number of Chinese doctors who migrated to the province earlier on and continued their practice in an unregulated fashion. (Somewhat ironically, the unregulated use of acupuncture and herbal medicine may have been spurred by the fact that its practitioners—often trained simultaneously in Western medicine—were not legally permitted to practice as conventional medical doctors.) Although TCM’s history is long and complex, it is commonly held to have originated in the writings of the legendary Chinese emperors Fu Xi (ca 2953 BCE), Shen Nong (2838-2698 BCE), and Huang Di, also commonly referred to as the Yellow Emperor (2698-2598 BCE) (Ergil 2001:306). Huang Di is said to have authored the earliest and most esteemed Chinese medical treatise *Huangdi Neijing*, known in English as *The Yellow Emperor’s Classic of Internal Medicine* or, more simply, *The Yellow Emperor’s Inner Canon*.¹⁸

According to the principle of *yin-yang* (allegedly decreed by China’s Emperor Fu His some 8,000 years ago) everything in the universe contains two fundamentally polarized, yet

¹⁷ TCM may also include dietary therapy, moxibustion, *tuina* massage, and mind-body exercises such as *qigong* and *tai c’hi*.

¹⁸ Although, as is the case with many texts and treatises, it is probable that *Huangdi Neijing* was embellished and modified over the centuries and eventually compiled into its currently recognized form by unknown authors by circa 200 BC (Ergil 2001; Lao 1999).

complementary, forces that interact with and shape one another. *Yin*, representing all that is inert, passive, waning, internal, cold, and dark, is placed in contradistinction to *yang*, pertaining to all that is active, vigorous, waxing, external, hot, and bright (Ergel 2001; Hesselink and Petty 2004; Kayne and Booker 2010; Lao 1999; Shannon 2002). The energetic ebb and flow embodied in *yin-yang* speaks to the underlying element of change inherent in all life. On a cosmic scale, *yin* and *yang* embody the two major interacting forces of creation and reception. In everyday terms, if *yin* is night then *yang* is day, or if *yin* is water then *yang* is fire, and so forth. Or, in medical terms, a doctor of TCM would be apt to say that if *yin* pertains to low temperature, then *yang* pertains to high temperature, or if *yin* is expressed as a pale complexion, then *yang* is expressed as a red or rosy complexion (to give two simpler examples; Lao 1999).

All of the body's physiological functioning—indeed all of life—occurs in the interplay between these intertwined polarities. This is why, as Dr. Shen pointed out during one interview, we find the doctor of TCM prone to asking questions such as “Is there too much cold? Is there too much heat? Is there not enough *yin*?...[Or] too much *yang*? It's always about balance and... there's different systems that we use to achieve that balance.”¹⁹ Unlike the Cartesian mind-matter dualism of the west, however, *yin* and *yang* are not irreconcilable phenomena but are relative and interdependent. This means that not only is each complementary to the other, but they also have the potential to transform one another. It also implies that health and malady are themselves complementary and opposing forces, each one necessary to the other's existence. It is on this basis that the idea of equilibrium or “balance” takes precedent in TCM—health becomes about accomplishing an ideal state of

¹⁹ Dr. Shen, interview with author, Vancouver, October 13, 2011.

equilibrium in the body between *yin* and *yang* in all of its various manifestations (Kayne and Booker 2010; Lao 1999; Shannon 2002).

Wu-xing, known in English as the Five Elements or the Five Phases, is another central concept in TCM having to do with the dynamic and inter-relational life flow pervading all phenomena and whose constitution is likened to five universal elements: wood, fire, earth, metal, and water (Ergel 2001; Hesselink and Petty 2004; Kayne and Booker; Lao 1999). As Dr. Shen tells me, the Five Elements explains “nature’s dynamic and how it changes and flows, like how we observe that even in the seasons—in the spring, in the summer, the fall, the winter— that’s the natural way of life. So in the body there is a natural [harmony] or natural way of life.”²⁰ The Five Elements concept is embodied in the internal organs’ complex and dynamic physiological and pathological inter-relationships that are mirrored as well in the relationship between the human body and its external environment. This means that in addition to being characterized as predominantly *yin* or *yang*, each body organ is associated with one of the five elements, which in turn is associated with a particular tissue, sensory capacity, vocal timbre, emotion, and, by extension, a season, cardinal direction, weather type, colour, taste, and developmental or generative capacity (Ergel 2001; Kayne and Booker; Lao 1999).

For instance, the wood element is related to the liver and gallbladder, which are in turn associated with the tendons, the eyes, a “shouting” vocal timbre, an angry temperament, spring time, cardinal East, windy weather, the colour green, sour tastes, and germination (Lao 1999). Each organ’s associated element also determines the type of relationship it shares with other organs. For example, just as fire is spurred on by the presence of wood, so

²⁰ Dr. Shen, interview.

too is a wood-related organ such as the liver said to help generate or “promote” a fire-related organ (a phenomenon termed *interpromotion*). When an organ, on the other hand, exerts a controlling or limiting influence on another, such as when an earth-related organ controls or limits a water-related organ, this type of interrelationship is termed an *interaction* (Lao 1999). Together *yin-yang* and *wu-xing* define for TCM not only the physiological functioning and the physical and energetic manifestations of the body and their relation to the environment, but also the treatment and prevention of sickness and the maintenance of health.

Other essential concepts in TCM include *qi*, the vital energy pervading the body whose deficiencies and excesses underlie most sickness and inform TCM’s diagnostics and symptomologies; and *jing-luo*, or meridians, the energetic pathways through which *qi* is distributed in the body and along which the acupuncture points are found (Ergel 2001; Kayne and Booker 2010; Wei-Ming 1992). “They’re like waterways—that’s what the meridians are,” explains Dr. Shen, “and what travels on that is *qi* and blood and *qi* is that vital source of life, that vitality... You could almost say it’s like the source of life.”²¹ Although *yin-yang*, *wu-xing*, *qi*, and *jing-luo* have no direct translation or usage in Western medicine or music, as I will illustrate in the following chapters they share analogues in contemporary sound healing and CAM practices.²²

Though it may appear internally consistent, “Traditional Chinese Medicine” is comprised of a spectrum of historically, politically, and socially contingent—and quite often conflicting—ideas, practices, sects, and beliefs. In much the same way that current medical

²¹ Dr. Shen, interview.

²² See Nathan Hesselink and Jonathan Petty’s “Landscape and Soundscape” (2004) for a discussion about the application of *yin-yang* and *wu-xing* in traditional Korean music.

writing may not take into account more marginalized practices such as sound healing in Western society, texts comprising the canon of Chinese medicine are based on the writings of a literate minority and as a result do not encapsulate the full extent of medical practices in China's history. As Kevin Ergil remarks, "It is important to realize that the histories of individual physicians and the texts that have come down to us reflect the medicine of the literate elite of China more than the medical traditions of that nation as a whole" (Ergil 2001:309).

Moreover, what Western practitioners of TCM have inherited does not necessarily reflect the legacy of an unchallenged or uniform medical system in China (Unschuld 1992). For instance, the Chinese physician Chun Yu Yi (ca 90 BCE), the first known physician to record personal observations of medical cases, was tried for malpractice as a result of using the unfamiliar method of acupuncture to manipulate the flow of *qi* (Ergil 2001; Unschuld 1985). Similarly, the *Classic of Difficult Issues (Nan Jing)*, compiled sometime during the first or second century CE in response to the *Inner Classic*, presented a radical re-conceptualization of Chinese medical thinking, stripping all mention of magical elements and instead systematically reorganizing the theory and practice of acupuncture according to body structure, illness, diagnosis, and treatment. This text met with so much resistance that it was marginalized as a commentary to the *Inner Classic* (Ergil 2001). Much later, in 1822, acupuncture was formally eliminated from the Imperial Medical College altogether due to political, economic, and social trends and the mounting influence of Western medicine, science, and technology. Spurred on by Western educated proponents of reform in China, this trend continued on past the collapse of the Qing Dynasty in 1911 through the closing of the Imperial College of Physicians and the rapid elimination of previous traditional forms of

Chinese medicine. Throughout 1914 to 1936, clashes over the regulation, establishment, and elimination of particular Chinese medical practices were fairly routine (Ergil 2001; Unschuld 1985). What is nowadays referred to as TCM in the west may be more accurately described as the outcome of the “new” Chinese medicine known as *Zhong Yi* that came into being in the early 20th century as a result of such upheavals. It was this newer revisionist style of Chinese medicine that was subsequently appropriated by the Chinese Marxists in their attempts to rebuild China’s medical infrastructure in response to the needs of a vast population and considerable technical and economic limitations. This eventually gave rise to the system of medicine known as “Traditional Chinese Medicine” in the west (Ergil 2001).

The practice of acupuncture involves the insertion of fine needles—usually 0.22 to 0.25 mm in diameter and 1 to 1.5 inches in length—into the skin at designated points all over the body. Its purpose is to stimulate the points (sometimes numbering over 300 depending on which system is being applied) and to reopen the normal flow of energy along the meridians in order to relieve the pain or symptoms caused by energetic congestion or obstruction (Shannon 2002; Kayne and Booker 2010; Ergil 2001). When meeting with a patient, which points Dr. Shen chooses is based on information collected during diagnosis. “In Chinese medicine there is a certain procedure that you go through to form your diagnosis. There’s a certain set of questions that you ask and then you take the tongue and the pulse to complete your overall assessment of what’s going on in the body and relate it to why they’re coming in. So if they’re coming in for pain and swelling around the knees... you’re not just going to go right away and treat them, you should check the system first.”²³

²³ Dr. Shen, interview with author, Vancouver, April 26, 2011.

This system of diagnosis involves four steps: 1. inspection (visual assessment of a patient's tongue, vitality [or *shen*], and other physical manifestations); 2. auscultation/olfaction (assessment of the patient's voice including loudness, diction, and timbral quality as well as the patient's odour); 3. inquiry (asking questions regarding the onset and course of illness, symptoms, past history, and qualitative indicators of health such as sleep patterns, mood, and digestion); and 4. palpation (tactile inspection of the patient's pulse and body). "So if they're there for a particular injury, [then] checking to see what makes it better or worse, to find out any triggers, how long it has been [there], [and] how did they injure it initially? And then... we go through questions to evaluate the whole system [such as]... How is your sleep? How is your digestion, body temperature regulation? Any headaches? Appetite level?... Because it will indicate to us how certain organ systems are functioning and how that can contribute to an area not healing well."²⁴

The doctor of TCM then employs a comprehensive analysis of this collected data, a process termed "differential diagnosis" (to see the form on which diagnostic information is recorded by Dr. Shen, see Appendix 1). "I'll decide what I want to do, which acupuncture points I'm going to use, based on my diagnosis and then the tuning forks to use," explains Dr. Shen. "So, if there's a lot of swelling, then I definitely use the points that I know move water or move fluids. And then when it comes to pain, I always use the tuning forks that are related to relaxing tissue, relaxing the body and also moving circulation, because that helps reduce pain."²⁵ There remains little doubt in Dr. Shen's mind regarding the efficacy of using the tuning forks as an enhancement to acupuncture. "When I finished [my training] I

²⁴ Dr. Shen, interview.

²⁵ Dr. Shen, interview.

immediately started using it in my practice,” she explains, “and it really enhanced and really helped my patients quite a lot and I do feel that it gets them further along in many cases than it would have if I hadn’t used it...It kind of makes the treatment more effective.”²⁶

From Acupuncture to Acusonics

In 1964 an 11-year-old girl named Marjorie De Muynck was given a tuning fork by her father to help tune her guitar. Making a habit of placing the fork on her head, chest, and legs, she became fascinated with the sensation of the fork’s vibrations. Building on her latent affinity, a pivotal moment occurred some 20 years later when, gigging with her band of jazz musicians, she suffered an interminable migraine. The response of one of her band mates was to hand over a tuning fork which, on a moment’s inspiration, she placed on her body. The result of this, she claims, was the successful soothing of her migraine. Years later, transitioning from music education to studying and teaching Shiatsu, Hara Diagnosis, Kundalini Yoga, and Reiki at the Northwest Institute of Acupuncture and Oriental Medicine in Seattle, her experience treating her migraine with the tuning fork helped formulate her views on the potential of sound and vibration to complement CAM approaches. In 1995 Marjorie co-founded the Kairos Institute of Sound Healing and went on to found a system of acusonics called *Ohm Therapeutics*, used by acupuncturists such as Dr. Shen as well as massage therapists, nurses, chiropractors, energy workers, and other healthcare and CAM practitioners, until her passing away from cancer in 2011 (de Muynck 2008:xv).

Like de Muynck, Dr. Shen did not set out to become a sound healer, per se. Despite singing in choirs as a child and deejaying in college, it wasn’t until she happened upon an

²⁶ Dr. Shen, interview with author, Vancouver, October 13, 2011.

acusonics demonstration at a CAM conference and felt tuning forks placed on her body for the first time—an experience she characterizes as “quite amazing”—that her interest in sound transitioned from curiosity to concerted practice. “A couple of the instructors that teach this course were there... talking about [the tuning forks] and I was able to experience... what it sounded and what it felt like and that really intrigued me,” explains Dr. Shen. “I’ve always been attracted to sound and music just growing up so I decided to take the course based on that and it really opened up a whole new world for me.”²⁷ Dr. Shen went on to train in both de Muynck’s *Ohm Therapeutics*TM system as well as another acusonics approach known as Acutonics[®] created at the Kairos Institute of Sound Healing in New Mexico. Having already completed her doctorate in TCM, Dr. Shen found that integrating the tuning forks into her practice was a relatively seamless process since it drew upon concepts from TCM she was already familiar with. “It’s an enhancement,” says Dr. Shen about her use of the tuning forks to complement her acupuncture treatments. “I address the imbalances with the needles and then I choose the forks that will help enhance what I want to achieve.”²⁸

The example of applying tuning forks to the body’s acupuncture points is viewed by practitioners as a natural progression from “one of the oldest medicinal practices in the world,” having begun with the application of pressure to points along the meridians using fingers, then rocks and needles, and now evolving into methods that employ sound and vibration (de Muynck 2008:41). Setting aside their novelty, the sight of a doctor of TCM applying tuning forks to a patient’s body, however, may seem fairly routine, if not uneventful, to the outside observer. Today, as I observe Dr. Shen using the tuning forks on a patient, the procedure seems at once monotonous and methodical, audibly characterized only by the

²⁷ Dr. Shen, interview.

²⁸ Dr. Shen, interview.

repeated punctuating strikes of the tuning forks followed by their gentle hum. As the patient lies back on the table with eyes closed and a drape covering her unclothed body, Dr. Shen sequentially applies the bottom end of two resonating tuning forks to various points along the body where needles remain inserted. In order to “activate” a tuning fork, Dr. Shen strikes it against a sturdy black foam pad strapped to her lap that has been specially manufactured for the acusonics practitioner. This produces a subtle but pleasant “ping” sound that can last for upwards of a minute (though in actuality, unless placed next to the ear, it is difficult to discern this).

Dr. Shen applies one activated fork to the patient’s ankle and the other to the wrist. These are held for approximately ten seconds, after which time the forks are struck again and applied in combination to the same points several times for both left and right ankle and wrist. After this Dr. Shen applies both forks to the patient’s heart region several times. She repeats the same general sequence for other point-combinations along the patient’s body including heart and navel, navel and inside right ankle, and navel and inside left ankle. A few minutes into the procedure, Dr. Shen puts down the tuning forks and picks up a larger-sized pair that sound a lower range of frequencies. After activating them, she waves them in a circular motion several inches above the patient’s heart region, tracing a coil-like figure in the air. She returns to her previous sequence of applying the forks simultaneously to the heart/navel, heart, and navel/ankles. This time, however, she follows up by placing both forks on the inside of both ankles before returning to the desk to pick up yet another pair of forks. These she applies to the shin of one leg, then the other, before placing them on the crow/navel and inside ankle/sole respectively. Finally Dr. Shen places both forks on the sole of each foot

before removing the activator pad from her leg and leaving the room, leaving the patient quietly resting with needles still inserted.

According to de Muynck's acusonics manual *Sound Healing* (2008), different types of tuning forks (each tuned to specific frequencies) may be used for different purposes. For example, the low Ohm tuning forks tuned to 68.05 hz (the most frequently used by Ohm Therapeutics practitioners) is said to help ground the body and loosen deeply lodged energy or *qi* in the body. Combining the same fork with another sounding at an octave higher, on the other hand, is said to move and strengthen *qi* as well as clear energetic blockages. Applying forks tuned to 34 hz, meanwhile, is said to help relieve pain, reduce inflammation, and increase bone density (de Muynck 2008:34). A range of more formal treatment protocols addressing specific meridian points are also available to the acusonics practitioners to help accomplish particular outcomes. For example, applying two mid-range tuning forks to the shoulder blades at point SI 11 or Small Intestine 11 (also known as "Heavenly Gathering") is described as helping to relieve pain in the shoulders and open the energetic pathways to the arms and hands. It is also said to assist in opening and clearing the lungs and chest area and instilling a sense of lightness in the patient (de Muynck 2008:62; see de Muynck 2008 Part VIII for a range of other treatment protocols).

Practitioners of acusonics such as Dr. Shen also use their knowledge of the harmonics and frequencies of each tuning fork to enhance the effects sought through use of the needles, though this may not be apparent to the casual observer. "What I remember is the function [of each fork]. So I know if one is good at building blood or that it goes to the metal meridians or goes to the chakra... then I'll use them accordingly. So that's all I need to know and then how to use them with the harmonics—the mid, low and high ranges—how to use those

together” explains Dr. Shen.²⁹ Curious, I ask her if she knows how the connection between particular frequencies and their effects on the body may have been established. “I don’t know how they made the connection between this frequency [and] this function, but I imagine [traditionally] they just did it by—you could say trial and error, you could say by experimentation, you could see by intuition—there are so many ways. I mean people could say, ‘How did they figure out acupuncture?’ It came from years and years and years of thought and observation, trial and error.”³⁰

Descriptions of how the sound vibrations of a tuning fork are able to improve health and overcome malady range from general to somewhat specific. They may also draw from concepts and experiences from both within and beyond the scope of TCM. Perhaps the most comprehensive explanation comes from the acusonics manual *Sound Healing: Vibrational Healing with Ohm Tuning Forks* by Ohm TherapeuticsTM founder Marjorie de Muynck:

Sound and Vibrational Healing can effectively restore balance to the body. The root of illness can be seen as the disruption of harmony in the body, which results in negative resonance or disease. The restoration of balance and harmony enables the body’s immune system to function more efficiently. Enhancing and strengthening the overall body, including the immune system, is the primary objective in the Ohm Therapeutics model of vibrational Sound Healing. The premise of the work is to support the body’s natural healing ability. The use of acupuncture points to access Qi and the application of sound frequency known for its ability move Qi help to regulate and strengthen the whole body, achieving homeostasis. (2008:12)

Though far from complete this explanation introduces several interrelated concepts that assume slightly varying perspectives on acusonics’ efficacy and make different claims or assumptions about the body and health. First there is the idea that acusonics, like its medical next of kin acupuncture, is an effective method for manipulating the body’s *qi* and maintaining an optimal flow of energy. This is related to a second idea that regards acusonics

²⁹ Dr. Shen, interview with author, Vancouver, April 26, 2011.

³⁰ Dr. Shen, interview.

as a way to help strengthen the body's immune system, thereby mobilizing the body's "natural healing ability" and helping to stave off sickness. The third distinct claim is that the focused application of sound vibrations can help counter the "disruption of harmony" in the body from which disease is said to emerge and help restore "balance" to the body.

The idea that acusonics provides a means of manipulating and balancing *qi* in the body is succinctly explained by de Muynck: "The application of sound vibration to the physical and subtle body opens the energetic pathways where the Qi or natural life force flows. As a result, energy blocks are removed—increasing the flow of Qi—facilitating homeostasis through which profound healing begins" (de Muynck 2008:xvii). This basic view is shared by Dr. Shen who explains how acusonics enhances the specific outcomes sought through acupuncture and the diagnostic and interventional principles laid out in TCM. In other words, acusonics is considered "complementary" to the practice of acupuncture which is itself considered complementary in the wider sphere of medical practice in the west. As Dr. Shen explained regarding her use of the tuning forks, "I'm forming a Chinese medicine diagnosis and from there I decide which ones to use... [based on] knowledge of what each fork does and what I want to accomplish."³¹

Acusonics' healing qualities are also expressed by practitioners in a more holistic sense. This has to do with the concept of "balance" said to be characteristic of TCM and does not rely on the notion of specifying and treating individual components of the body, per se. Certain frequencies of sound are believed to restore balance or equilibrium to either individual organs, groups of organs, or overall in the body. Like most trained doctors of

³¹ Dr. Shen, interview with the author, Vancouver, April 26, 2012.

TCM, Samantha Jennings (an Ohm Therapeutics™ practitioner and Dr. Shen’s prior acusonics instructor) also subscribes to the view that most sickness in the body is the result of energetic imbalance and she repeatedly turns to this concept as a “core belief.”³² Samantha also studied extensively the philosophy of Five Elements (see Chapter 2), a dimension of TCM she claims is now virtually excluded in the curricula of TCM colleges but that is emphasized in Ohm Therapeutics™.³³ She explains how according to the Five Elements philosophy the concept of balance is associated with Earth element and Earth element is believed to be embodied in the “grounding frequency” known as *Ohm* (said to fall somewhere between C and C# and to be based on the measurable frequency of the Earth’s elliptical orbit around the Sun). Such a frequency, by virtue of this affinity, helps to restore balance, establish homeostasis, and promote healing (de Muynck 2008:43).

Samantha believes it is natural that acusonics practitioners would conceptualize their treatments around applying this fundamental frequency to address imbalances. De Muynck remarks that “the Ohm vibration strengthens my center and helps to resolve the disharmony of disease” (2008:xvi). Dr. Shen likewise describes the Ohm frequency during an interview as “a centering and balancing one. It brings the body back to [centeredness]... back to homeostasis.”³⁴ Samantha, meanwhile, explains “We can say...an organ basically isn’t functioning optimally because its vibration somehow is off kilter. If I put Ohm frequency over the lungs or over the liver [however]...the body—because it’s already geared towards natural homeostasis—will start to entrain to the more balanced frequency.”³⁵

³² Samantha, interview with the author, Vancouver, February 17, 2012.

³³ According to Samantha, her graduating class was the last one in existence to receive a dual-track consisting of TCM and Five Elements training.

³⁴ Samantha, interview.

³⁵ Samantha, interview.

Dr. Shen also describes a tactile component to acusonic treatment that she believes can help the practitioner determine the pathological state of each part of the body:

What I keep track of is mostly how much of the sound that I'm using—that particular frequency—is being absorbed by the body. Because the quicker that the body absorbs it, the more it needed it. And so that will tell me about what's going on with the body... Because you feel the vibration in your hands as you are putting the fork on the body, you can feel how quickly it is absorbed and how quickly the vibration gets absorbed or stops, right? So... [if] I put the sound on and it's absorbed quickly then I know it needs more.³⁶

The Mechanic and the Gardener

Mechanics works in explaining machines. But no matter how popular this metaphor has become... the body is not a machine and it cannot be entirely explained by mechanics. It is becoming increasingly clear that an understanding of energetics is required. (Micozzi 2001b:4)

I claim that sound healing practices are driven by practitioners' critiques of how conventional medicine conceptualizes and treats the body. This is evident from the way sound healing practitioners frequently appeal to views of the body and health that are antithetical to conventional medicine. The manner in which practitioners of acusonics appeal to Traditional Chinese Medicine in their adoption of tuning forks is but one example of how complementary and alternative medical approaches in the west have helped to invigorate views of the body that are counter to Western understanding. "The way that Western medicine looks at the body is like... a machine with parts," explains Dr. Shen. "So the way [Western doctors] approach the body is like you can take it apart and you can replace [the parts]—these are all the levers and the pulleys and this is how it all operates."³⁷ The view of the body-as-machine has helped to cultivate the perception of the doctor as a medical

³⁶ Dr. Shen, interview.

³⁷ Dr. Shen, interview with author, Vancouver, October 13, 2011.

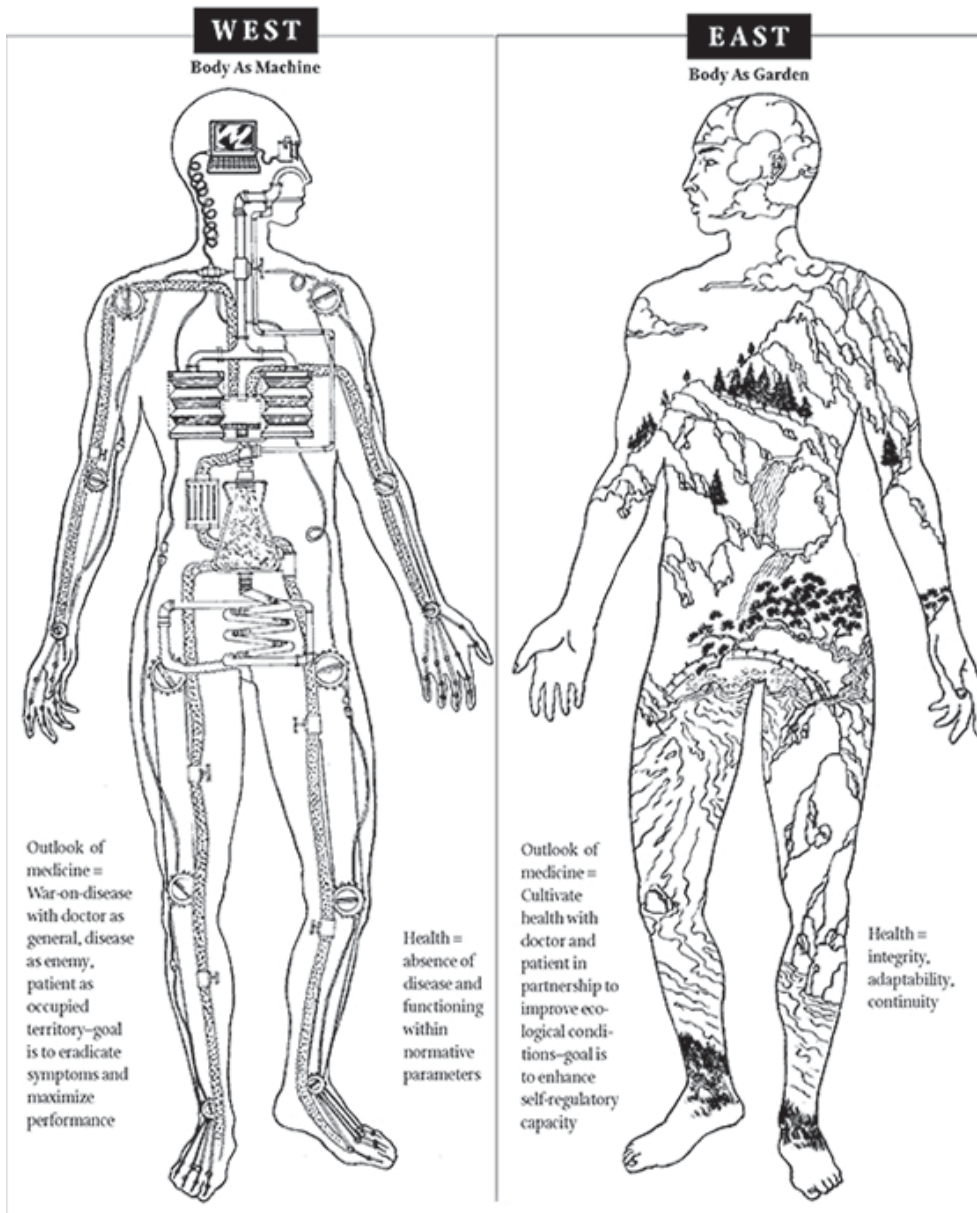
mechanic trained to tune and repair the body back into service (Stibb 1996:186). Western medicine has a very different conception of detecting sickness in the body, Dr. Shen tells me. “If a part is fixed and hence, not a problem anymore, then they see it as being healed... In the Western view, [a part of the body] is fixed because of their definition of how it should work. But in the Chinese medicine view, it may not be completely fixed or in balance because of our definition of how it should be functioning optimally... So I think they just define healing in a different way and that’s because they look at the body in a different way.”³⁸

Dr. Shen is not the only practitioner of TCM to characterize Western science’s view of the body in this manner. As Melissa Carr encapsulates the idea in a *Vancouver 24 Hours* opinion column on June 6, 2013, “Western medicine... often views the body as a machine with parts that must be fixed or replaced. Even the wording can be mechanistic—the brain is a computer, the heart is a pump, and the nervous system is a telephone network.” Looking even further back, TCM practitioners and authors Harriet Beinfield and Efrem Korngold were calling attention to the body-as-machine view in their book *Between Heaven and Earth: A Guide to Chinese Medicine* (1992; see Illustration 2.1). In another publication in the *Journal of Traditional Medicine*, they comment:

Within this [Cartesian] worldview, nature and humans are governed by mechanical laws: systems that do work, tools of production. Western medicine, correspondingly, is the study of how the human machine works. When people are like machines, doctors become like mechanics. The mechanic occasionally performs routine maintenance but mostly intervenes to execute emergency repairs. He plunges into the working parts, replacing the non-functioning elements, and puts the machine back into working order. It follows that the doctor as mechanic fixes the broken body-machine. (Beinfield, Korngold, and LeShan 1991:24)

³⁸ Dr. Shen, interview.

Illustration 2.1: West vs. East: “The Body-as-Machine” vs. “Body-as-Garden” (© 1992 Beinfield and Korngold, with permission)



The concept of the body-as-machine is often claimed to have originated in the thinking of Descartes (Turner 2008:6).³⁹ As one sound healer and naturopathic doctor describes it, “Within [Descartes’] model, the physical body was seen as a machine and a

³⁹ “The fire which burns continually in its heart,” wrote Descartes of the human body in his “Treatise of Man” “...is of no other nature than all those fires that occur in inanimate bodies” (Descartes 1972:113).

doctor's training revolved around maintaining and fixing up the 'body-machine.' The soul, mind, and life force were separate from the body machine. They were under the authority of the Church and not to be tampered with by medicine" (Beaulieu 1987:21). Renaissance conceptions of the body-as-machine likened the body to an anatomically and physiologically distinct "earthen machine" (Halle 1972:xxix) where, as Lewis Mumford puts it in his critical history of the machine, "the arms are levers, the lungs are bellows, the eyes are lenses" (1934: 32), and where the heart is found to be functionally analogous to a pump.⁴⁰ Or they held the body to be analogous to a "clockwork" (Reeves 2010), or a "steam machine" (Sappol and Rice 2010). Some of these earlier conceptions of the body-as-machine even suggested we treat the body as "nothing but a clock—a self-perpetuating machine capable of winding itself up," as the French philosopher and physician La Mettrie wrote in his 1748 treatise "Machine Man" (Mettrie 1997:7 and 31). One result of this has been a conventional demarcation of the body as a discrete mass of matter—dead or alive—distinct from other masses of matter (see definition, page 31) whose embodiment of a spirit or life energy remains at best inconsequential to the life of the body and, therefore, its health.

Such a view of the body is also characterized by scholars as being part and parcel of a more general view of the natural world cultivated in Europe during the 17th century during which time a Cartesian quest to master and possess it began to take hold (Wei-Ming 1992). As Ted Kaptchuk explains, scientists from this era were increasingly apt to view nature as "a machine whose parts only moved in response to other parts. Volitions, intentions, cognition, and mental states were relegated to peripheral or epiphenomenal status in biology; some scientists even came to believe that all life could be explained in mechanical and

⁴⁰ William Harvey allegedly made his "discovery" of the heart's pump-like functioning in the 17th century after reportedly having first seen a pump in action.

physicochemical terms” (Kaptchuk 2001:44; see also Lederman 1989). By the 19th century the mechanistic view in biology and medicine had almost entirely erased any need to postulate an energetic or animating principle underlying nature. This shift was bolstered by a range of scientific developments during the era including German chemist Friedrich Whöhler’s (1800-1882) synthesis of organic material in 1828 and Atwater and Rosa’s demonstration in 1897 that the laws of thermodynamics could also be applied to life (Kaptchuk 2001:45). Following closely in the footsteps of the mechanistic view was its corollary, reductionism, which ascended by way of Italian anatomist Giovanni Battista Morgagni’s (1682-1771) exacting comprehension of pathology and anatomical conditions, to French anatomist Marie Françoise Xavier Bichat’s (1771-1802) focus on tissue, to French physician François-Joseph-Victor Broussais’ (1772-1838) emphasis on tissue lesions, to German doctor-biologist Rudolf Virchow’s (1821-1902) breakthrough contributions to cell theory, and running all the way to German bacteriologist Robert Koch’s germ theory and onwards to modern gene dissection (Kaptchuk 2001:51).

In common vernacular the mechanized conception of the body is also reflected in the way we speak about and refer to it. We are “hard-wired” to behave or function a certain way, our cells are the “building blocks” of the body and our DNA its “blueprints,” we “get “revved up” when something excites or agitates us, we ponder what makes someone “tick,” and so forth. However, when the body is viewed through the lens of the body-as-machine, it is an epistemological breaking down of the whole into constituent elements and an understanding of how they interact that best lends itself to human inquiry (Leder 1992:20). For Descartes this approach extended all the way down to the most minute structural level, a concept that superseded previous views of the body and that has underscored modern science

and medicine all the way from its early dependence on dissection and microscopes to the microphysics and nanotechnology of today (Giblett 2008:24; Zaner 1992:103). With this ability to understand, remake, transform, and ultimately control the body and its parts, Western medicine has wielded an enormous therapeutic power. The implications of the body-as-machine view, however dated, continue to be manifest even at the most pragmatic levels: from medical education that still begins with the dissection of a cadaver to the physical treatment of the patient by the doctor.

“On the practical level,” argues Drew Leder, “while it is true that many practitioners intuitively treat the lived body, it is undeniable that Cartesianism has had profound effects. The sense of the patient as a living, experiencing, suffering person has been systematically truncated by the model of the body-as-machine, a model that has shaped our understanding of disease, our modes of professional training, diagnosis and treatment, even the offices and hospitals in which medicine is practiced” (Leder 1992:33). At the centre of this medical worldview “is the Cartesian revelation: the living body can be treated as essentially no different from a machine” (1992:23).

Perceiving the limitations of the body-as-machine view, however, practitioners and commentators from both the spheres of conventional medicine and CAM have begun to voice their criticism. One of the foremost proponents has been Marc Micozzi, MD, who suggests that “Modern Western medicine works on the material aspects of the body: sending in drug molecules to affect cell receptors, cutting out parts that do not work, replacing parts that fail. But the body is not a machine. Although these mechanistic approaches have clearly had great success in fixing problems, they do not always provide the best approaches to maintaining health” (2001a:xiv).

Readers familiar with the literature will also recognize the idea as one that has been echoed repeatedly through critical concepts posited in social theory, philosophy, phenomenology, medical anthropology, Marxism, feminism, and post-structuralism as a way to denote the view of the body said to be most emblematic of Western medicine. Foucault, for example, concerning himself with questions of power and “technologies” of discipline derived the medical and political metaphor of “man as machine” (1977:176), itself the outgrowth of an integral ontology concerned with the institutional regulation of bodies that took root at the same time that medicine took its Cartesian turn in the 18th century. In *The Birth of the Clinic* he writes “The Great book of Man-the-Machine was written simultaneously on two registers: the anatomico-metaphysical register, of which Descartes wrote the first pages and which the physicians and philosophers continued, and the technico-political register, which was constituted by a whole set of regulations and by empirical and calculated methods relating to the army, the school and the hospital, for controlling or regulating the operations of the body” (Foucault 1977:136).

Foucault also writes that it was during the rise of Cartesian thinking that classifications of disease began to have their bases in the organic lesions found in corpses, rather than the symptoms reported by the living patient. As Leder similarly explains, it was the affinity for analogizing the body with inanimate objects and industrial processes that also resulted in the body being closely associated with death, since it is the figure of the dead or inanimate body that not only underscored both Descartes’ investigative methodology and his metaphysics (1992:17) but also motivated his metaphysical and scientific explorations (Descartes spent years dissecting and studying dead animals; 1992:19). The dead body, in a sense, became the gateway to understanding the living body. The body of modern Western

medicine has thus remained neither completely alive nor dead but, rather, “a kind of animated corpse, a functioning mechanism” (Leder 1992:20).

The anatomical text *The Complete Human Body* (used in many schools of medicine), for instance, defines the human body as “a ‘living machine’ with many complex working parts. To understand how the body functions it is vital to know how it is assembled” (Roberts 2010:28). As the author Dr. Alice Roberts claims in the Foreword, there is a reason that modern medicine’s understanding of the body is rooted in anatomy and dissection.⁴¹ “After all, when you’re trying to find out how a machine works, it’s not particularly helpful to just look at the outside of it and try to imagine the machinery inside” (Roberts subsequently recounts having to take apart and re-assemble a toaster as part of her medical training; 2010:9). Although nowadays, as she points out, we have at our disposal technologies such as X-rays, computed tomography (CT), and magnetic resonance imaging (MRI) that allow us to “cut up” the body virtually, the basic model of the body as a “working machine” (2010:9) is retained.

The view of the body supported by TCM, on the other hand, can be referred to as the *body-as-garden* and is said to have its conceptual and therapeutic roots in Confucianism and Taoism (Wei-Ming 1992). “A garden is a dynamic system where everything is connected and related in order for there to be harmony and balance,” explains Dr. Shen. “There has to be just the right amount of sunlight, you need just the right amount of water, you need just the right amount of nutrients. If you have an overabundance of one, it offsets the whole harmony

⁴¹ The term anatomy is derived from the Greek *anatomō*, meaning to cut or dissect (Merriam-Webster Dictionary Online, s.v. “anatomy,” accessed August 20, 2013 <http://www.merriam-webster.com/dictionary/anatomy>).

of the balance.”⁴² The view of the body-as-garden, not rooted in the mind-body dualism of Descartes, likens the body to an equally (if not more) complex landscape or ecosystem of consonant physical and energetic systems that are analogized with earthly elements and that are endowed with a *qi* or life energy (Ergil 2001; Wei-Ming 1992). As Tu Wie-Ming describes it, “For Chinese thought, the body is never merely material and mechanical, but an open and flowing system of vital energy” (1992:87). This conception of the body, also termed the “Taoist Body” by Kristofer Schipper (1993), for millennia provided the locus for what in China and other parts of Asia was essentially a medical and philosophical enterprise geared towards life-cultivation. In its truest sense this Taoist body tended to by the doctor of TCM is not a material body per se, but rather “a system of energy flows between nodal points along passages or channels” (Farquhar 1994:78) reflecting the abstract powers of the inner universe (Schipper 1993:69). Embodying the decidedly conservationist Taoist motto “not humanity apart,” the body-as-garden can also be seen as reflecting Taoism’s deep belief in reciprocity with nature (Schipper 1993:2-3).

As depicted by Dr. Shen, the health of the body-as-garden is predicated on achieving an optimal equilibrium or “balance” within the body, which is itself treated as an ecological system. As Beinfield, Korngold, and LeShan exclaim, “The key is to achieve balance, which means being flexible, diverse, moderate, and in harmony with your own rhythms and needs. Chinese medicine makes use of acupuncture, herbs, diet, physical exercise, massage, mental discipline, and the modification of life-style habits as forms of therapy” (1991:25). Adopting this perspective, they point out, naturally leads to the analogy of the doctor-as-gardener. “A gardener has quite a different attitude. If something is wrong with the development of a plant,

⁴² Dr. Shen, interview.

the gardener will examine the total environment in which the plant exists and to which it is responding.” They subsequently ask, “Should [the physician]... be primarily a mechanic and repair the ill body, or should he [*sic*] be primarily a *gardener* and help the body grow past disease and towards health?” (1991:25).

While it would be unjustified to characterize the body-as-machine view as uniformly representative of all scientific and medical disciplines, its significance in reinforcing sound healers’ ideals regarding the conception and treatment of the body—not to mention their orientation in the overall landscape of Western healthcare—cannot be underestimated. As demonstrated in these examples, it seems the further back in time one goes in citing examples, the easier it becomes to give substance to the Western mechanistic conception of the body. Absent in this high-contrast perspective, however, are the more eclectic conceptions of the body that have begun to appear in more recent discourse on the body and that do not exhibit the sharp distinction between the mechanicism of Western medicine and the holism of CAM.⁴³ In the end, the body-as-machine and the body-as-garden are best treated as constructed polarities given meaning through context and contestation.

In subsequent chapters I will explore how such conceptions of the body, when adapted within the framework of sound healing, allow practitioners to ground their views of the body and its health in new ways. First, however, I will highlight the perspective of one patient who has explicitly sought out Dr. Shen’s acusonics treatments and explore how CAM is rapidly establishing itself as a force to be reckoned with in the Western medical sphere.

⁴³ For example, the Digital Body (Begusch 1999; Luckman 1999; Shaw 2008), the body as cyborg (Featherstone & Borrows 1996; Williams 1997), and the Virtual Body (Boellstorff 2011).

CHAPTER 3: “CONVENTIONAL” OR “COMPLEMENTARY”? A PATIENT’S PERSPECTIVE

Today I have arranged to meet with Pam, a regular patient of Dr. Shen, at her ranch-style residence 40 minutes outside of the city where she lives with her partner, four cats, and a stable full of horses in a rustic quietude usually familiar only to cottage owners and renunciants. When Pam began Dr. Shen’s acusonic treatments, she had stage one breast cancer and had decided to turn down conventional chemotherapy after tests detected a small lump in her chest. By the time she volunteered to participate in my study, Pam had completed 15 acusonics treatments over the course of a year and continued to receive them on a regular basis. Seated on a patio overlooking a pasture, I am momentarily lulled by the picturesque view of four horses idling nonchalantly as I ponder why someone like Pam, under threat of cancer, should turn to sound healing as a treatment rather than the usual chemotherapy and radiation.

Pam now comes out of the back entrance of her house sporting plaid jockey pants, a yellow polo top, and turquoise crocs and seats herself next to me, one leg crossed over the other. The ranch setting, I soon learn, is no coincidence as Pam informs me she is a retired horse jockey with almost 20 years of racing experience behind her. She now spends most of her time breeding, training, riding and writing about horses in addition to publishing novels in her spare time. If the idea of a woman racing horses sounds at all unfamiliar, it’s because for a long time such a thing didn’t exist. Pam was among the first generation of women jockeys to earn a living in what was a male-dominated sport. Meeting Pam in person somehow makes it easier to understand why she should hold this distinction. At roughly five-

foot three with taut frame and limbs, a tough wind-beaten complexion, and eyes betraying a weathered elegance, Pam seems made of sturdy stuff. She tells me she took her first riding lesson as a Phys-Ed student in her college years, and three years and just as many injuries later earned her jockey license. Having suffered several broken bones and a brain aneurysm on the racetrack, Pam knows something about healing. “Because of your level of fitness and because of your passion to get back in the saddle,” Pam tells me, “jockeys have a tendency to heal usually within half the time. If a doctor says six weeks you are healed in three or three-and-a-half.”⁴⁴

Throughout her career, Pam has made a veritable habit of defying (if not creatively adapting) doctors’ orders. When a doctor first put a cast on her leg after her first riding injury and told her to wait six weeks (“for some reason nobody could tell me why [6 weeks]?” she hastily submitted, but not without subsequently implementing her own pain relief regimen: 222’s and a shot of whiskey instead of the usual Demerol prescribed by doctors at the time (Pam incidentally made a profitable habit of smuggling 222’s and Rothman cigarettes to friends across the border).⁴⁵ Two decades later she broke the same bone and returned to the hospital only to have her doctor implement the same 6-weeks-in-a-cast regimen. This time Pam resisted the doctor’s orders, challenging the logic of casting a swollen leg and promoting atrophy in the muscles while disallowing exercise of the joint. Bucking the doctor’s orders, Pam opted for a self-acquired sling, nursing her injury with ice for six days before establishing a low-impact routine of pressing her leg against the wall in order to strengthen the damaged joint (a method she says she picked up from equestrian medicine). In

⁴⁴ All subsequent quotes from Pam, interview with author, Vancouver, May 11, 2012.

⁴⁵ “222” refers to a pain medication combining acetylsalicylic acid (ASA), codeine, and caffeine.

four weeks Pam was back on her feet with the assistance of a cane. “So for me, that’s the healing process that the doctors know absolutely nothing about—putting a cast on for six weeks is not healing.”

Like Dr. Shen, Pam’s initiation into the world of sound healing came more by chance rather than choice. A long-standing allure to music and sound and the way they seem to affect the body inspired earlier musings about sounds’ visceral and emotional effects. “I would have to say that I’ve always loved music. I love the sound of music. I’ve been very aware of what music does to me emotionally and physically. Over the years, I’ve really started to realize how even certain instruments would affect certain parts of my body— would create very specific emotions, and I found that quite fascinating.” Pam recalls the first time she began to pay explicit attention to this dimension of sound while listening to the electric harpist Hilary Stagg. “I had never heard of electric harp before... [But] the effect that it had on me was just instantaneous, just totally calm[ing], relaxing... I think the harp speaks to the soul—that part [of the body].” She notes the same effects from listening to piano and other instruments and wonders out loud whether the different pitches of each instrument are responsible for affecting different aspects of the body such as heart rate or breathing.

Pam’s conviction regarding sound’s capacity to positively affect health was cemented later in life as the result of an incident involving a painful, blistering skin rash that she suddenly developed prior to departing for a vacation:

[It was] January of 2003... and I broke out in shingles. We just happened to be going to Mexico, so that was the worst flight of my life, let me tell you... But we were at this spa and there was an Irish fellow there with a bio-resonance machine. And then I read about it and I thought, “Okay, this sounds like it might help me”... He said basically what we were looking at was that, okay, my shingles would be caused by a specific meridian and that he had to find out which meridian. Now each meridian resonates at a very specific Hertz. And so once he found which one it was, he said that what this machine did was run that vibration backwards through your body... It

made sense to me and so we did that and three hours later I felt great. Within nine days the shingles were gone... And so I think that was when I realized that my body really responds to vibration.

According to Pam's explanation, there is a dimension of a sickness that is carried in the meridians and this makes them a sensible point of medical intervention.⁴⁶ Since according to established science everything has a natural resonant frequency that is inherently vibrational, it is not unwarranted to assume that vibration can therefore be used to affect or manipulate a meridian. In theory, if its correct resonant frequency is known, it is possible to target a specific meridian and cause it to resonate by applying that frequency (although how resonance translates into improved health is not part of Pam's explanation). There is a tempting linear logic underlying this explanation: identify the part of the body in need of treatment, determine the correct frequency at which it resonates, and apply that frequency. Pam carries her experience of the bio-resonance machine with her into her perception of acusonics treatments since, as she writes in her journal, "[Dr. Shen] is using meridians, much like the bio-resonance machine did," and that "my experience with the bio-resonance back in 2003 convinced me that sound/wave therapy is something my body responds to."

It isn't long before Pam introduces the subject of her cancer and her decision to turn down chemotherapy. "Two years ago when I discovered that I had breast cancer... I knew I wasn't going to go traditional," says Pam of her decision to pursue non-conventional treatment. "I don't believe in chemotherapy because as far as I'm concerned it's the militaristic approach where you go and kill everything. And so once I gave myself time to think about it, I decided that my approach would be to strengthen all aspects of my body and

⁴⁶ Meridians refer to the energetic pathways through which the body's *qi* is distributed (see Chapter 1).

my mind.” Instead, Pam decided to adopt acusonics as her main treatment, which she had learned was available from a doctor of TCM in Vancouver, while supplementing them with dichloroacetic acid (DCA).⁴⁷ According to Dr. Shen her records indicate improvements in energy levels and decreased fatigue, better digestion and sleep, and the diminishing of the disc-shaped lump in her chest.

When I ask Pam about her avoidance of conventional cancer treatment, she asks rhetorically, “How many times have you heard of people [saying] ‘oh, they’re cancer free now,’ and then, of course, six months later they say it’s back... I have a feeling that it was never really gone because as far as I know there isn’t a test that [doctors] can run on your body that says absolutely there is no cancer. And then why do the tests?... I’d rather go on how I’m feeling, how I look.” Pam describes in a personal journal entry her approach of mobilizing the body’s natural restorative capacity during an acusonics treatment using meditative techniques of visualization:

I went into a deeper meditative state today... I imagined the healing that was taking place by seeing all the cells in my body being rejuvenated. I concentrated on the healthy cells, not the cancer cells. That has been my philosophy from the beginning: I focus on the healthy cells being in control, keeping the cancer cells walled off, behind a moat (like a medieval castle surrounded by a moat). I know our bodies are dealing with cancer cells every day and keeping them at bay. My healthy cells need a boost—they need all the help they can get... Seeing the cancer cells walled off behind the moat is also a key to my successful therapy. I don’t expect my body to be cancer free (though that could happen) but rather, the healthy cells keep it under control. There isn’t a big battle going on with the cells killing each other. That scenario would

⁴⁷ As of March 11, 2013 the website of the American Cancer Society states that although DCA has been shown to retard the growth of some tumors in some animal and *in vitro* studies, it has not yet been recommended as a cancer treatment (<http://www.cancer.org/treatment/treatmentsandsideeffects/complementaryandalternativemedicine/pharmacologicalandbiologicaltreatment/dichloroacetate--dca->). Conversely, one of the earliest attempted applications of ultrasound was in the treatment of malignancies (see Horvath 1944 and Horvath and Dyroff 1944).

exhaust and weaken me. It's important that I keep my body/mind strong, and battle free. That's what works for me.⁴⁸

The significance of Pam's description lies in the absence of the more typical Cartesian dualism (described in Chapter 2) that sets apart mind and body in matters of health and therefore minimizes their reciprocity. Pam's reference to her "body/mind" indicates a presumed continuity between the two and helps privilege the idea that a change in the state of the mind can indeed affect a change in the body—an idea epitomized in the growing field of so-called "mind-body medicine" aimed at optimizing health using unconventional methods.⁴⁹ This foregrounding, in turn, helps justify Pam's use of meditative techniques presumably aimed at strengthening the body's immune system and regulating cancerous growth.

Pam is also clear about the intended outcome of her acusonics treatment: she does not use acusonics to rid her body of cancer but rather to "keep it under control." Rather than seeking an absence of cancer in her body, Pam's goal is to limit its development. The idea of eradicating disease in the body suggests to Pam a perpetual "battle" that she believes—if left unchecked—can ultimately deplete the body of the inner resources necessary to prevent sickness from taking over. There is no being completely rid of cancer in this view but, rather, a balance between cancer cells and "healthy" cells—a *yin* and a *yang*. "The healing process, it is an individual healing process but there are certain things that we all have to do for healing," Pam tells me during an interview. "I would do [acusonics]. Other people would do it slightly different. And it's up to us individually to say 'Hey, this is my body. What do I need to heal?'"

⁴⁸ Pam, e-mail message to author, July 9, 2012.

⁴⁹ As of July 20 2013, the website of the University of Maryland Medical Center defines "Mind-Body Medicine" as those practices—such as meditation and yoga—that use the power of thoughts and emotion to influence health (see <http://umm.edu/health/medical/altmed/treatment/mindbody-medicine>).

Pam intuitively understands that “the deeper I can go into a meditative state, the deeper the vibrations can go. Therefore, a greater healing effect [can be achieved].” However, when it comes to understanding the specific interplay between sound, visualization, and health, “I don’t totally understand how the vibration along a meridian works, not scientifically, but my visualization of seeing the pathways strengthen my cells works well enough for me. The meditative state means there is no resistance and therefore I receive 100% of the healing effect... My body responds well to sound/wave therapy so I know this is the strongest therapy that I am doing.”

Both acupuncture and acusonics are, in Pam’s view, neither complementary nor alternative—they *are* the treatment. “I personally think that they are the most important part of what I am doing for the cancer. To me it’s the foundation.” She explains, “You see, when we say complementary or alternative, we are accepting allopathic medicine as the [standard].”⁵⁰ Pam continues, “I mean most people consider it the standard but... I don’t think of acupuncture as alternative or complementary. I would look at it as allopathic medicine is not very complementary to acupuncture.”

The Rise of Complementary and Alternative Medicine

Pam’s rationale reverses the logic of conventional thinking: whether one medical system is “conventional,” “complementary,” or “alternative” for Pam is a matter of perspective. If one accepts as conventional what is typically considered a complement or alternative to a dominant mode of medicine, then one has essentially turned the tables on established medicine, forcing the relativistic nature of medical pluralism into the faces of

⁵⁰ As of August 6, 2013, *Dorlan’s Medical Dictionary for Health Consumers* defines allopathic medicine as “that system of therapeutics in which diseases are treated by producing a condition incompatible with or antagonistic to the condition to be cured or alleviated” (<http://medical-dictionary.thefreedictionary.com/allopathy>).

dismayed doctors. As Marc Micozzi succinctly summarizes the matter, “it is not so much that there are many alternatives to modern Western (allopathic) medicine but that allopathic medicine is one of many alternatives” (Micozzi 2001a:xv). Remarks such as these speak to how conventional and unconventional medicine are distinguished from one another according to time and context and show how the boundaries between each remains blurred and in flux (Jonas and Levin 1999:3). As a result, “Trying to achieve a precise definition of CAM,” as one commentator puts it, “is like struggling to hit a moving target” (Kelner & Wellman 2003:13).

There is lingering uncertainty in Western society regarding the proper name for treatments or therapies falling outside of conventional medicine: “complementary,” “alternative,” “natural,” “integrative,” “holistic,” “wholistic,” “unconventional,” “non-scientific,” “vernacular,” “heterodox,” “non-traditional,” “integral,” “folk,” and “popular” are but a few of the names used (Cumming, Simpson and Brown 2007:2; Horden 2000:8; Kelner & Wellman 2003:11; Micozzi 2001a:xv; O’Connor 1995:2). On the other hand, other evaluative terms that have been employed by some medical professionals—including “unorthodox,” “unofficial,” “fringe,” “ethnic,” “primitive,” and “marginal”—while not representative of the entire medical profession, bespeak varying degrees of prejudice or belittlement from within established Western medicine that according to at least one writer have negatively influenced the outcomes of numerous CAM studies (O’Connor 1995:2). The term “traditional medicine,” meanwhile, continues to be used to refer to both Western and non-Western medical systems.

One fact made evident by writers on both sides of the conventional-CAM divide is that the very act of defining CAM remains, intentionally or not, an essentially exclusionary

one (Cumming, Simpson, and Brown 2007; Kelner & Wellman 2003; Saks 1992).⁵¹ Whereas CAM is characteristically defined as a heterogeneous group of practices falling outside of conventional medicine whose constitution may change over time, conventional medicine more steadfastly retains its virtual synonymy with Western biomedicine, however eclectic its own practices may be (O'Connor 1995:5). Take, for example, the simple yet revealing definitions of CAM offered in the literature such as Cumming, Simpson and Brown's: "a group of medical and Healthcare systems, practices and products that are not considered to be part of conventional medicine" (2007:2). Another example, offered by Vincent and Furham, defines CAM as an approach that "embraces a wide range of therapeutic practices and diagnostic systems that stands separate from, or in some cases opposed to, conventional scientifically based medicine" (1997:6). Zollman and Vickers (1999) offer a more elaborate yet ultimately congruent definition: "A broad domain of healing resources that encompasses all health systems, modalities and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health systems of a particular society or culture in a given historical period" (quoted in Cumming, Simpson and Brown 2007:2).

The residual nature by which CAM is defined is also pervasive in the language used by health-related institutions and regulatory bodies. For example, as of March 13, 2012, the website of the U.S. National Institutes of Health defines CAM as "a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine" (see <http://www.nccam.nih.gov/health/whatiscam>). The British Medical Association (BMA) similarly offers the following: "Those forms of treatment which are not widely used by the conventional health care professions, and the skills of which are

⁵¹ Ethnomusicologists may be familiar with this style of categorizing from the equally heterogeneous and exclusionary label "World Music."

not taught as part of the undergraduate curriculum of conventional medical and paramedical health care courses” (British Medical Association 1993:7). Then there is the definition created by workers at Harvard Medical School: “those practices explicitly used for the purpose of medical intervention, health promotion or disease prevention which are not routinely taught at U.S. medical schools nor routinely underwritten by third-party payers within the existing U.S. health care system” (Micozzi 2001b:5).

Pam’s subversive logic, though not shared by everyone, is nonetheless a reminder of the relativistic and pluralistic dimensions of health-related beliefs and practices when comprehended at the global scale. What many now consider to be complementary or alternative medical approaches in the west, for example, may have held the distinction of being considered “conventional” medicine in their cultures of origin, meaning they were amongst the most recognized, preferred, and accessible of medical treatments. Add to this the fact that the majority of populations in developing countries currently still use non-Western or indigenous forms of medicine regularly.⁵²

Some academics have written about the development of CAM in the west as something reaching back to historically remote eras. CAM, according to such accounts, likely developed from natural, folk, or home remedies dating back to pre-recorded times in places such as Asia, Africa, India and other parts of the globe (Roe 2002:1; Kelner & Wellman 2003:11; Micozzi 2001a:xv). Many remedies were likely rooted in access to natural resources such as water, food, herbs, and plants as well as physical activity, intuition, and

⁵² In China, for example, traditional herbal preparations account for 30-50% of total medicinal consumption. Similarly, in Ghana, Mali, Nigeria, and Zambia 60% of children suffering from malaria are treated with domestic herbal medicines from traditional healers (Kayne 2010:1).

concern for spiritual matters in life. By the time that Western medicine started to become prevalent beginning in the 19th century natural and folk treatments retained a prominent role in the physician's practice. However, it was not until advances in allopathic medicine that the use and acceptance of previous treatments were vastly reduced. As a result, Western medicine is what many now recognize as conventional medicine in many parts of the world (Jonas and Levin 1999:3). With this modern medical enterprise has sprung forth a multitude of technological advances including new and effective diagnostic procedures, surgical methods, and pharmacological inventions as well as the virtual extinction of diseases such as poliomyelitis, tuberculosis, and smallpox. Meanwhile, rates of morbidity and premature mortality, previously associated with diabetes, ischaemic heart disease, and asthma have decreased dramatically (Cumming, Simpson and Brown: 2007:32; Jonas and Levin 1999:3).

Nevertheless, despite its marginalized status in the west, the heterogeneous group of medical approaches now known as CAM has only continued to diversify and be sustained through the practices of indigenous and native healers and non-professional practitioners around the world (Herring & Roberts 2002; O'Connor 1995). In the west, CAM has become a formidable industry that continues to operate alongside conventional medicine with more and more people expecting access to CAM services and products (Roe 2002:2). This rising interest in CAM, as Jonas and Levin comment, "reflects not only changing behaviors, but also changing needs and values in modern society" (1999:2). Meanwhile, as a growing percentage of healthcare consumers pour more dollars into CAM products and services, conventional healthcare practitioners have increasingly felt it necessary to begin paying more attention. Herring and Roberts note in their handbook for medical students and professionals *Complementary and Alternative Medicine: Fast Facts for Medical Practice* "The public's

interest in CAM is pervasive... [and] the consumer is not waiting for outcome studies... Patients are asking questions now and are not likely to postpone decisions regarding their use of integrative therapies” (Herring & Roberts 2002:xiv). What has become ever more clear by now is that CAM continues to be used alongside conventional medical treatment by the majority of its users (Eisenberg et al. 1993), while dissatisfaction with conventional medical care and attraction to the philosophies and beliefs regarding health underlying many CAM approaches have become amongst the primary motivators for adoption (Astin 1998; Kellner and Wellman 2000; Furnham and Forey 1994; Gesler and Kearns 2002).

Such dissatisfaction is shored up by empirical data collected on CAM usage in the west. In the short time span between 1990 and 1997, for example, the use of CAM in the U.S. alone increased from 34% to 42% of the population with visits to CAM practitioners swelling from 400 million to more than 600 million per year. By 1997, spending on CAM in the U.S. topped 27 billion (mostly non-reimbursed) dollars (Eisenberg et al. 1998). Meanwhile, the *Landmark report on public perception of alternative care* reported that 70-90% of those surveyed were using CAM and that 74% of those users were pursuing CAM alongside conventional medical support (InterActive Solutions 1998). As Micozzi remarks, “Americans are not primarily interested in propagating any particular model of medical practice or science. People want what works” (2001a:xv).

In Canada, statistics speak to a similar rise in CAM usage (de Bruyn 2002:6). The National Population Health Survey, for example, reported that the use of services from massage therapists, acupuncturists, homeopaths or naturopaths, Feldenkrais or Alexander teachers, relaxation therapists, biofeedback teachers, rolfers, herbalists, reflexologists, spiritual healers, and religious healers increased from an estimated 15% of Canadians in

1994/95 to an estimated 19% in 1998/99 for those aged 18 or older (Millar 2001:12). In the mean time, half of all respondents to a National Angus Reid Poll reported using CAM in the previous 12 months (Angus Reid Group 2000). “Popular interest in complementary and alternative medicine (CAM) is part of a fundamental change in society’s orientation to health and healing,” remark Kelner & Wellman. “Demand for CAM services and products have grown in Canada... [and] there has been a grassroots revolution in the expectations and choices of consumers of healthcare” (2003:11).

CAM has also continued to make inroads into conventional medical training and practice (Wetzel, Eisenberg, and Kaptchuk 1998), and has been added into the benefit packages of increasing numbers of health insurers (Roe 2002). By 1998, it was estimated that in the U.S. CAM was being taught at over 75 medical schools (Wetzel, Eisenberg, and Kaptchuk 1998) and that between ten and fifteen thousand physicians were incorporating CAM modalities into their practice (Weeks 1998). In particular, adoption of CAM in allopathic outpatient and community facilities such as hospices, outpatient clinics, and long-term care facilities continues to be high (Roe 2002). The term “integrative” is also now used more frequently alongside “complementary” and “alternative”—implying a conscious consolidation of CAM with conventional medical treatments. The question that still concerns most practitioners of conventional medicine, however, is the extent to which CAM practices may be considered legitimate and, therefore, capable of being integrated into conventional treatment. As Steven Kayne suggests, CAM practitioners present a challenge in the west “because their theories and practices strike many conventionally trained physicians and researchers as incomprehensible” (2010:6). The question then emerges, “Should modern

medicine dismiss them as unscientific, view them as sources of alternatives hidden in a matrix of superstition or regard them as complementary sciences of medicine?” (2010:6).

Recent media reports on the negative effects of combining CAM with conventional drugs and treatments, on the other hand, have begun to make CAM consumers more wary and health professionals and policy-makers have continued to advocate for more research into the safety and efficacy of CAM treatments (Kayne 2010; Marwick 1998; Kelner & Wellman 2003). Meanwhile, the perception that the scientific quality of many clinical trials remains poor is not uncommon (Jonas and Levin 1999). In recognition of the overall lack of scientific evidence for CAM practices in the US, the creation of the White House Commission on CAM Policy in 2002, for example, called for increasing the scientific standards with which CAM practices are measured. Meanwhile, government agencies and policy-makers continue to remain cognizant of the implications of such research for accountability and regulation of CAM practitioners and products, for healthcare providers wishing to have a more credible basis by which they may refer patients to them, and for reducing the risk of medical fraud or danger to the public (Kelner & Wellman 2003). Without a more formidable body of research, it is likely that users will continue to consult a limited and inadequate pool of CAM studies—a potentially unfavourable and problematic scenario for both CAM practitioners and conventional medical professionals.

Medicine of the Material

Faced with a medical metaphysics that conceptualizes the body as a wholly material, manipulable substratum, perpetually in need of medical engagement, power over the body is again the first and necessary goal. (Weston 1992:82)

Accounts of the current state of conventional medical practices in the west strongly echo the statements of many current healthcare consumers. Pam’s views on the subject, for example, are reflective of a growing public dissatisfaction towards the assumptions and methods surrounding conventional Western medicine, and an accompanying openness to those presented in CAM. By now the view that people who adopt CAM are anti-science or are disproportionately uneducated, poor, ill, or neurotic has been largely refuted (Jonas and Levin 1999). As repeatedly demonstrated through research (see Table 3.1), part of the reason for CAM’s growing popularity is that more and more people have begun to view health not only in terms of disease prevention but also in terms of maintaining high levels of wellbeing, balanced lifestyles, and a more active role in the health provider-patient relationship (interests often supported by the philosophies and practices of CAM; Roe 2002).

Table 3.1: Prime factors in the growth of CAM. Source: compiled from Jonas and Levin 1999

Pragmatism	The rationale with which individuals adopt complementary or alternative methods (especially those with little or no success in treating chronic or fatal conditions with conventional treatments; Eisenberg et al 1998; Furnham 1994; O’Connor 1995)
Holism	A view towards health that considers a potentially broad spectrum of health-related factors including body, mind, spirit, emotion, environment, and psychosocial factors (Astin 1998; Dacher 1995; Chesworth 1996; Ernst, Hill, and Resch 1997)
Life style	The emphasis on health promotion and enhancement and addressing life style factors that lead to sickness (McCamy and Presley 1975; Orme-Johnson and Herron 1997)
Spirituality	The incorporation of special religious or spiritual concepts into healing often rooted in a concern for seeking greater meaning in suffering (Levin, Larson and Puchalski 1997)
Healing	The enhancement of the body’s regenerative or restorative abilities during sickness without necessarily addressing a known cause (Jonas and Jacobs 1996)
Adverse effects of medicine	A concern for the perceived harshness of conventional treatments (particularly in treating chronic disease) often accompanied by a belief that CAM or “natural” treatments are safer (Ernst 1995; Jonas 1996; Vincent and Furnham 1996)
Costs	Concern over accessibility of medical care, especially with regards to the rising costs of conventional health care (Smith et al.1998)
Democratization of medicine	The desire of patients to be active participants in healthcare decisions (including evaluating, assessing and engaging) (Fox 1997; Hufford 1997; Kelner and Wellman 2000; Starr 1982)

The theme that continually surfaced throughout interviews with Dr. Shen, Pam, and other adopters of acusonics is the perception that conventional medicine is too narrowly focused on the material dimension of the body and health. As some dictionary definitions indicate (see page 31), there is a tendency in conventional thinking for the term “material” to acquire a degree of import not customarily attributed to anything lacking matter or substance. That characterized as “immaterial,” on the other hand, is accorded a lesser significance (as some usages of the term suggest). As demonstrated throughout the literature, this bias is primarily expressed through the physicalist thrust that has underscored the modern medical encounter and the skeptical suggestion that many doctors merely view health as a mechanical problem in need of a technological solution. As Pam explained, “Doctors are great plumbers— you have a broken bone, you have something like that, you need an x-ray—they suit that purpose. When it comes to healing, most doctors know nothing,” she reports in a matter-of-fact tone. As Pam’s doctor of TCM also expressed to me during one interview, “[Western doctors] typically treat very physically, very physiologically. They don’t really connect the mental and the emotional side so well... Whereas in Chinese medicine... every organ system has a physiological function and mental and physical and spiritual and emotional functioning as well and so there’s always a connection.”⁵³

The over-stated concern for the material, according to Pam, begins in medical training during which time “doctors study physical aspects as if there is no connection to... spirit [or] environment,” leading to the unquestioned and overly authoritative handling of the patient’s body. “Doctors have a tendency to... literally just take over your body,” is how

⁵³ Dr. Shen, interview with author, Vancouver, October 13, 2012.

Pam characterizes her medical experiences beginning from childhood. “As a child I was pretty much powerless to stop it but I didn’t like it,” she tells me. “When I became an adult and had several broken bones on the racetrack, when the doctor would start saying, you know, ‘I’m going to do this’ ... I would say, ‘Whoa, whoa, wait a moment. We have to discuss this.’ I got a lot of double takes from doctors... You know there’s been... a little bit of an arrogance in the medical profession because they became such gods. You know, everyone thought, whatever the doctor said...” Pam says as she motions with her shoulders in my direction. “They were on a pedestal for some reason and... when you’re on that kind of pedestal there is no need to improve.”

As I delve deeper into my conversation with Pam about her views of medicine and health, she begins to consciously contrast her views of conventional medicine against her perception of CAM. Pam, for example, sees CAM as emphasizing a more refined and holistic view. The materialist and mechanistic emphasis of Western medicine, by contrast, is perceived as crude in comparison. “Allopathic medicine is so invasive. It’s almost like if they want to see what’s going on inside you they have to cut you open or they have to put this machine on [you] and to me that seems almost prehistoric.” She continues “The last time I was [at Dr. Shen’s clinic], she took my pulse [and] she said, ‘Have you had any problems with your lower back and your knees?’ And I said, ‘Oh yeah, right, my lower back! I forgot to say that!’” The conviction in Pam’s voice grows as she describes the experience. “She knew that from taking my pulse! And it’s like, ‘Wow!’ So if [doctors of TCM] can do that, why in the world can’t our [Western] doctors do that—take a pulse and know it’s there?”

Pam’s insistence, however, is that things were not always this way in Western medicine. “When Hippocrates first started—he very much brought in the spiritual aspects,

[the] seasonal, planets, all of that. But somewhere along the way all that was lost.” She ponders out loud, “I’m not sure why allopathic medicine is *the* [emphasis Pam’s] medicine, you know? When did that happen?... Everything became physical. And you know maybe it’s just a part of our evolution that ... we had to go through a very physical period in order to understand the physical. And that’s fine if we had to go through it [but] that time’s over. Now we have to get into wholeness again and bring everything [together].”

For all her discontent with conventional medical practices, however, Pam ultimately remains optimistic about conventional medicine’s potential to steer away from physicalism and mechanicism and evolve towards a more holistic standard. “I think some of the doctors [nowadays] are becoming aware. They’ll start talking about your environment or asking about you and your emotional environment and your physical environment. But they were not trained to do that” she explains. “I don’t know what’s happening with the young doctors in medical schools [but] some of the doctors who have been practicing for a while are starting to embrace [alternative methods]. And I think, you know, those are the successful ones”. As part of this evolution, Pam’s perception is that more types of “complementary” and “alternative” medicines—including sound healing—will indeed cease to be regarded as such and will become integrated with conventional medical practice. “Acupuncture—one day... it will come in alignment with it.”

Pam continues to receive treatments from Dr. Shen, albeit on a less frequent basis. “I think I’ll do it forever but, you know, I may get to the point where I do it twice a year or something.” Despite being stated in good humour, Pam’s closing analogy is a reminder of the challenges of transcending the entrenched modes of thinking unconsciously shaping our

world views: “My body is the old model,” chuckles Pam. “I have an old model, so I have to keep it tuned up.”

PART II
NEGATING THE BIOMEDICAL BODY

sense *noun* \ˈsen(t)s\

2 a : the faculty of perceiving by means of sense organs

Merriam-Webster Dictionary Online, s.v. “sense,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/sense>

in·sen·si·ble *adjective* \(\,)in-ˈsen(t)-sə-bəl\

2 : incapable or bereft of feeling or sensation: as

a : not endowed with life or spirit : insentient <insensible earth>

Merriam-Webster Dictionary Online, s.v. “Insensible,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/insensible>

lis·ten *verb* \ˈli-s^ən\

: to pay attention to someone or something in order to hear what is being said, sung, played, etc.—used to tell a person to listen to what you are saying

: to hear what someone has said and understand that it is serious, important, or true

Merriam-Webster Dictionary Online, s.v. “listen,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/listen>

nat·u·ral *adjective* \ˈna-çə-rəl, ˈnach-rəl\

10 b : existing in or produced by nature : not artificial

Merriam-Webster Dictionary Online, s.v. “natural,” accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/natural>

ho·lis·tic *adjective* \hō-ˈlis-tik\

2 : relating to or concerned with wholes or with complete systems rather than with the analysis of, treatment of, or dissection into parts

Merriam-Webster Dictionary Online, s.v. “natural,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/holistic>

CHAPTER 4: LISTENING WITH THE BODY, MYSTIFYING THE BODY: REDEFINING SOUND AND THE BODY

The second-floor studio of Unity Yoga—marked by its orange-brown walls and peach-coloured curtains—offers an earthier and less pristine environment that is a welcome contrast to the minimal design of many of the city’s yoga studios. Inside, purple pillars with stenciled fish designs reach up from swirls of coffee-coloured linoleum to white office ceiling tiles. Two framed pictures of Hindu-Buddhist deities adorn the wall next to the room’s entrance. With a large window framing an industrial rooftop vista and the occasional passing of the nearby rapid transit, the studio offers an ambience that seems internally subdued yet open to the urban landscape.

Throughout the studio measuring approximately 30 by 30 feet eight women and four men decked out in a miscellany of yoga and sporting attire rest on thin grey-blue foam mattresses amid small piles of blankets and meditation cushions. Poised rather majestically in the middle of the studio is the reason for today’s gathering: five large silver/bronze-coloured gongs suspended on black metal frames surrounded by an assortment of instruments. Each gong measures approximately 30 inches in diameter and has a brushed texture and a single cryptic symbol at its centre. On a small table in front of the gongs rest some tubular wind chimes suspended horizontally in wooden case. On the floor below are five bronze-coloured singing bowls of slightly varying diameters, a rain stick measuring

approximately one foot, a metallic Tibetan vajra bell, some shakers, and another set of chimes.⁵⁴

Such is the setting of my first “gong bath” in Vancouver, one in a series of ongoing sound healing events throughout the city put on by gonging enthusiasts Kathy Cameron and Paul Bissonnette. The purpose of these gong baths— improvised performances lasting usually an hour—is to immerse attendees in the vibrations of the gongs, believed by practitioners to have a healing quality.⁵⁵ According to Kathy and Paul, the term “gong bath” was first used by Don Conreaux (known to some as Baba Don), who conceived of the concept based on his training in Kundalini yoga with Yogi Bhajan, and who has since then established numerous gong bath communities around the world.⁵⁶ Paul, who is dressed today in light brown khakis and a short sleeve peach-coloured top, and Kathy, who wears a loose, long-sleeved white-knit top and scarf, stand in front of the gongs and begin to address today’s attendees. They greet all the newcomers, explaining that they are in their seventh month of facilitating gongs baths in Vancouver, and welcome back all the regulars. Paul then advises everyone on the significance of focusing on your breath during gong baths, and the importance of generating a sense of intention. “Whatever you came with wanting to address,” remarks Paul, “focus on that.” He points to a woman in her 40s with a cast around

⁵⁴ The vajra bell is a ritual bell emblematic of Mahayana and Vajrayana Buddhism that is usually paired with a small ritual scepter or *dorje* which together symbolize the union of wisdom and compassion respectively.

⁵⁵ The gongs used are designed by a German company called Paiste that specializes in cymbals, gongs, and bronze percussion instruments.

⁵⁶ According to the website www.donconreaux.com (accessed June 12, 2013), Don Conreaux was one of five original teachers of Kundalini yoga in the west trained by Yogi Bhajan and originated the terms “Gong Yoga of Holistic Resonance,” “Gong Therapy,” “Gong Puja,” and the title “Gong Master.” Kundalini yoga is a style of yoga influenced by the tantra and shakta schools of Hinduism and derives its name from the spiritual or corporeal energy said to abide at the base of the spine.

one leg. “You came for your leg?” asks Paul in good humour. She explains that she was recently in a car accident (and, yes, she will focus on her leg).

Paul then explains that the gongs work through a gradual process of emotional tension-and-release during which slowly accumulating layers of gong sounds escalate to a point of maximum volume and density. This “wave” of tension is then released through a gradual decrease resulting in emotional catharsis for the listener. Paul warns that during this process, unpleasant mental images or emotions are likely to be stirred up and that it is best to “work with” whatever arises. As the gong bath commences and I lie back on the mattress with eyes closed, a distant shimmer—both frosty and haunting—begins to emanate from the centre of the room. I immediately note the difficulty of trying to demarcate the exact beginning of individual gong strokes and find myself guessing at how the gongs are being struck. Eventually a brilliant wash of noise—rich, messy, and alluring—emerges, punctuated occasionally by more distinct, bell-like strokes of the gong. Embellishing this alien soundscape is the occasional high-pitched moan that sounds as if a violin bow is being passed over the rim of the gongs. At a certain point I become cognizant of the sensation of the gongs resonating in the area below by heart and in my extremities as the vibrations travel directly from the gongs through the floor to where I am resting.

Gradually the performance builds up through the cumulative layering of gong strokes that become louder and more frequent. The sounds become increasingly complex and chaotic as the audible spectrum begins to be filled with more and more frequencies. After reaching a point of climax in the performance marked by voluminous frenetic rolls and crashes, this “wave” of tension is released through a gradual decrease in density and loudness. Eventually

the performance reaches a moment of sparseness carried solely by the soothing and contemplative arpeggiation of struck singing bowls and dangling chimes.

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So far I have shown how the recent introduction of acusonics as an adopted modality in Traditional Chinese Medicine provides a means through which a questioning of the views of conventional medicine is expressed. This includes, most importantly, re-conceptualizing the body in ways that run counter to conventional medical thought—what it comprises, what makes it sick, and what the best way is to restore and maintain its health. In the case of Dr. Shen we saw how a concern for balancing the body’s vital life force or *qi*—itself viewed as a substrate of pathology—coincided with a bodily energetics and the ecological framework of the body-as-garden. Although a variety of explanatory models for acusonics were presented, each employing slightly differing claims, sound was viewed as being fundamentally capable of affecting the energy of the body. This was not a concept inherited from TCM, but it was certainly accommodated by it and as a result acusonics was deemed a sensible and valid way of affecting change in the body without dependence upon technological or pharmacological intervention.

By now, numerous sound healing organizations have come into existence throughout the west, including the World Sound Healing Organization, the Sound Healing Network, the Healing Music Organization, and the Sound Healers Association. Yet no standard definition of sound healing exists which encompasses the diversity of its practices (at least not with the degree of specificity found in conventional health disciplines). This lack of consistency, however, is remarkably diminished when we examine sound healing at the level of its episteme. In Part II I will show how the re-conceptualizing of the body as a counterpoint to

mechanistic and materialistic Western medicine is a concern common to a wider sphere of sound healing practices. Grounding my observations in interviews with 20 different sound healing practitioners using gongs, singing bowls, and voice for healing purposes, this chapter demonstrates a surprising consistency in the way that practitioners of sound healing challenge ideas about conventional medicine.⁵⁷ I will call this *negating the biomedical body* to emphasize how views of the body and health are virtually always contrasted—implicitly or otherwise—with what are believed to be the dated or misguided views of conventional medicine. I begin by fleshing out two conceptual models based on sound healing practitioners’ views of the body and sound that I will call the *Listening Body* and the *Body Mystified*.

The Listening Body

According to the Listening Body, audition—or the act of hearing—is conceived as not only having to do with the ear but with the entire surface of the body as well as its viscera (i.e., its internal organs; Ihde 1976). As one commentator explains: “Apart from the human ear, humans also perceive sound by skin and bone conduction. Other senses, such as sight, smell and touch, allow perception of an even wider range of vibrations than those sensed by hearing. People are sensitive to sounds in ways that have often not been considered” (Brewer 1998:9). This form of perceiving sound is supported by a technique employing the tactile or somatosensory aspects of hearing and listening to enhance the entire body’s sensitivity to

⁵⁷ Although for analytical purposes I have distinguished three categories of sound healing instruments—gongs, singing bowls and voice—readers may bear in mind that varying combinations of these (as well as other) instruments were also often employed regularly by practitioners.

vibration.⁵⁸ As such, the Listening Body accepts a visceral dimension of hearing and listening and may privilege emotion and intuition over intellectual understanding, though this does not mean it defies scientific scrutiny.⁵⁹

It was a number of weeks after my first experience with the gongs that I met with Kathy Cameron (who wished to be identified), a former educational admin assistant who now offers private sessions with gongs and singing bowls at her home for individual paying clients. Having paired recently with Paul, a kindred spirit in the world of gongs and healing, Kathy has also swiftly established a pastime presenting regular public gong baths in the name of offering opportunities for relaxation and self-discovery to a wider audience. Kathy originally stumbled upon the concept of sound healing through a series of recordings intended to facilitate a systematic approach to meditation. The recordings featured the sounds of a rainforest ambience, but it was the sound of the singing bowls incorporated into the recording that immediately called out to her during an earlier period of chronic back pain. Kathy tried acupuncture and massage to remedy her problems, but it was her affinity with the singing bowls that prompted her to visit the U.S. to learn more about them.

⁵⁸ As of August 2, 2013 the Merriam-Webster online dictionary describes somatosensory as sensory activity that may originate in parts of the body other than the specialized sense organs (<http://www.merriam-webster.com/dictionary/somatosensory>).

⁵⁹ For example, as far back as 1843 physiologists such as Johannes Müller were flagging the idea that the ear was not the only sense capable of perceiving vibration and that sound was but a very particular perception of vibration (Müller 1843:714). Nowadays neuroscientists such as Tony Ro and Elizabeth Courtenay Wilson have been interested to show how hearing and touch are processed in the same areas of the brain and how this may indicate a common evolutionary origin (Wilson has suggested that “the ear evolved out of the skin in order to do more finely tuned frequency analysis”; see <http://www.wired.com/wiredscience/2011/05/hearing-touch-synesthesia/> and <http://medicalxpress.com/news/2011-06-evolved.html>).

Figure 5.1: Kathy Cameron leads a gong bath in Vancouver in June 2012 (© 2012 Kathy Cameron/Pure Soul Media, by permission)



The use of the term “bath” to describe listening to the gongs is no coincidence. Analogizing sound waves with the palpable quality of water, the term alludes to sound as something to be tangibly immersed in and corporeally sensed.⁶⁰ Like many of her contemporaries in Vancouver, Kathy frames hearing and listening as having not only to do with the ears but also with the body— as a listening *with* the body. As Kathy describes, “the body is like one big ear and we are taking those vibrations into the body”.⁶¹ As of August 15, 2013, Kathy notes on her website <http://www.thesoulofsound.com>, “We not only hear sound,

⁶⁰ For another water analogy in perception of sound and music, see Feld 1990.

⁶¹ All subsequent quotes from Kathy, interview with author, Vancouver, August 9, 2011.

we feel it and... powerful rhythmic vibrations resonate deep within.” Kathy’s gong partner Paul Bissonnette (who also wished to be identified) also emphasizes the body’s susceptibility to sound while downplaying the ear’s primacy in listening. “The other organ that picks up the majority of your sound is the skin... So the majority of sounds, you feel [...] all the way down to the bones,” Paul says during one interview. “That’s why I use the gongs, because it goes all the way down to the bones.”⁶²

Ruby, a retired lawyer ready to leave behind the “lawyerly analytical” part of her life, agrees with Kathy and Paul about the corporal nature of gong baths. Like other sound healing practitioners, Ruby has had some experience using CAM methods such as TCM and has played piano, flute, and sung in choirs. Her conception of sound and its relation to health revolves predominantly around bodily engagement. “You’re listening through your ears, certainly, but you know the feeling you have when you’re hearing music... It’s your whole body that’s taking it in somehow. It’s not just your ear. So, you are feeling it. You’re picking up the vibrations... It’s like feeling the sensation of sound. So it does translate from this awareness of sound into practically a tactile feeling.”⁶³

Ruby wonders whether attending to the gong’s rich harmonic and vibro-tactile qualities during gong baths has increased her sensitivity to vibration. “It’s like a full body experience... It’s not the brain that’s the main thing,” she confides. “There’s the feeling I have increasingly [of]... touching something and feeling the vibration of... the instrument... It’s like a surge of energy... It’s relaxing and energizing at the same time.” Ruby’s professed interest in the tactile dimension of sound eventually inspired her to learn about *nada yoga*

⁶² All subsequent quotes from Paul, interview with author, Vancouver, January 20, 2012.

⁶³ All subsequent quotes from Ruby, interview with author, Vancouver, May 15, 2012.

and the chanting of Sanskrit mantras during time spent in India.⁶⁴ “I think what turned me on about it from the start... was learning about these [mantra] vowels and how the vowels are embodied... and really working with these and how it could really move the [body’s] energy.”

Karl, a young part-time model, has also been a regular participant at many of Kathy and Paul’s gong bath events. Karl is another example of someone who, because of pervasive health issues, has experimented with a diversity of CAM treatments including massage, acupuncture, acupressure, Reiki, Shiatsu, and reflexology, and eventually turning to sound healing. Karl first discovered the sound of the gong at an early age while traveling through Asia with his family and describes the effects of the gong as intangible yet visceral: “It was definitely something because... I felt it physically... It’s so hard to explain... I can feel it, but I can’t see it, I can’t hear it, I can’t touch it... I don’t know what it is,” Karl ponders out loud during one of our interviews. “I just know that I could feel it when I heard the gong... I can feel that power, you know, when I’m hearing those sounds... It all gets inside me.”⁶⁵

Vicky, a middle-aged counselor and support worker by profession, is a relative newcomer to the realm of sound healing and decided to become involved in my study after seeing my recruitment poster at a yoga studio. After years of attempting to remedy her lack of concentration and poor sleep using Chinese herbal medicine, acupuncture, acupressure, and massage, she tried Paul’s gongs and singing bowls in several private sessions at his

⁶⁴ Although *nada yoga* is not defined in most English dictionaries, Dr. David Frawley describes this ancient Vedic philosophical-medical concept as deriving from *Shabda Yoga* (“Yoga of Sound”) that postulates the existence of a single transcendent sound on which all of reality rests. Aspects of this teaching are present in all branches of yoga (Frawley 2010:30).

⁶⁵ All subsequent quotes from Karl, interview with author, Vancouver, November 2, 2011.

home. I asked Vicky to describe her first experience with the gongs: “I could say I was more relaxed and tuned into what was going on and then the gong sound [became] really overwhelming in a good way... I also feel that my body was more heavy, but in a good way [and] my mind wasn’t traveling here and there.”⁶⁶ Her characterization quickly steers towards the visceral dimensions of the gongs. “I found that in... the digestive tract or the belly, it’s like it was a bit tense, right? [But] as the session went [on] ... particularly after he put [singing bowls] on my body, on my belly... then I found that [it was] more released [*sic*], more relaxed.”

Christine Vautour (who wished to be identified), a long-time kit drummer in her middle ages who recently returned to post-secondary studies, attended her first gong bath after a car accident left her with a broken leg and heightened symptoms of Post-Traumatic Stress Disorder (PTSD). Christine broaches the subject of the tactile dimensions of listening by stating, “You can feel it in your skin, right? You can feel the vibration... A real energetic-type thing... It wasn’t a listening experience, it was an all-over experience.”⁶⁷ As someone familiar with CAM approaches such as TCM and naturopathy, as well as Buddhist meditative practices, Christine believes “even though it’s passive it still can be quite powerful because it is meditative and then there is this kind of active component because you can feel the vibrations, you can feel the energy in the room.”

Tascha Stubbs (who wished to be identified), a former environmental management professional also struggling with symptoms of PTSD, relates a similar story. Her first experience at a gong bath began with a heightened nausea, a sensation she often experiences

⁶⁶ All subsequent quotes from Vicky, interview with author, Vancouver, December 18, 2011.

⁶⁷ All subsequent quotes from Christine, interview with author, Vancouver, February 23, 2012.

when lying down and that she believes to be related to her PTSD. “I literally felt like I was falling through the ground, [like a] roller coaster, like nothing was going to be there to catch me... It was all visceral,” says Tascha of the experience. Yet, she subsequently notes how “the gongs took me so quickly into a relaxed state that I wasn’t used to that... They seemed to open... an ability for my body to let go that I wasn’t able to access on my own.”⁶⁸

Afterwards Tascha professes to have experienced a profound sense of inner peace. This she attributes to the gongs’ ability to affect the listener on a strictly somatic, non-intellectual level. “Your mind isn’t engaged. Communication is happening on a somatic level and a deep knowing level that I think we cannot put into words and that we probably don’t understand,” she tells me. “There’s something about the deep nature of the sound that I think is different than... other experiences... The depth of penetration... It feels deep. You can feel the gongs. Basically it goes through you and everything to your core, to your bones. Every single piece of you is affected with that sound.”

The Body Mystified

The *Body Mystified* aligns with a holistic critique of medicine that is commonly upheld by CAM users. It takes issue with modern medicine’s tendency to systematically obscure or disregard what ought to be considered the body’s true mysteries. As Anthony Weston suggests, “It is not that modern medicine maintains an attitude of skepticism towards the body’s farther powers. Those powers are also, often, obliterated” (Weston 1992:80). Rather than seek to elucidate these mysteries, however, the *Body Mystified* reverently embraces them by viewing the body “as something *more* than it presently is made to seem—

⁶⁸ All subsequent quotes from Tascha, interview with author, Vancouver, April 27, 2012.

but something not so easily, and not so appropriately, pinned down” (Weston 1992:78).

“This is one sense of the ‘mystery’,” Weston states. “Holistic medicine aims to reopen us to ignored mysteries of the body, to overlooked or forgotten unities kept alive in other traditions” (1992:78). The Listening Body thus calls attention to the alleged deprivation of the spiritual life of the body in modern healthcare.

Popular sound healing books are populated by would-be sound healers’ tales of their rapturous encounters with the wondrous and preternatural dimensions of sound. Take, for example, Mitchell Gaynor, M.D., who recounts his first encounter with the singing bowls. “I could feel the vibration physically resonating through my body, touching my core in such a way that I felt in harmony with the universe,” says Gaynor of his first encounter. “I did not, at that moment, make a conscious decision to further explore the singing bowls. It was almost as if I didn’t have a choice in the matter, because I immediately intuited that playing the bowls would change my life, and the lives of many of my patients” (1999:3).

Sound healing author and overtone singer Jonathan Goldman tells of his experience listening to a recording of The Harmonic Choir for the first time:⁶⁹

Somehow, I ended up in a little bookstore...Almost as though I were being led by unseen forces, I found myself in front of a table which had a number of audio tapes. I looked down at a tape entitled “The Harmonic Choir,” thinking “Yes! This is what I want.”...I took out the cassette player, put on the headphones, popped in this mysterious tape and began to listen. The first thing I heard was a powerful human voice singing one single note. It was ethereal and unearthly and gorgeous. I do not normally have transformative experiences in crowded hotel lobbies, but almost instantly I became entranced. The next thing I became aware of was the click of the cassette player as it shut itself off. (2002:2)

⁶⁹ The Harmonic Choir was founded in 1975 by singer-composer-author David Hykes and is known internationally for its incorporation of overtone singing techniques.

Sound healer and naturopathic doctor John Beaulieu describes walking down a New York street and being mesmerized by the rhythmic pulsations of idling trucks. After sitting down to listen more attentively:

I let myself go with the sounds. ...Listening even deeper to the sound I felt myself “move inside” its pulse. My imagination and memories were still present, now accompanied by a new sensation. A profound quietness or stillness came and, for a moment, I experienced myself just being the sound. Then there was a shift in my awareness... At that moment a friend tapped me on the shoulder, I came back to the reality of a New York City street. The truck was driving away. (1987:16)

Although it may be easy to dismiss the *Body Mystified* as being steeped in an unknowable and problematic “mysticism,” I side with Weston in suggesting that this term may well have more to do with marginalizing discussions that run counter to the norms of conventional medicine. As with the term CAM, with mysticism “we are left with [a] catch-all and derogatory category... and correspondingly with a number of candidate metaphysics the evidence for which often stands in inverse proportion to the conviction and marketing skill with which they are advanced” (Weston 1992:80).

In the Vancouver sound healing community, the *Body Mystified* is suggested in stories such as the one recounted by Matthew Kocel (who wishes to be identified), an American-born throat singer and instrumentalist who leads public and private sound healing events in Vancouver. At a young age Matthew had an inexplicable experience involving an overwhelming psychophysical sensation in his head that he now characterizes as the opening of his crown *chakra*. “I didn’t know what a *chakra* was, I didn’t know anything about subtle energy,” he reflects. “The feeling and the experience was not supported by the rituals of [my] church and in my family life I didn’t have anyone to relate the experience to.”⁷⁰

⁷⁰ All subsequent quotes from Matthew, interview with author, Vancouver, October 19, 2011).

Wishing to find an explanation to account for his experience, Matthew began to read about Eastern esoterica and concepts such as *chakras*, *qi*, *kundalini*, meridians, and breath work. “Everything in [the readings] resonated with me and, reading the description of the *chakras*, I knew [what happened to me] was true because I felt sensations [the readings] said were related to these parts of my body,” he explains. “It was like, ‘That’s it, that’s what happened! My crown *chakra* opened. Now I know!’.”

Not long after Matthew happened upon a recording of the throat-singing Gyuto Monks of Tibet being played at a bookstore, an experience that he characterizes as being unlike anything he had heard before—an unprecedented “scrambling of the mind.” So profound were these early experiences that Matthew dedicated a number of years to learning and exploring Eastern philosophy, meditation, and throat singing, eventually incorporating the throat singing technique into the meditation gatherings he began to lead. Matthew now performs regularly throughout Canada and the U.S. blending his throat singing with harmonium, singing bowls, and other instruments.

A propensity to reference spiritual traditions and so-called mind-body medicines (see page 78) also means that the *Body Mystified* engages concepts originating in esoteric, non-Western, and pre-Enlightenment traditions. The majority of the additional sound healing practitioners I interviewed for Part II (12 out of 17), for example, had experience with some form of meditation, while four practiced yoga or *tai’ chi*. This meant that vocabulary drawn from these practices, including *chakra*, *qi*, *Ohm*, *aura*, *yin-yang*, *kundalini*, *prana*, and *karma*, were often used to discuss sound healing.

For example, Jerry DesVoignes (who wished to be identified), another practitioner of throat singing in Vancouver, grew up singing in choirs and rock bands. However, he credits a

profound experience he had on stage one night with his rock band as sparking his interest in the enigmatic dimensions of music. “I remember my eyes were closed and I could sense almost the magnetism of the microphone. You know, I could sense there was a current or something around the mic... I [had] a sense that, it must’ve been like my heart was getting bigger... like the body wasn’t there anymore and I just seemed to kind of float through the room or go beyond the building,” recounts Jerry with a lingering sense of awe. “The microphone disappeared, you know, and I just found myself kind of in... oneness with the sound.”⁷¹

Jerry subsequently became a dedicated student of yoga, learning about *prana*, the subtle and esoteric qualities of the breath taught in yogic traditions. This experience encouraged him to re-conceptualize his approach to singing (“you don’t just sing from the mouth or the vocal cords, but your whole body resonates,” he commented during one interview). His later encounters in the city with *Kirtan* stimulated him to start learning more about mantras, Indian ragas, and throat singing, and to later form his own choir specializing in the overtone technique of throat singing.⁷²

It wasn’t until a traumatic brain injury resulting in amnesia, however, that Jerry began to take more seriously the potential healing capacity of music and sound. His accumulated proficiency in throat singing and new breathing and vocal techniques eventually inspired him to begin offering public sound healing workshops through which he encourages participants to pursue throat singing and vocalization as avenues for personal and spiritual development.

⁷¹ All subsequent notes from Jerry, interview with author, Vancouver, November 2, 2011.

⁷² *Kirtan* is a style of *Bhakti* devotional Indian music characterized by frequent call-and-response and the chanting of mantras.

Laurel Murphy (who wished to be identified) is a singer and graphic designer. She began studying vocal improvisation 20 years ago and completed studies in jazz and contemporary music at a local community college. She now spends much of her time offering immersive voice-based sound healing sessions at a support centre for individuals living with cancer, as well as at yoga studios around the city. Laurel's first experience with any kind of healing modality, however, occurred when she was studying Polarity Therapy.⁷³ She recounts: "I was working on my partner and suddenly felt this surge of energy run up my arm—I said, 'Wow, did you feel that?' And she said, 'Yeah, I felt that.' Up until then, I didn't believe there was anything other than this solid body. I am not sure I would have been as open to the idea of sound healing if I hadn't had that experience. After that I became very interested in the things we can't see... energy, intention, vibration and their affect on our bodies."⁷⁴

Laurel describes her first active engagement with sound's healing potential in the following story:

The first time I experienced the healing potential of sound was about 15 years ago during a weekly gathering of improvising singers. It was suggested on a whim that everyone sit in a circle and vocalize while one person lie in the middle with their eyes closed. We started out by breathing together, then someone started singing a tone and from there we seemed instinctively to know what should come next... The fact we were singing to someone and had the intention of offering something of benefit to them [*sic*] changed our approach to the music quite dramatically. There was no thinking, just sensing. We were very tuned in to each other and the person in the centre. Sometimes it would feel like we were all being carried on the sound, or that we were riding an energetic wave. It had its own momentum. We were totally in sync... And these moments of collective intuition seemed to have their impact on the recipient. They talked about going very deep, about being enveloped by the sound, and how it seemed to take them wherever they needed to go.

⁷³ Polarity Therapy is a holistic and energy-based system of medicine developed in the west by Dr. Randolph Stone rooted in principles of Ayurvedic medicine.

⁷⁴ All subsequent quotes form Laurel, interview with the author, Vancouver, November 28, 2011).

After eight years of leading sound healing sessions incorporating guided imagery and therapeutic touch for cancer patients, Laurel thought it would be beneficial to offer something similar to the general public. She invited a group of singers to join her in creating a series of improvised sound experiences called *Sound Journeys* that she now continues to offer throughout Vancouver.

Linda, the founder of a healing centre in Vancouver with experience in palliative care and orthopedics, believes her views on the healing nature of sound were shaped by her regular practice of vocalizing *Nam-myoho-renge-kyo* (an aural condensation of the core practice of Nichiren teachings).⁷⁵ Yet even before she began her practice, Linda's experiences as an alternative healthcare practitioner in the formative days of palliative care had convinced her that conventional medicine was lacking in an intangible quality that she intuited as having to do with tactility. She notes that if patients "were touched and if they were massaged in certain ways—pressure points and everything—they would begin to loosen without being OD'd [over-dosed]. So that's where I started to go, 'Oh, just a second here.' I seemed to have hit on something for me. So that's where I started to personally explore the sensations that I was feeling as vibration."⁷⁶ Linda later discovered *Nam-myoho-renge-kyo* when someone at a meeting of an HIV/AIDS support group she helped to organize introduced the chant to everyone. "Once he started chanting," explains Linda, "I literally had

⁷⁵ As of July 2, 2013, *Nam-myoho-renge-kyo* is defined on the Soka Gakkai International website as the "Mystic Law, the natural principle governing the workings of life in the universe, the law to which all Buddhas are enlightened and the true aspect of our own lives" (see <http://www.sgi.org/buddhism/buddhist-concepts/the-meaning-of-nam-myoho-renge-kyo.html>).

⁷⁶ All subsequent quotes from Linda, interview with author, Vancouver, October 7, 2011.

the biggest, visceral experience of my life and I thought to myself, one day I'm going to explore this.”

Vocalists aren't the only sound healing practitioners, however, to appeal to an enigmatic dimension of the body's healing abilities. Megha Ratna Shakya is a financial advisor and Princeton graduate now committed to what he believes are the singing bowls' innate healing abilities (see Figure 4.1). For the past few years Megha has taken time out of his career in finances to offer singing bowl concerts and workshops to the public (as well as the occasional private session for friends in need). Megha grew up in Nepal where as a child he became acquainted with both the Tibetan exile community and the throngs of tourists in the markets of Katmandu. On return visits he noticed tourists' increasing interest in singing bowls. His curiosity prompted him to seek a teacher in Katmandu to learn more about them.

Megha's training in both Reiki and Vipassana meditation influenced his approach to teaching about the bowls' healing properties, and his sound healing practice now involves bringing together the meditative components of his Vipassana training, the energy component of his Reiki training, and the sound component of the singing bowls. “So the singing bowl,” explains Megha, “what it does, is to work [*sic*] with your unconscious mind. The frequency that is generated by unconscious mind, the singing bowl sound will penetrate there.”⁷⁷

⁷⁷ All subsequent quotes from Megha, interview with author, Vancouver, March 4, 2012.

Figure 4.1: Megha Ratna Shakya gives a singing bowl demonstration in Vancouver in March of 2012 (© 2013 Trans-Himalayan Aid Society, by permission)



Another advocate of the singing bowls' energetic healing potential is Nadia, a 30-something Australian expatriate employed in Vancouver as a yoga teacher and certified Pilates instructor. She first heard singing bowls during a gathering at a friend's place but did not become more intimately acquainted with them until a yoga and Reiki retreat she attended in Guatemala. Struggling with the heightened anxiety of PTSD and chronic indigestion, she sought out a private singing bowl session with the retreat instructor (Nadia has also tried massage, Chinese herbal medicine, osteopathy, structural integration therapy, and craniosacral therapy to cope with her symptoms). "I was lying down and it was definitely... the singing [of the bowls] that... gave my body permission to be open, like it didn't have to keep locked down. [Before] it felt like it wasn't safe and somehow the sound created safety,"

recounts Nadia. “It was really profound just how quickly my body was... coming from a contracted place into a place of expandedness [*sic*] and just the emotional release that came with that. So for me it was really, like, ‘Wow’.”⁷⁸ Her experiences inspired her try other forms of sound healing and to regularly incorporate the singing bowls into the meditative component of her yoga classes.

Christine, the kit drummer and gong bath attendee, also describes an inexplicable outcome from her first experience with the gongs, which she sought out in order to help overcome an auditory trauma resulting from a car accident. Christine had been suffering from insomnia, unable to still the horrific sound of the crash in her mind’s ear. Not surprisingly, it was with some reservation that she approached her first gong bath. “When I got there I realized that I was going to be listening to kind of like crash sounds,” she recalls. Yet the experience, she claims, inadvertently provided her an opportunity to sensitize herself to her own trauma in a safe and controlled manner. “What happened was because I was in such a relaxed state, I knew I wasn’t in an accident. It actually really healed that part of my thinking, my repeating of the sounds of the crash, because I think I was a willing participant—to go and just relax and have a new experience [with] that kind of sound.” The result was the complete disappearance of the trauma.

The body’s inner mysteries, however, are not always construed along spiritual or esoteric lines or explicitly linked to CAM, nor is human receptivity to sound always deemed positive. In another striking example, Paul (the gong bath facilitator) describes how he unwittingly stumbled upon some mysterious ability of sound and frequency to cause a sharp pain in the body while repairing a radio during his tenure as a U.S. Air Force electrical

⁷⁸ All subsequent quotes from Nadia, interview with author, Vancouver, April 12, 2012.

technician:

So you're sitting there and tweaking [the radio] and you're looking [for the problem]... and then it makes this strange buzzing effect [that] causes the right side of your head to feel like someone is beating you in the head with something... So next thing, you're sharing it with the [other technicians] and you're all rather intrigued... "What's up with that? What's happening?" None of us really could figure it out. So we realized that something was happening with the sound... but we could feel it within our body like, "Whoa, something's happening"... So I was intrigued that some of these audible ranges caused the physical reaction in my body.

**

As shown in the preceding examples, the epistemic framework implied by sound healers sometimes impinges upon commonly received dualities in Western medicine. These include the separation between subject and object, mind and body, and spirit and matter and are often perceived as the underlying causes of conventional medicine's insensible and problematic view of the body. Yet, as some authors have argued, these are also reflected in the way sound has been perceived in the west since the 18th century. Since this time sound has been posited as both an object and a domain of thought and practice that can be treated independently of particular instances of sounding or, as Jonathan Sterne puts it, a "static and transhistorical" entity existing apart from human experience (2003:14). This has helped relegate its study as the purview of physics, biology, and the sciences (2003:2), which typically conceive of sound as a mechanical phenomenon, and hearing as reducible to a physiological process or mechanical function separable from the body (2003:23). As argued by Sterne, however, sound is not an entirely natural phenomenon existing separately from humans. Rather, it comes into existence through the act of *hearing*. Sound, in this regard, is truly anthropocentric (2003:11). Like the body, sound healers' deeply embodied perception of sound can be seen as caught up in a perpetual tension between representation and being-

in-the-world, objectification and indeterminacy, and continuity and transformation (Csordas 2002:3).

According to Holger Schulze (2012), this way of conceiving of sound as a positive scientific entity—as repeatable, reproducible, material events—became prominent through the work of Hermann von Helmholtz.⁷⁹ Helmholtz’s investigations into acoustics and perception of sound were a watershed since, for the first time, the philosophical investigation of sound was replaced by scientific experimental methods and close adherence to physiological knowledge (Schulze 2012).⁸⁰ Schulze writes of Helmholtz’s seminal 1863 publication *On the Sensation of Tone*:

Thus, on the one hand, sonic epistemology, following Helmholtz, got closer to the body and, on the other hand, it became more remote from individual experience. An abstract model of nervous signals and data processing... replace[d] individual experience. But leaving out this individual aspect, it seems that auditory research has left out the whole of human sound experience—with great consequences for science history. The culture of alphanumeric writing prevailed; it overturned the individual, the situated and corporeal experience, once again. (2012:201)

This dialectic between scientific methodology and a deeply embodied and individualistic perception of sound is reflected in the Listening Body, where the body and its inner senses is given prominence and the idea of a mutually opposed object-subject duality is called into question (this dialectic will be further explored in Part III). The Body Mystified, on the other hand, is not always concerned with explaining the body’s receptivity to sound. Its focus is on

⁷⁹ Hermann Ludwig F. von Helmholtz (1821-1894) was a German-born physician, pathologist, former military doctor, and founding president of the *Physikalisch-Technische Bundesanstalt* (Berlin’s National Institute for Natural and Engineering Sciences). In 1863 he published *Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik* (*On the Sensations of Tone as a Physiological Basis for the Theory of Music*; see Helmholtz 1875) which is widely regarded as the first seminal work on acoustics and sound perception.

⁸⁰ Schulze also suggests that this shift contributed to an “anti-corporeal” and “anti-sensational” conception of music as exemplified in Eduard Hanslick’s 1854 *Vom Musikalisch-Schönen* (*The Beautiful in Music*; see Hanslick 1986).

evoking a dimension of human knowing or ability that can be accessed through engagement with sound or vibration and that stimulates the body's capacity for experiencing the sacred or divine. As such, the *Body Mystified* suggests an intangible and enigmatic aspect of sound healers' bodily engagement with sound and sanctions dimensions of human existence beyond common or rational understanding. Rather than completely negate the body's materiality, it seeks to expand the conceptual spectrum on which the body may be defined by extending it into an immaterial and energetic dimension. As a result, the *Body Mystified* implicitly challenges the centrality of the body's materiality in conventional definitions, wherein it is considered "masses of matter" (dead or alive) and by its very physicality, given a "concrete reality" (that which lacks materiality, on the other hand, is deemed unimportant or "of no substantial consequence"; see further page 28). At the extreme materialistic end of the Western spectrum, Penelope Gouk points out, "The 'medicalized' conception of the individual human body as a composite, material entity whose structure and function are amenable to analysis is strongly promoted as the dominant model in Western culture. Within this conceptual framework there is apparently no space for the soul, or any other invisible and intangible entities whose existence cannot be detected through conventional scientific techniques"(Gouk 2000a:17).

In the following chapter I examine practitioners' perceptions regarding health and show how involvement with CAM informs their ideas about how to best define, assess, and acquire it. It distinguishes two broad health-related themes—holism and naturalism—and highlights how values and concerns carried over from CAM have helped define sound healings' dynamics and aspirations.

CHAPTER 5: FROM PHARMACEUTICALS TO FREQUENCIES, FROM SURGERIES TO SOUNDS: REDEFINING HEALTH

Everything is drug-oriented or, if not that, then surgical, medical, advice-oriented and seeing the human body as a mechanical device... a bunch of parts put together and not seen as a whole, functioning, living ecosystem. (Matthew Kocel, interview with author, Vancouver, October 19, 2011)

Sound healing practitioners often critique the perceived conventions of Western medicine, which cluster around one primary concern: conventional medicine's reduction of the human body to a predominantly mechanistic or material entity, an engrained percept seen as constraining how health can be viewed. As Christine (the kit drummer and gong bath attendee) succinctly remarks: "A doctor actually knows a lot more about your [body's] biology and the science—like how your physical body works."

Practitioners' statements regarding this aspect of medicine are typically consistent. Kathy (the gong bath facilitator), speaking from personal experience, suggests, "When you go to your doctor with something, let's say like eczema, they're not looking beyond the physical presentation of a problem with your skin. So, 'Here's some cream—off you go'." Linda (the chanting Nichiren Buddhist) similarly hypothesizes, "If I go to my orthopedic surgeon and start crying, he's not going to know what to do... He deals with bones."

Practitioners such as Karl (the gong bath attendee) seem apt to associate the physicalist approach of conventional medicine with a militaristic mindset. "It's just kind of physical. It's very much like... 'Send the troops in and kill them all.'... Like an aggressive... easily understood, scientifically explained thing." Even Megha (the singing bowl practitioner and financial advisor), whose interest in neurosciences yields a much more optimistic view, suggests "Scientists have so far focused more on the physical side of the brain—brain as [a] physical product." Again and again, modern medicine's perceived fixation on the physical is

likened to blinders that inhibit medical professionals from viewing the body and its health from a broader perspective.

On the other hand, there is a corollary to the physicalist critique—again fostered in CAM and carried through to sound healing activities—that suggests an inability of current medicine to cultivate an individualized, person-centered approach to treating patients. As Alan Watkins suggests, “Complementary medicine assumes that all individuals are different; the manifestation of disease depends on the unique characteristics of the individual patient. Therefore a constellation of therapeutic activities is deemed necessary” (2001:204). As Dr. Shen would attest, this is not a shortcoming of TCM. “The Chinese medicine approach is always to treat the individual, not treat a standard set of diseases or [use a] standard way of treating it because that’s not actually treating the root cause and is not as effective. So we’re always wanting to treat the person.”⁸¹

Karl encapsulates this discontent in the following way: “We really have to take our own health into our own hands and find what works for our body, like, [which doctor] works well with you, you know? So, it’s so body specific. What works for some people doesn’t work for others.” Tascha’s sentiment stems from her experiences seeking medical support for her PTSD. “I think the approach of the gongs allowing me to let go and help me surrender ... the medical establishment would have never approached my symptoms or my case in this way. In fact they’ve been able to do nothing for me except tell me... it’s ‘psychosomatic!’” she says of medical experts’ perceived unwillingness to listen to or entertain other possibilities or perspectives. She adds, “When [doctors] can’t apply the broad brush to patients, then you tend to fall between the cracks.”

⁸¹ Dr. Shen, interview with author, Vancouver, October 13, 2012.

In this chapter I show how corresponding ideas of health are formulated according to two main themes: 1. *holism*, the antithesis of biomedical reductionism, and 2. *naturalism*, pertaining to the notion that health is best served by living in accordance with nature and its self-evident processes. According to Bonnie O' Connor:

Health belief systems weave together attitudes towards health and illness, and theories of disease etiology and remediation. In addition they articulate these within a larger cultural framework of other important beliefs and values—for example, those dealing with religious, moral, and ethical concerns; with family and community relations and the requirements of reciprocal responsibility; with the nature of the universe, the world, or Nature, and the rightful place of humanity in them; with human nature and the capacities and limitations of the human body, mind, and spirit. (O'Connor 1995:22)

As we saw in Part I, practitioners' ideas regarding the body are often carried over from previous experience or familiarity with CAM and this is no different when it comes to ideas regarding health. When change is brought to the manner in which the body is conceived, it seems new and unconventional ways of perceiving health are enabled. Yet just as holism and naturalism continue to gain currency in their respective communities of practice, so, too, have they received increased attention in academia and medicine. Therefore, I will also contrast holism and naturalism's relevance for patients against the ways in which they continue to be advanced in academia and professional medicine.

Holism

The central idea of modern medicine has been to master the minutiae while missing the whole—and it is the whole that people are missing the most in modern medicine. (Micozzi 2001a:xiv)

The term *holism* was coined in 1926 by the Cambridge-educated South-African statesman J.C. Smut as a counter to mechanistic and reductionist thinking in early 20th-century medical debates (Kaptchuk 2001:51). Intended as a reformulation of the previous

concept of vitalism that had fallen into disrepute in medicine and the philosophy of biology, this newer term implied that the laws governing components of an organism or system were insufficient to explain the whole. Holism instead offered an ecological understanding of biological phenomena, suggesting that a living organism was best comprehended when it was neither observed nor measured at any level other than the whole.

Holism, as such, holds that health and sickness are more adequately addressed when all aspects of the human condition—biological, psychological, social, spiritual, emotional, and environmental—are considered (Auyang 1999; Weston 1992). In keeping with its heterodox origins, practices considered holistic acquire their significance “not so much by a definite positive conception of the body or self,” as Anthony Weston writes, “but rather by their resistance to or refusal of orthodox reductionism” (1992:75). Although likely unaware of the term’s Smutsian roots, practitioners of CAM and sound healing continue to contrast holism with conventional medicine’s focus on the individual observable components of the body. Yet for this reason the term has also increasingly taken on a much more nebulous character, being used more generically to refer to CAM or any medical approach that considers its methodologies or aims not to be reductionist (Kopelman and Moskop 1981). In the medical world, meanwhile, despite being adopted early on by a number of scientists in the wake of its conception (including the notable Joseph Needham; see further 1955), holism came to be used to evoke a humanistic or psychosocial side of health care (Kaptchuk 2001:52).

Beginning in the 1960s, however, holism once again began to be propagated in academic medicine by a minority of medical doctors embracing CAM modalities. To cite one of its earliest and most prominent advocates, Marc Micozzi, M.D., Ph.D.:

The central idea in medicine over the past 100 years, propagated as part of general science, is that health can also be broken down into its smallest component parts and studying the parts can be made relevant to the experience of the health of the whole. In its “reduced” state modern medicine has focused on cells, genes, and molecules—an understanding of which is central to the modern practice of biomedical science. While much of science is necessarily beginning to move beyond basing all understanding of reality on reductionist studies, modern Western medicine remains rooted in this central idea... Likewise, “health” is not a property that can be ascribed to or experienced by cells or molecules but only at the level of the whole person in this context of his or her physical and social environment. (Micozzi 2001a:xiii)

Kathy brings a holistic ethos to her sound healing practice: “It really is about mental, spiritual, physical, and emotional all coming into alignment, all facets of the body.” Vicky believes so long as Western medicine continues to be primarily concerned with “dealing with the disease, the symptoms... it’s not a holistic approach.” Stemming from her strong interest in Tibetan Buddhism, which she studied for many years before discovering sound healing, she professes, “I am a strong believer in [the] body-mind kind of approach... because if it’s not in tune—your mental state and your emotional state—I believe as time goes on it does manifest on the physical level.” Megha, meanwhile, explains, “When I [refer to] people’s health, it is not necessarily limited to physical health, but also emotional and mental, things like that.”

The alleged absence of a holistic ethos in current medicine, however, goes beyond the level of the individual patient. For sound healing practitioners like Tascha, it is a systemic issue that feeds directly into the encounter between patients and health care institutions and the delivery of health care in the contemporary west. Tascha relates how “I’ve intersected with insurance companies, with long-term disabilities, and whatnot and the medical system is very siloed. And to be able to give you money or to approve [you] or to be able to test your symptoms, they need to fit into a convenient box. But no one person is trained to look at you holistically. Right? It’s all silos... So no one’s trained to be able to deal with you as one

patient,” she remarks emphatically.

Christine also attributes health to a broad spectrum of factors, stating that the holistic approach is about being able to take account of a greater range of personal beliefs, attitudes, and values than what is normally allowed in conventional medicine. “I think doing [holistic approaches]... affirms whatever your philosophy is about life,” she affirms. “You’re doing them because you want to feel better, you don’t want to suffer. But there’s also kind of a bigger philosophical platform... about what kind of person [you] are and how you approach things and how you take care of yourself in life.... I believe that all of those little pieces add up to a bigger whole health picture.”

Discussions of holism also commonly correlate the idea of holism with “balance,” such as Dr. Shen’s claims regarding TCM: “A garden is a dynamic system where everything is connected and related in order for there to be harmony and balance. What we’re always trying to do as practitioners is we’re always trying to balance.” Correspondingly, being sick is sometimes characterized as being “out of balance.” As Dr. Shen explains: “Western medicine tends to be cause-and-effect: A plus B equals C. If you’re missing B this is what you need, B. In Chinese medicine it’s more like we know the relationship of A and B are off therefore creating C, so we don’t know what caused what but we know that this relationship is what needs to be balanced out.”

Maria, another patient of Dr. Shen, believes acusonics is about the “balancing of... our electrical components of the body.” She believes sound may hold relevance for the health of the body because “each of us has our own soundwave, energy wave, that type of thing. And I’m sure it gets off-balance every so often... And I’m sure [TCM] has its own way of

setting the balance within the body.”⁸² Tascha, meanwhile, explicitly makes mention of “trying to achieve harmony and balance in my body” by attending gong baths, and points out that healing involves “setting the intention to achieve states of balance... [in] all aspects of ourselves, whether it is some sort of balance physically, mentally, [or] emotionally.” Though current medicine may not look at the whole person, she notes, “the gongs do.”

Since, by definition, holism is concerned with the multitude of components that make up the whole and as such privileges affinities and associations between parts over their individual functioning, it is not surprising to also find an abundance of sound healing and CAM terms alluding to relations between things: “attune,” “compliment,” “connected,” “disconnected,” “entrain,” “equilibrate,” “equilibrium,” “harmony,” “homeostasis,” “imbalance,” “interconnected,” “interrelated,” “off-kilter,” “sympathetic resonance,” “stasis,” and “sync.”

Naturalism

CAM and sound healing prize things considered natural, i.e., in accordance with or determined by nature. Discussions are everywhere peppered with nature-related analogies or idealized views of a medical ethos free of human or industrial artifice. In the case of TCM and acusonics, we have seen how this is expressed through analogies such as viewing the body as “like a garden.” Other analogies include describing the body’s structure as “like an onion,” its meridians “like waterways” (Dr. Shen), and its etheric field as “a soft white cotton” (Samantha Jennings). Even the pathology of the body—likened to a “dam in a river”—is described using organic or nature-related terms such as “cold,” “congestion,” “damp,”

⁸² All subsequent quotes from Maria, interview with the author, Vancouver, April 18, 2012.

“drain,” “flow,” and “heat” (Dr. Shen). Conventional medicine, however, uses a distinctively mechanistic vocabulary to describe the body. As Dr. Shen pointed out, this is evidenced through anatomical terms such as “‘wall,’ ‘socket,’ ‘joint,’ ‘hinge,’ ‘valve,’ and ‘pumps’.”⁸³

Nature-oriented analogies are also expressed in the characterization of the body as being primarily constituted by water, a fact introduced early on in my fieldwork by Dr. Shen and Samantha Jennings to explain its susceptibility to sound frequency and vibration: “Our body is 70% water so our body becomes a great resonator for sound—a receptacle for sound,” is how Dr. Shen puts it. She further suggests, “[The body] can be really affected by sound and that really, I think, is why it helps so much for our body with healing.” Likewise, as Samantha Jennings explains, “So the idea is that because we are primarily water and sound travels four times faster in water than it does in an aerial environment, when we apply that frequency to the body the body naturally responds... That’s why it can be so effective because we are really affecting the watery content of who we are.” Here is an extended description by de Muynck:

Both the human body and the Earth are largely composed of water, which is a great receptor and conductor of sound. In fact, the closer we examine the organic nature of our bodies, the more evident it becomes that our physical body is a microcosm of the earthly body we inhabit. The Earth has many rivers, streams, lakes, peninsulas, and oceans, as are our bodies traversed by a network of mineral-laden liquid meridians. We are so much like the Earth in our physical composition, that it makes perfect sense we would find ourselves reflected in her landscape. (de Muynck 2007:84)

In chapter 7 I will show how the body-as-water analogy provides an epistemological stepping stone to a new conception of the body unique to sound healing.

In the broader sphere of sound healing, however, the affinity for idealizing “natural” medical resources translates most simply into the belief that nature has an inherently wholesome and restorative quality, or, what Joseph Pizzorno and Pamela Snider characterize,

⁸³ Dr. Shen, interview.

as “an inherent drive toward health that lives within the patterns and processes of nature” (Pizzorno and Snider 2001:177). Despite the powerful quick-fix nature of many modern medical treatments, medical resources considered by sound healing and CAM practitioners to be natural remain the preferred source for healing oneself. In addition to constituting a tenet in many of today’s CAM practices, this belief in the healing power of nature—termed *vis medicatrix natura* in Naturopathic medicine—has been espoused in numerous traditional medicines around the world and has its Western roots in the writings of Hippocrates (Pizzorno and Snider 2001:173). The spectrum of natural resources encompasses medicines or substances derived directly from the Earth (such as food, botanicals, or herbal medicines), contact with nature and its outdoor environs, and a philosophical and earnest consideration of the deep reciprocity between humans’ health and the health of the environment. As Laurel frames it, “There’s something about... natural elements, I think they’ve got to be healing in a way. Air, water, sun—like, there’s some aspect of them that I think on some level I think our body just knows.” Pam agrees “You know how important that is... to take the time to be in nature... I mean we’ve got the beach, we’ve got Stanley Park, even walking down some of the streets in Vancouver with those beautiful trees where the old houses are... It’s lovely.”

For Pam, a reverence for nature and its inherently restorative properties may also mean looking to unlikely sources for clues about health and healing:

I learned a lot about healing from animals and turning to animals and nature. It’s amazing. You know we had a dog that was very sick. I mean, we thought it was the end. It was the summer and she went and lied [*sic*] under that tree and she lied under the tree for just under 48 hours... And at the end of 48 hours she got up and she got better and got stronger... And that’s what animals do. They go and hide and they draw in and they put everything—*everything* goes towards healing. Nothing else... Their body slows down so there isn’t need for food or anything like that. And everything goes towards healing. And certainly that’s what I’ve done with broken bones and whatnot. I didn’t do anything else except focus on healing... I think that’s one of the most important parts of healing that most people don’t do. They may say

that they can't because they have to work or do whatever, but that's what you have to do. If it's a serious injury, you've got to know that you're going to have a certain amount of time where you go inwards and your whole focus is healing.

For the sound healer this spectrum can be expanded to include natural sounds or soundscapes believed to have inherently restorative properties, such as a flowing river or the soothing tidalscape of an oceanfront.⁸⁴ “Nature is always in harmony. You hear the rustle of the leaves as the wind goes through the trees and the chirping of the birds,” says Paul of his cherished hikes through the forest. “Instead of causing us irritation and upset... they give you a soothing effect... That sound of the water when it comes over the waterfalls is very soothing and cleansing to the body because of the way we hear it and the way we feel it.”

The corollary to the belief in nature's health-bestowing properties, on the other hand, is a distrust of any medical resource viewed as artificial, toxic, mechanical, hi-tech, and, above all else, pharmacological. As Anthony Weston suggests, this is perhaps owing to the idea that “by systematic pharmacological and surgical assault, the body is all too often *turned into* exactly what... ‘materialistic’ medicine imagines it to be—a fragmented set of organs, ever in need of medical management” (Weston 1992:81).⁸⁵ Acusonics practitioners such as Pam, as we have already seen, perceive pharmaceuticals as an unnecessary and harmful staple of Western conventional medicine. “I think that we could definitely find ways of, let's say, first of all dealing with pain without all these heavy drugs that have side effects,” she suggests during one interview. “The only reason we don't [have more medical alternatives] here is, of course, because allopathic medicine—I think mostly because of pharmaceuticals. I

⁸⁴ A perusal of commercial sound healing recordings, for instance, shows that a large percentage revolves around the recorded sounds of nature or natural sounds.

⁸⁵ According to *A History of Medicine*, the original Greek meaning of the term *pharmakon* simultaneously denoted “drug,” “medicine,” and “poison” (Sigerist 1987:27-28).

think we're run by pharmaceuticals, we're not even run by the doctors. The doctors are run by the pharmaceuticals."

Similarly, when I ask Vicky what she means when she refers to sound healing as a "natural" or "organic" form of healing," she responds "The first thing that comes to my mind is meditation and I think yoga and any kind of exercise. You know, anything that's without the administering of drugs or chemicals, I would call natural." By contrast, Vicky considers medical methods such as x-ray and surgery not to be "natural" or "organic" by virtue of their invasiveness and toxicity.

For most sound healing practitioners, this distrust comes out through criticism of conventional medicine's perceived over-reliance on pharmaceuticals (so contentious and distressing was this aspect of conventional medicine that on a number of occasions I was asked by interviewees to temporarily suspend recording). Vicky, for example, explains, "I think the major difference [between natural and conventional medicine] is—I would say it's not administering... drugs or your body is [not] under the knife." Following Vicky's critical stance, Matthew offers the following characterization during one interview: "The current practice [of medicine] seems to be to mask symptoms with drugs or stop symptoms with drugs rather than going to the level of cause," he remarks, adding that this is due primarily to a profit motivation.

Paul agrees with this profit-driven characterization, claiming "not a single pharmaceutical drug was ever made to cure anything that [the pharmaceutical industry] didn't already know was [possible to treat] on a natural level." For Paul the pharmaceutical industry's main concern is to "figure out a way of doing it synthetically and putting it into a pill and making a buck." Finally, for Nadia this somewhat odious dimension of conventional

medicine was cause enough for her to forego conventional medicine altogether. “I stopped seeing conventional doctors... when I was going [to them] for the posttraumatic stress—they would’ve wanted to give me drugs and I didn’t want to.”

The concept by which most sound healing practitioners appeal to nature’s self-evident healing qualities, however, is the body’s innate healing capacity. Notwithstanding the perceived merits of their methods, practitioners of sound healing agree that the body’s ability to heal itself ought to take precedent over excessive professional and technological intervention. Although etiologies often vary dramatically across the spectrum of sound healing and CAM practices, healing is best aided by the body’s own inner resources though these can be enhanced externally (Micozzi 2001a:xv). It is for this reason the sound healing practitioner may, in addition to (and despite) all the expertise of modern Western medicine, simply let nature take its course when confronted with sickness. As Micozzi writes:

Wellness in the context of complementary medicine is more than the prevention of disease. It is a focus on engaging the inner-resources of each individual as an active and conscious participant in the maintenance of his or her own health. By the same token, the property of being healthy is not conferred on an individual solely by an outside agency or entity but results from the balance of internal resources with the external natural and social environment. This latter point relates to the alternative approach that relies on the abilities of the individual to get well and stay healthy. (Micozzi 2001b:6)

Kilner and Wellman similarly note:

[CAM practices] focus not just on biomedical processes, but emphasize the natural ability of the body to heal itself. They stress health rather than disease, and their goal is to strengthen the health-promoting forces of the body. The flow of energy is regarded as a crucial source of healing, and pronounced emphasis is placed on the uniqueness of each individual, the subjective experience of patients and the important effects of the environment. (Kelner and Wellman 2003:12)

In contrast, excessive medical intervention is often seen as unnecessary and at worst an impediment to the body's self-healing powers (it was this understanding, for instance, that underlay Pam's insistence that, "my body would simply take care of the cancer.")

As a result, practitioners using sound to heal often appeal to their role not as a healer, *per se*, but as a "facilitator" or "enhancer" of the body's innate healing ability. Hence, "If the body heals itself, has its own energy, and is uniquely individual, then the focus is not on the healer but on the healed" (Micozzi 2001b:7). Kathy makes this point explicit when she declares during one interview that "I don't refer to myself as a healer because I can't heal anyone. We heal ourselves." She adds, "I can only facilitate an experience [of healing] and try to use the knowledge I have to help somebody come back to a more harmonious way of being." Matthew also emphasizes that neither he nor his performances can be credited with directly healing anyone. "I never have tried to make a claim that I can cure anyone or heal anyone of anything specific with sound. But I can build that space of possibility for their healing...that allows them or their body or their spirit—whatever it is—to reconfigure itself in a healthy way." Laurel (the vocalist) similarly clarifies her aim of "creating an atmosphere that will facilitate healing, so it's clear that people are healing themselves." She adds, "We're just creating the setting for them to do their own healing." Paul (the gong bath facilitator) likewise shares this sentiment: "I need to encourage [the gong bath attendee] to accept the fact that the sound is going to accelerate [healing]," he suggests in conversation. "It's not going to do the healing—*they* are still doing the healing. All I'm doing is giving an accelerant."

PART III

DIALECTICS OF SOUND HEALING AND SCIENCE

en·er·gy *noun* \ 'e-n ə r-j ē \

1 *c* : a usually positive spiritual force

2 : vigorous exertion of power : effort

3 : a fundamental entity of nature that is transferred between parts of a system in the production of physical change within the system and usually regarded as the capacity for doing work

Merriam-Webster Dictionary Online, s.v. “energy,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/energy>

nat·u·ral *adjective* \ 'na-chə-rəl, 'nach-rəl \

8 *a* : occurring in conformity with the ordinary course of nature : not marvelous or supernatural

b : formulated by human reason alone rather than revelation

10 *b* : existing in or produced by nature : not artificial

12 *a* : having a physical or real existence as contrasted with one that is spiritual, intellectual, or fictitious

b : of, relating to, or operating in the physical as opposed to the spiritual world

Merriam-Webster Dictionary Online, s.v. “natural,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/natural>

nat·u·ral·ize *verb* \ 'na-chə-rə-, līz, 'nach-rə-\

2 : to introduce into common use or into the vernacular

3 : to bring into conformity with nature

4 : to cause (as a plant) to become established as if native

Merriam-Webster Dictionary Online, s.v. “naturalize,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/naturalize>

CHAPTER 6: FROM SMOOTH TRADITIONALISM TO SCIENTISM: SOUND HEALING AS SCIENCE?

Most people in the west will recognize the famed mythological *caduceus* of Hermes and Mercury (see Illustration 7.1) as the symbol of all things medical, an unfortunately mistaken association that a number of historians have pointed out.⁸⁶ This misidentification, it has been suggested, has to do with the number of commercial health-related organizations who have appropriated the caduceus due to its popular appeal and commercial value (Friedlander 1992). (Indeed as one commentator asked “Would not [Hermes’ caduceus] symbol be suitable for certain Congressmen, all medical quacks, book agents and purveyors of vacuum cleaners, rather than for the straight-thinking, straight-speaking therapist?” Tyson 1932:495). Caught in the cross-currents of medicine, history, commerce, and public perception, the caduceus provides an apt point of departure for discussing sound healing’s often problematic relationship with Western medicine. A quick survey, for instance, shows how a variety of interpretations of the caduceus have flourished within a marketplace of sound healing and CAM-related books, recordings, magazines, and websites (the term has been used as the name of a publisher of sound healing books, a magazine dedicated to “Mind, Body, Spirit & Environment,” and the image as a signature icon by the popular sound healer Jonathan Goldman).

⁸⁶ The correct representative emblem is the rod of Asclepius that depicts a single snake wrapped around a staff. By contrast, the caduceus depicts two snakes coiled around a staff with wings extending from the top and owes its affiliation with Western medicine to its adoption as an insignia by the U.S. Medical Corps in 1902 (Engle 1929; Frothingham 1916; Garrison 1919-1920). Interestingly, it is believed the snake is a symbol of the contradictory dangers and benefits inherent in the use of drugs as evidenced in the medicinal use of snake venom in ancient Greece (Jonsen 1990; Kelhoffer 2000).

Illustration 7.1: Caduceus symbol (This work has been released into the public domain by its author, Rama. This applies worldwide; see <http://commons.wikimedia.org/wiki/File:Caduceus.svg>)



In *Music and Sound in the Healing Arts* (1987) sound healer John Beaulieu suggests that Ayurvedic medicine associated the staff and two intertwining snakes of the caduceus with the three primary energy currents in the body. He further suggests that the two snakes also embody wave and form—two essential characteristics of sound. Marjorie de Muynck’s *Sound Healing* manual compares the upward-spiraling formation of the caduceus’ intertwining snakes to the yogic energy of *Kundalini*, characterizing the symbol as a “powerful image [representing] humanity’s ability to connect to spirit” (de Muynck 2008:16). In *Polarity Therapy* Dr. Randolph Stone writes “The two serpents represent the Mind Principle in its dual aspect. The fiery breath of the Sun is the positive pole as the vital energy on the right side of the body... On the left side of the body flows the cooling energy of the Moon essence of Nature” (1986:34).⁸⁷

⁸⁷ Randolph Stone (1890-1981), an Austrian-American Osteopath, Naturopath, and Chiropractic, was the creator of Polarity Therapy.

I extend the concept of negating the biomedical body presented in Part II by considering the dialectic between sound healing and conventional medicine and science.⁸⁸ This is most readily apparent in the tension between practitioners' appeals to a historicized or consecrated dimension of sound and healing, on the one hand, and frequent scientific appeals, on the other.⁸⁹ Negating the biomedical body, taken on its own, is an antithetical and often antagonistic stance; this chapter demonstrates sound healing practitioners' appeals for legitimacy through the authority of Western science and medicine. To this end, I will revisit my preliminary case study in acusonics, my interviews with sound healers, and refer to magazines, websites, radio reports, and books by well-known sound healing authors including Jonathan Goldman, Don Campbell, Mitchell Gaynor, and John Beaulieu.

"Finally Catching Up": Historicizing Sound Healing, Consecrating Sound Healing

It just seems like sound healing—its time has come. And it's been with us in all types of traditions... religious experiences and rituals and devotional singing... I'm hopeful that there will be way more sound practices that become prominent. (Ruby, interview)

The view of sound healing as immemorial is often evoked by practitioners to support its authenticity in a modern setting (Horden 2000b). In this view, despite having been overshadowed by biomedicine, science will inevitably restore sound healing to its rightful place. As the liner notes to Andrew Weil and Kimba Arem's CD *Vibrational Sound Healing*

⁸⁸ I use the term "dialectical" in the general sense to refer to the juxtaposition or interaction of conflicting ideas or forces through which a synthesis or new meaning may be derived.

⁸⁹ The Merriam-Webster online dictionary defines scientism as the "methods and attitudes typical of or attributed to the natural scientist" or "an exaggerated trust in the efficacy of the methods of natural science applied to all areas of investigation." (Merriam-Webster Dictionary Online, s.v. "energy," accessed April 27, 2013 <http://www.merriam-webster.com/dictionary/energy>).

optimistically state, “Western science has proven what ancient traditions have known for centuries: sound has the power to heal.”⁹⁰ Where it has not, the practice of sound healing may simply bypass scientific validation by virtue of the fact that it has been around for much longer than science.

In writings on sound healing, we see examples of this smooth traditionalism (as Peregrine Horden terms it; 2000b:32) employed repeatedly as a way of setting up the unequivocally healing and transformative quality of sound. Sound healing composer and Doctor of Chiropractic Jeffrey Thompson states in one essay that: “Human beings have been using sound to access deeper states of consciousness, expand awareness and heal the body for thousands of years” (Thompson 2013). The Sound Healing Network’s more in-depth claim states as of May 11, 2013: “Sound has been used as a healing catalyst throughout human history, across cultural bounds. Whether the nomadic shaman, the Tibetan Lama, or Christian, Islamic, Hindu, African or Jewish priest, musician, or cantor, sound has been found to carry us closer to that we hold as sacred, and to that we view as whole” (<http://www.soundhealingnetwork.org/>). Suzanne Gerber’s magazine article “The Sound of Healing” says:

Music is a fundamental component of all major religions, from Christian hymns to Jewish cantorial melodies to the muezzin calling Muslims to prayer. Buddhists recite mantras and prayers and chant to win merit in this life and those to come. Millions of people around the world chant the Sanskrit mantra ‘om’ daily to purify mind and body and become one with all creation. Sufis (the esoteric branch of Islam) hold that higher states of consciousness can be attained by concentrating on the reverberations of bells and the harmonic echoes of choirs. And Judaism's mystical Kabbala teaches that chanting certain vowel sounds connects one with the energies of the Divine. (1998:69)

⁹⁰ See <http://www.soundstrue.com/shop/Vibrational-Sound-Healing/2147.pd> (accessed September 29, 2013).

Marjorie de Muynck remarks how “Sound is the oldest form of healing” (2008:2) and Jansen and de Ruiter claim in their *Singing Bowl Handbook* that the concept of sound’s transformative capacity “is as old as humanity itself.” To this they add, “It is a concept that can be observed everywhere, all the time, not only in humans but also in animals” (2008:31). Jonathan Goldman, meanwhile, similarly reminds readers how “The use of sound healing is nothing new. It is probably as old as the first sound ever made by a man or woman” (Goldman 2002:17). As Gerber puts it, “Every culture in the world has used sound and music to heal. Finally, we’re catching up” (Gerber 1998:68).

In addition to its pervasiveness throughout cultures and time, descriptions of sound healing may extend back even further to scriptural or mythical origins, thereby endowing it with a legitimacy perhaps believed to be beyond reproach. Appeals to creation myths that evoke the creational capacity of sound are common. Jansen and de Ruiter, for example, suggest that “In creation myths all over the world sound is recognized as the source of all visible and invisible things” (2008:31). A more elaborate example is Jill Purce’s “Sound in Mind and Body” in which she explains: “When I began looking into these [many] traditions I found that even quite widely distant peoples had the idea that the world itself came into being and continued to come into being through sound, that the coming into being is a sonorous event. This is found in the East and the West... St. John’s Gospel says, ‘In the beginning was the Word, and the Word was with God, and the Word was God’” (1991:234-35).

Other sources provide similar examples by calling attention to Hindu and Vedic creation myths. As of May 11, 2013, the World Sound Healing Organization’s website, for instance, explains “The Hindus have a saying, ‘Nada Brahma,’ which means, all is sound, or all of creation is sound. They suggest that the primordial sound of manifest creation is the

sound of ‘Aum,’ or Om” (<http://www.soundhealingnetwork.org/>). Sound healing author Don Campbell recalls that for Hindus the first moment of creation was embodied in the “cosmic vibration” *OHM* from which followed sound, music, dance, language, and drama. In Indonesia, too, he informs us, it is believed that the primordial striking of a giant gong sounded the cosmos into existence, and in Japan the creation of the first sound ushered the end of the sun goddess’s retreat as well as the end of all darkness and lifelessness on earth (2000:60).

John Beaulieu also flags Indian creation myths, calling attention to sound’s cosmic affinity by stating “The ancient rishies, or seers, of India referred to Sacred Sound as *Shabda*.” Going one step further, he suggests “Discovering Sacred Sound within ourselves is the basis for mantric yoga, Pythagorean intervals, Western classical and modern music, the Indian ragas, Buddhist chanting, the sacred rhythms of African tribes, the trance dance music of Bali as well as many other systems of music and sound” (1987:35-36).

Highlighting an East-West link for sound healing, on the other hand, Laurel Elizabeth Keyes places “the origins of the term ‘Amen’ in the older ‘Aum,’ representing the full range of sounds reproducible by the voice and embodying, by this virtue, the creative principle of God. Then there are *Kung* (corresponding to F in the Western scale), designated the ‘Great Tone of Nature’ in ancient China; *Hu*, pronounced the ‘creative sound’ by the Sufis; and the sacredness ascribed in Tibet to the Western equivalents of tones A, F, and G” (Keyes 2008:32).

Scientizing Sound Healing

Appealing to sound healing's historical or mythical origins, however, does not diminish practitioners' concern for scientific validation. There is a positivist and teleological thinking evident in sound healing that seeks compatibility with science.⁹¹ This thinking attempts to locate practices of sound healing at the cutting edge of science and the forefront of new and more enlightened views on health and medicine. In this view, if sound healing has been derogated as something steeped in magic, mysticism, and miracles, then we need only to wait for science to provide a rationale for it. In the meantime, sound healing practitioners might be forgiven for wishing to speed the process along.

Take, for instance, Suzanne Gerber's reference to the research of Herbert Benson:

Herbert Benson, M.D., of the Mind/Body Medical Institute at Boston's Deaconess Medical Center and author of *Timeless Healing, The Power and Biology of Belief* (Scribner, 1996), has studied the effects of chanting mantras on human physiology. He has found that by repeating a single word (such as "om"), measurable changes are produced in energy consumption, respiration rate, heartbeat, pulse and metabolic rate. An increase in alpha brain waves, associated with daydreaming and meditation, also has been observed. His studies have further demonstrated that through meditation and relaxation, it's possible to improve immune function and alleviate and prevent heart disease, stroke and many other chronic health problems. (1998:70)

Jeffrey Thompson also claims that "Using sound, it is possible to make profound changes in brainwave patterns and states of consciousness, observable on brainwave mapping equipment (EEG), as well as positive changes in the body measurable with blood tests, biofeedback equipment and other sophisticated procedures" (Thompson 2013). Then there is the World Sound Healing Organization website, that as of May 10, 2013, claims "There are numerous theorems stipulating the melodic structures of the universe, from the spin of the

⁹¹ Positivism is a philosophy of science positing that all valid knowledge may be derived scientifically from sensory experience and empirical evidence using logic and reason.

planets around the sun, to the sun around the galaxy, to the spin of electrons in our body, and the structure of our DNA” (<http://worldsoundhealing.org/SoundHealing.html>).

A rather intriguing example comes by way of a 2007 magazine article titled “Rediscovering the art and science of sound healing.” It includes the following explanation:

Another possible explanation of how sound is able to trigger the healing response relates to cellular ion channels. Situated within a cell’s membrane, ion channels are the means by which the cell receives nourishment and communicates with neighbouring cells. In dysfunctional cells it is proposed that some of these vital channels are shut down. In this hypothesis, sound opens the closed channels, supporting the cell to resume normal functioning and replication.

Dr James Gimzewski, of UCLA, California, has taken a revolutionary approach to studying cellular function. He uses an atomic force microscope, a kind of super-sensitive microphone, to listen to the sounds emitted by cells. The focus of this new science, called “sonocytology,” is mapping the pulsations of the cell’s outer membrane, thus identifying the “song” of the cell. Gimzewski’s work has revealed that every cell in our bodies has a unique sonic signature and “sings” to its neighbours. (Reid and Kohinoor 2007:21)

When the subject of sound healing reaches the mainstream via news reports or articles, it is often because it has recently been touched on in some way in a scientific “study.” Such is the case in one Canadian Broadcasting Corporation radio piece about sound healing that was broadcast on March 14, 2013: “According to new research, the calming sound of a cat’s purr may lower your risk of a heart attack by nearly 40 percent. That’s not the only evidence that says certain sounds can make us healthier” (available at <http://www.cbc.ca/quebecam/dr-lin/2012/03/14/sound-could-be-the-cats-meow-for-your-health/>). (The segment goes on to report on NASA’s research into the bone-strengthening effects of low frequency sound vibration and its therapeutic significance for astronauts.)

Popular writings on sound healing often reference scientific studies or terminology professed to hold vindication for sound healing. Consequently, concepts such as “brainwaves,” “entrainment,” “magnetic fields,” “cytology,” even “quantum physics,”

amongst others, may be variously employed to help explain or prop up principles of sound healing. As Mitchell Gaynor states, “Sound enters the healing equation from several directions: it may alter cellular functions through energetic effects; it may entrain biological systems to function more homeostatically; it may calm the mind and therefore the body; or it may have emotional effects, which influence neurotransmitters and neuropeptides, which in turn help to regulate the immune system” (quoted in <http://www.thesoulofsound.com/sound-healing.html>, accessed October 19, 2013). The significance of these references lies not so much in the particular sources or individuals to which they may be attributed, but in the fact that they are considered products of medicine and science and thus a source of credibility.

Appeals to science are also evident in Elizabeth Durkin’s preface to de Muynck’s *Sound Healing* manual, in which she characterizes de Muynck’s work as “eloquently bridg[ing] ancient knowledge of Ohm with scientific understanding to present a refined healing system that is simple yet comprehensive” (Durkin 2008:xii). De Muynck’s manual illustrates a pervasive concern for linking the “spiritually upheld” tenets of sound healing with scientific knowledge (Durkin 2008:xvii). Her assertions regarding the healing properties of sound and vibration include: 1. “Recent research validates that low frequency sound vibration not only heals bones and alleviates pain but it actually increases bone density” (2008:xvi); 2. “The grounding earth tone of Ohm helps the adrenals to relax enabling the parasympathetic and sympathetic nervous system to find balance” (de Muynck 2008:2); 3. “Our nervous systems... naturally resonate with all the unintended noise and sound byproducts in our home and work environments... [and] our adrenals respond by overworking and consequently we suffer from stress, lowered immune function, imbalance, and sleeplessness” (2008:3); 4. “The laws governing Quantum Physics demonstrate that

everything in the Universe is made up of vibrational fields, including the human body” (2008:10); and 5. “The vibratory essence of sound affects the inner walls of nerves and blood vessels. Sound and Vibration can strengthen the cells and tissue, and discourage unhealthy cells” (2008:11).

Kathy Cameron’s webpage, <http://www.thesoulofsound.com/sound-healing.html>,(accessed September 15, 2013) demonstrates similar concerns:

Scientific studies show that sound and vibration have measurable effects on a physical, emotional and spiritual level.

Sound waves travel from the outer ear throughout the body via the 10th cranial nerve or vagus nerve. Our wandering vagus nerve connects the brain to all major organs and affects heart rate, breathing, digestion and more.

When we’re stressed, our bodies release hormones such as cortisol and adrenaline which make our hearts race and our breathing rate faster and shallower. These hormones can leave us feeling anxious and unsettled. Long-term stress causes a range of ailments including high blood pressure, insomnia, heart disease and digestive problems. Not only does stress damage the quality of our lives, it reduces the body’s ability to heal and ward off disease.

The promotional literature for a singing bowl performance in Vancouver by Megha Ratna Shakya describes the body’s susceptibility to sound and vibration:

The human body is made of innumerable cells, each one carrying electrical energy. As each cell vibrates, it creates a particular sound frequency. When a person is sick, there is an imbalance in this sound frequency of the cells in the body and the mind. The singing bowl therapy balances the sound frequency, reinvigorating the sick person’s body and mind. (Trans-Himalayan Aid Society 2012)

Books, websites, and audio recordings by well-published sound healers cite a repeating constellation of studies and scientific terms. These include references to the “Cymatics” experiments associated with late 18th-century German physicist and musician Ernst Chladni, and late 20th-century Swiss medical doctor and Anthroposophist Hans Jenny (whose research into the patterns produced by vibrating bodies have provided a topical point of departure for many sound healing writers; see, for example, Goldman 2002; Campbell

2000; Jansen and de Ruiter 2008; Gardner 1990; de Muynck 2008).⁹² David Gibson states that “Science has proven that sound, or vibration, has a strong impact upon substance. For example, the study of Cymatics has shown how sound creates geometric patterns in matter” (Gibson 2013). Jill Purce, an overtone singer, sound healer, and former research fellow at the University of London biophysics department opens one chapter by stating, “Hans Jenny, a Swiss engineer and doctor... made it his life work to demonstrate [the effect of sound on matter]... This is extremely significant. If sound can introduce form and pattern into matter, then it is essential to understand the nature of sound” (1991:234). Kay Gardner comments that, “What the future will bring with regards to cymatics... is impossible to surmise. It is up to the scientists and the practitioners of medical music to determine this through continued research, development, and application” (Gardner 1990:126).

French otolaryngologist Dr. Alfred A. Tomatis (1920-2001) also figures prominently in writing on sound healing. Tomatis was most known for his work helping professional singers overcome hearing-related problems and for his subsequent invention of the Electronic Ear, with which he later controversially attempted to address reading problems, dyslexia, depression, schizophrenia, and autism.⁹³ Proponents of sound healing, however, are interested in how Tomatis’ work supports the idea of sound as a bona fide healing agent

⁹² In 1878 Ernst Chladni (known to some as the “father of acoustics”) published *Entdeckungen über die Theorie des Klanges (Discoveries in the Theory of Sound)* in which he documented the patterns produced by sand particles vibrating on resonating metal plates. Hans Jenny—who continued Chladni’s research and who also coined the term “Cymatics” to describe the periodic effects that sound and vibration have on matter—is known for having extensively documented the various mandala-like patterns produced by exposing various substances to sound.

⁹³ Increased opposition from the medical establishment eventually led Tomatis to disassociate from the profession.

(Tomatis’s theory was that sounds rich in high-frequency harmonics—such as those found in many forms of chanting—have a salubrious “charging” effect on the brain).

The story of Tomatis’ summoning to a Benedictine monastery to allay a mysterious sickness resonates strongly with writers. In his popular book *Healing Sounds* (2002), author Jonathan Goldman gives his account of the story:

Tomatis discovered the therapeutic effects of high-frequency chanting after the leaders of a Benedictine monastery approach him for help. After the Second Vatican Council, the new abbot of the monastery felt that the six to eight hours of chanting which the monks engaged in served no useful purpose and the chanting ceased. Within a short period of time, the monks became fatigued and depressed.

Various physicians were called into remedy the situation, but with little effect. One well-known French doctor examined the monks and decided they were in this state because they were undernourished. This doctor decided that the almost completely vegetarian diet that the monks ate was bad for them and he prescribed a basic meat and potatoes diet. This MD had apparently forgotten that the monks had basically eaten as vegetarians since the twelfth century and had been able to keep up their rigorous lifestyle without any previous problems. The monks ate meat and potatoes and became worse.

Finally, Dr Tomatis was called in. Tomatis discovered that the monks had stopped their daily practice of Gregorian chanting. Without the therapeutic and charging effect of their chanting, the monks were unable to continue their rigorous schedule of work and prayer. Once Tomatis re-established their daily chanting, the monks were soon able to return to their twenty-hour workdays. (Goldman 2002:75-76)

In other cases attempts to link sound healing with scientific knowledge are made not by sound healers, but by practitioners working either in both conventional and non-conventional fields of medicine or at the peripheries of established medicine (in which case the more lettered the credentials proceeding the writer’s name, the better). One such figure is the late Sir Peter Guy Manners, M.D., D.O., L.B.C.P., Ph.D., F.I.C.T.M., D.D. M.H.M.A.⁹⁴ Based on extensive research with scientists in Germany, England, and the U.S., Manners extended the work of Hans Jenny by developing a method known as “cymatic therapy.”

⁹⁴ D.O.: Doctor of Osteopathic Medicine; F.I.C.T.M.: Fellow, International College of Tropical Medicine; D.D.: Doctor of Divinity; M.H.M.A.: Member of the Homeopathic Medical Association (unable to find meaning of L.B.C.P.).

According to this approach, audible frequencies are said to be able to restore the natural resonant frequencies of human cells, organs, and tissues back to a more normative state.⁹⁵

John Beaulieu references the work of Austrian-born American physicist Dr. Fritjof Capra, whose widely read book, *The Tao of Physics* (1975), makes a case for the ultimately congruous aims of both physics and metaphysics.⁹⁶ Beaulieu also refers to the scientific legacy of Einstein in an attempt to underscore the primacy of energy in sound-based approaches to healing. “It was not until the twentieth century that physicists discovered that mass and energy were interchangeable. This relationship was defined by Einstein in 1905 in the equation $E=mc^2$ ” he explains at the opening of one chapter, a “constant reminder that everything we know, including ourselves, can at any moment be converted to energy” (1987:19).

In the most touted examples, however, the idea of healing with sound is openly supported by a credentialed practitioner working in an established scientific or medical discipline. One early exemplar is Italian psychiatrist and psychologist Roberto Assagioli (1888-1974), whose 1933 essay “Music: Cause of Disease and Healing Agent” is re-published in Campbell 1991. Assagioli has this to say about tone: “Every note, while physically produced by a specific rate of Vibration, has at the same time both definite physical and psychological effects. As is well known, sound has great power over inorganic matter; by means of sound it is possible to cause geometric figures to form on sand and also

⁹⁵ Sound healing author Jonathan Goldman cites a conversation with Dr. Manners during which he asked whether the principles underlying Cymatic Therapy might also apply to overtone singing. Dr. Manner’s response was that they did, but that his devices had a better chance of being accepted by the medical establishment since they didn’t involve “a person making strange sounds to another person” (Goldman 2002:94).

⁹⁶ Capra also argues that the reductionist and mechanistic Cartesian thrust long permeating scientific thinking ought to be replaced by a holistic approach.

to cause objects to be shattered. How much more powerful then must be the impact of this force on the vibrating, living substances of our sensitive bodies!” (Campbell 1991:100).⁹⁷

John Diamond, as Jonathan Goldman points out, “spent many years demonstrating that not only would certain substances make us strong or weak, but that music could do the same thing” (Goldman 2002:19). In addition to coining the research method known as Life-Energy Analysis, Diamond has published over twenty books on holistic health practices including music and healing and founded the Institute for Music and Health in order to advance the therapeutic application of music and the arts.

The rare and esteemed Doctor of Medicine *cum* sound healer, however, is the most championed in the sound healing literature. Such a figure epitomizes the ideal and aspiration that one day sound healing may take its place in the canon of biomedicine. One such example is Andrew Weil (M.D.), Director of the Arizona Center for Integrative Medicine at the University of Arizona and Clinical Professor of both Medicine and Public Health. Weil is an advocate of integrative medicine and healing-oriented approaches to medicine that incorporate body, mind, and spirit, whose work has been monetized as a line of health and lifestyle products. In 2010, alongside sound healer Kimba Arem, he released the CD *Vibrational Sound Healing* featuring natural “therapeutic soundscapes” and music composed by Arem with the purpose of helping to foster listeners’ “natural healing abilities using clinically demonstrated techniques and frequencies found in nature.”⁹⁸

In popular writing one of the most commonly cited figures is Mitchell Gaynor

⁹⁷ As a pioneer in humanistic and transpersonal psychology, Assagioli also openly decried the lack of recognition of both music-based therapies and psychotherapies during his time, owing to “the prevailing materialistic trend” in medicine in the 19th century (1991:99).

⁹⁸ As of September 15, 2013, liner notes are available at <http://www.soundstrue.com/shop/Vibrational-Sound-Healing/2147.pd>.

(M.D.), Clinical Assistant and Professor of Medicine at Cornell University/New York Hospital and Director of Medical Oncology at the Strang Cancer Prevention Center. In addition to being a member of the American Society of Clinical Oncology, the American College of Physicians, and the New York Academy of Sciences, Dr. Gaynor is board certified in medical oncology, hematology, and internal medicine and speaks publicly about the merits of integrative medicine. In sound healing circles, he is best known as the best-selling author of *Sounds of Healing: A Physician Reveals the Therapeutic Power of Sound, Voice, and Music* (1999). In this publication, Gaynor lays the foundation for an integrative approach to treating cancer patients that includes singing bowls, vocalization, breathing, and meditation that he describes as rooted in Native American, Tibetan, Hindu, and other traditional vocal practices.

During interviews, all but two of the practitioners made scientific appeals, usually without mentioning particular sources. Thus despite the recurring emphasis on critiquing them, appeals to conventional medicine and science are still commonly made to claim scientific relevance. A number of practitioners, for example, allude to studies measuring physiological responses in the body and their relation to health. Laurel, during an interview, references the research of physician Larry Dossey, whose attempts to scientifically validate the links between medicine, prayer, and healing were popularized in his New York Times best-seller *Healing Words* (1993): “As far as I could see, his study produced measurable results,” she remarks regarding Dossey’s experiments. Laurel also points out studies linking cortisol levels with health. “I think there are more than enough studies showing the relationship between stress and cortisol levels and how its effects on the body can actually make you sick,” adding that she has confidence in the potential of sound to induce relaxation.

Kathy calls attention to the concept of “brainwaves,” a term that refers to fluctuations of electrical activity in the cerebral cortex that are measured using electroencephalographic methods (brainwaves are also discussed by numerous sound healing authors—see, for example, Gardner 1990; Goldman 2002; Keyes 2008). Kathy explains the relevance of brainwaves for understanding the efficacy of sound healing: “In our waking state we’re in a beta brainwave state. That’s just your everyday waking, walking, working state. When you’re in a more deep, meditative state, you’re in a theta brainwave state, and delta, deeper still—the dream state. And you can get there with the gongs and the sounds of the vibrations. So it has a profound effect on the nervous system”.⁹⁹ Megha also makes passing mention of brainwaves in explaining sound healing’s efficacy. “I believe the scientific community has worked extensively to do mapping of the brain and study the frequency of the brain... They talk about this theta, alpha, beta... kind of frequency. Now this is good—at least it is a good start.”

Kathy also introduces the topic of sympathetic and parasympathetic nervous systems. She remarks, for example, how “Many people lead busy and stressful lives,” and how “Those vibrations from the gongs help to bring you back into the parasympathetic mode which is your rest and digest system so it just calms everything down and allows you to be receptive to having your body more balanced.” Kathy also speaks of the vagus nerve—also known as the pneumogastic nerve—that conveys sensory information about the body’s organs to the brain. “It controls information, it controls the ability to keep us calm,” she explains. “From

⁹⁹ The frequency range of beta waves has been recorded at 15-30 Hz, theta waves between 4-7 Hz, and delta waves below 4 Hz (Cahn and Polich 2006). The first brain wave—alpha—was recorded using electroencephalography in 1924 by German neurologist Hans Berger (1873-1941).

my understanding in working with the singing bowls... the vibrations are entering your ears and are carried via the vagus nerve which connects to all major organs and has a powerful influence on the body. So it has a powerful effect on all of that part of the body.”

Moving beyond mere allusions, a minority of the practitioners interviewed discuss their wish to engage actively with scientific research. Jerry, for example, speaks during one interview about contacting a doctor from New York who “wrote an article about vocal harmonics and the brain and how it creates neural pathways.” Megha spends a significant portion of one interview enthusing over possibilities for engaging with scientific researchers. He explains his attempts to actively dialogue with a neuroscientist at a Vancouver university doing research on neural transmissions. “I have always been interested in, you know, exploring if there is a way or means to actually do scientific research,” he explains. “Ever since I came to Vancouver I have been saying... if there is a scientific community that would like to do this kind of study, then maybe there’s some work to do.”

Going one step further, Laurel describes her attempt at approximating an empirical study of her own design. She recounts her experience renting a neurofeedback device and using it on a volunteer subject during a private sound healing session:

I was pretty excited because I finally had access to equipment that could measure brain waves. We attached electrodes to our subject’s head while he was laying down with his eyes closed and monitored them while we sang and played the various instruments. I video taped the computer screen the entire session and marked the time when each new instrument was introduced. The computer showed a lot of activity in certain parts of the brain—some frequencies were really spiking. I’m guessing the part of the brain responsible for imagery was quite involved but I couldn’t find anyone to interpret the data, so I still don’t know. If I could find someone to help me with these kinds of experiments I’d love to do more of them.¹⁰⁰

¹⁰⁰ Laurel, e-mail message to author, November 5, 2013.

Though few attempt their own empirical research, the emphasis placed on measurement and quantitative assessment of the effects of sound on the body and health is noticeable. Matthew mentions studies of the heart: “They’re measuring the electromagnetic pulse of the heart—the electricity and magnetism—[and] they’re showing how much stronger that electromagnetic pulse [in the heart] is than the brain.” Paul, meanwhile, alludes to studies conducted using special photographic methods to detect the subtle energetic field surrounding living organisms. “It’s actually a visual representation of the electromagnetic energy within the living thing,” he enthuses before moving on to a discussion of dark matter and other concepts from the cutting edge of physics. Megha suggests, “If there is a way to actually measure how sound is actually affecting cells... a scientific instrument that we can innovate—maybe that instrument can graph how things work.” To this he adds optimistically, “The scientific community has started, it’s a good beginning. But there’s a lot to be done.”

The Sound Healer: “Physician for Times to Come?”

There’s always emergencies, there’s always bones needing to be mended, people to be put back together... The acute, acute [*sic*]—that’s [what] Western medicine is indispensable for... And then when it comes to everything else... it could likely be handled much more effectively [through] treating the whole patient—person, client, being—differently. (Tascha, interview)

With frequent appeals to science and medicine, however, comes the perhaps inevitable admission: there is still always a time and place for conventional Western medicine. Practitioners’ views regarding this notion are quite consistent. Vicky expresses her sentiment in the following way:

Definitely there is a place for conventional treatment. Particularly for a very high fever, inflammation... bacterias [*sic*] and viruses. I think anyone should use their [*sic*] judgment to see whether you should take [conventional medicine]—the drugs and medication that... have the ability to stop it quickly. And then you do something with

your alternative [medicine] to get it out of the system completely. But sometimes it's an emergency situation—you have a high fever. You know, I'm not going to take Chinese herbs to bring the fever down, right? You're going to do something. You really have to stop it... It might be taking a surgery to do something or [taking] something alternative to completely remove the... block, the toxins, out of your body completely. Yes, there is a place for conventional treatment. It depends on what and under what circumstances. Every situation is different; everybody's... response to treatment is different.

Maria, the acusonics patient, also describes her belief that a medical merging of CAM and conventional medicine can only yield good results. She explains:

I think there's a balance. I don't think one is better than the other. I think if you merge both—like... I have cancer. I'm not going to just do acupuncture, I want surgery, let's deal with it. But each of them, Eastern and Western, has its own good points and if you merge them together I think you have a really good outcome. I think one over the other; I think that's wrong. And I think each of them has its own place and I definitely think if you have the two together then you get really good results.

Maria believes the ideal of bridging CAM and biomedicine (or “Eastern” and “Western,” as she puts it) is embodied in the example of Dr. Shen, who makes an effort to keep up to date on the possible scientific relevance of acupuncture and TCM. “She's knowledgeable, she knows what she's doing, [and] she does lots of research,” she says about her impression of Dr. Shen. “She's not into just like, you know, the Eastern. She looks at the Western too... and the scientific aspects of it all.”

Linda, too, is frank. “You know, if I'm involved in a car crash and my tibia is sticking through my leg, I don't want somebody incanting with a bag of herbs—it's not gonna do it. Give me morphine, give me an operation.” Tascha, despite her stated grievances with conventional health care, also admits, “If you cross the street today and you get hit by a car, you're not going to want an energy healer to lay their hands on you as you lie on the street bleeding with your arm half in shreds, right? You'd want to be at the VGH [Vancouver General Hospital] with somebody in orthopedics putting your arm back together.”

Ruby's sentiment is more succinct (and perhaps less dramatic): "Obviously, if you need an organ transplant, you need an organ transplant."

Though certainly not beyond reproach, the reductionist logic underlying these examples is that the crude, physicalist approach of conventional medicine is permissible in response to equally crude and physical medical cases. Yet by the same token, alternative approaches to healing, if applied to such crude and physicalist examples, are considered quackery. One outcome, then, of the dialectic between negating the biomedical body and appealing to science is support for the ideal of a dual CAM-conventional health care system. Despite the disapproval of many of conventional medicine's most defining tenets, in the end the most appropriate (and perhaps most pragmatic) role is as an adjunct. Such a view is usually premised on the idea that sound healing and science need not be treated any longer as mutually opposed realms.

As Mitchell Gaynor recounts in *The Healing Power of Sound*:

Although I once prescribed only the traditional remedies for the treatment of cancer and other ailments, I no longer see a contradiction between chanting and chemotherapy, between visualization and radiation. In fact, just the opposite: I openly advocate for what has come to be known as holistic medicine--combining allopathic regimens with complementary therapies... as well as regular visits to acupuncturists and energy healers. You'll notice that I refer to these modalities as "complementary," rather than "alternative." I have long since come to accept nontraditional, holistic approaches as necessities, rather than potential options, that must be integrated with the care and treatment of my patients. (1999:4)

Nadia suggests that "There's a place for conventional medicine. Like, I don't think it should be wiped completely. But I think it can be balanced with alternative healing as well."

Christine remarks during an interview how "Before it used to be all potions and magic and prayers and then science came along and we had some amazing benefits from that. But I think... maybe have a little more of a blending of those two disciplines, you know?"

Vicky attests to her belief in a dual approach by suggesting “If you get to the stage [where] you need some medication... you complement it... with something as simple as stretching and exercise.” To this she adds “You need to do something to go with [the medicine], otherwise you will be limited to drugs, per se.” Paul also agrees that making both conventional medical options and practices such as sound healing widely available is a worthy ideal. “I think combining the two would be a good idea, because there’s a lot of good conventional medicine... And incorporating that with all the other aspects: nutrition, meditation and sound—you get to the end result a lot faster than just dismissing or pooh-pooh-ing [them],” remarks Paul. “I can give you that little red pill for the rest of your life or I can give you the little red pill for the next month in conjunction with all of these other [CAM approaches] and then at the end of that month, you never need to take another little red pill again.”

The merger is neither an improbable nor entirely insurmountable goal, as some will point out. This is because the medical use of sound is not entirely beyond the province of clinical practice in the west. “The use of Vibration and Sound Healing are increasingly of interest in Western Medicine,” claims de Muynck in one chapter. “Allopathic medical practices employ vibrational technologies such as ultrasound and magnetic resonance diagnostic tools. Dental offices use sonic tools to clean teeth, and lasers are being used for some surgical procedures now as they offer less bruising, bleeding and pain... In the diverse field of Complementary Alternative Medicine, Vibrational Sound Healing is being incorporated into a variety of healing modalities” (de Muynck 2008:13). David Gibson further comments: “There are now very specific medical techniques being developed to destroy diseased cells with no side effects.” He points out rather optimistically that “In the

field of sound healing it is becoming widely accepted that within a very short time that the whole medical field will be changing drastically as new techniques using sound become more widely accepted... We are beginning to take back our power, as we once again are able to heal ourselves” (Gibson 2011:5).

Crowe and Scovel also explain: “Though much of the substantiation for the efficacy of these [sound healing] approaches is anecdotal from clinical practice, other scientific research in disciplines including biophysics, electromagnetic fields in the human body... biomedical research... and subtle energy systems in the human body... is currently in process” (Crowe and Scovel 1996:23). Reid and Kohinoor also remark, “Sound healing had almost disappeared in the West until the 1930s when acoustic researchers discovered ultrasound and its medical properties. With this discovery, research burgeoned and today the ancient art of sound healing is rapidly developing into a new science.” They point out “There is now a mass of research into the healing benefits of ultrasound, including its use in breaking up kidney stones and even shrinking tumours. In addition, infrasound and audible sound are now recognized as having immense healing properties” (2007:18). Finally, they suggest, “Thus, we can envisage a future where sound technology is as commonplace in the home as in clinical settings” (2007:20).

What remains unclear, however, is the extent to which these cited examples are compatible with the underlying epistemologies of sound healing and the degree to which they may reify the alleged materialism and reductionism of conventional medicine. Also perhaps overlooked is that ultrasound modalities involve sound vibrations that are beyond the range of human hearing (Robertson et al 2006:251) not to mention the fact that they have been mired in academic and clinical debate ever since Wood and Loomis’ first demonstration

of sound's effect on human tissue in 1927 (Wood and Loomis 1927). Ultimately, what remains apparent is that the need to resist or redefine biomedical views is closely rivaled by the need to appeal to scientific authority in order to enable possibilities for validating sound healing.

But what remains of the significance of sound in all of this? In the following chapter I will illustrate how a new vernacular of sound healing bolsters the idea of the body as both a physical *and* energetic entity while retaining a conceptual framework that is, in theory, amenable to scientific scrutiny. This helps us understand the relevance of sound for the formulation of new beliefs and practices surrounding body and health.

CHAPTER 7: SOUND HEALING AND THE NATURALIZATION OF ENERGY

The interior of Yoga for the People in Vancouver's east side could be one of many yoga studios in the city—brick walls painted white, hardwood floors, large windows, and the distant din of traffic a reminder of the space's detachment from the busy outside world. This afternoon, however, a different ambience permeates the studio, marked by a notably embellished interior and the guttural reverberations of amplified throat singing. Today one can glimpse a shrine-like structure supporting a small Buddha statue with pink flowers and candles and on either side two large speakers mounted on stands. One can also notice on the floor a cushion, two Indian harmoniums, and three white crystal singing bowls of slightly differing sizes alongside a pair of *timshaw* cymbals, two tuning forks, and a large pearl-white conch shell.¹⁰¹ As is typical at most sound healing events, almost everyone in attendance today has his or her eyes closed.

Matthew Kocel is in the middle of an instrumental performance using the assortment of instruments on display. Surrounding him in a semi-circle formation is a group of twelve people (including eight women) resting on foam mattresses, cushions, and blankets. Matthew's performance centers on his throat singing ability through which he is able to produce a deep grumbling tone replete with overtones and harmonic fluctuations. Throughout, harmonic modulation of the vocalized tones is accomplished through changes in the shape of the mouth and refined muscle movements in the throat. The performance is periodically embellished by the punctuating strikes of the *timshaws* and singing bowls and

¹⁰¹ The Indian harmonium is an organ-like keyboard driven by hand-operated bellows that push air through metal reeds. *Timshaws* refer to a miniature pair of decorated cymbals that produce a sustained high-pitched tone when struck together. Conch shells may be blown to produce a sustained trumpet-like tone.

occasional harmonic support from the melodium and acoustic guitar. The result is a heterogeneous sonic tapestry characterized by an earthy and persistent drone and the absence of any single domineering timbres or melodies. The performance draws to an end as Matthew cues attendees to start chanting along to a short repeating melodicized vocable. A moment of silence settles in afterwards, at which point people gradually begin to open their eyes and attune to the studio environment once again.

Matthew now speaks to his captive audience about the metaphysics of sound, explaining how “all is vibration, everything is vibration,” and that “we are all sound.” He cites the names of some of the creation myths in which the universe is described as having come into existence through speech or sound (the Bible being one example). He also calls attention to how conventional wisdom dictates we are all separate from one another, but that we have to start looking beyond this perception and developing our sense of connection with one another. He encourages everyone to briefly close his or her eyes once again and “feel the energy... We co-created this.”

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Tales of Western disenchantment, of the loss of soul in an increasingly materialistic world, of how modern dualism contrasts with the holism of traditional societies, epitomize the problems academics (and also therapists) face when they struggle to frame music’s effects in acceptably scientific terms. Terminology associated with mysticism or magic is by definition excluded, so what resources can legitimately be used to understand how music and healing interconnect? (Gouk 2000a:20)

Although the focus of this excerpt, from Penelope Gouk’s volume *Musical Healing in Cultural Contexts*, is on music and its relation to academic and health-related disciplines, I suggest that current practices of sound healing in the contemporary west must contend with a dynamic similar to that ascribed to music by Gouk. As shown throughout, the foregrounding

of the body as both a material *and* immaterial entity does not emanate in the west from practices of sound healing, but proliferates emergently from within and across a range of complementary and alternative medicines (including “mind-body” practices such as yoga and meditation). What is distinctive, however, is the manner in which sound healing practitioners are able to reframe non-scientific views of the body and health. The process hinges on naturalizing the term “energy” and a resultant vernacular that is carefully couched in science-friendly terminology but still upholds a view of the body and health that is radically divergent from science.

The unstable dialectic established between sound healing and science (outlined in Part II) has engendered a new discourse relating to the body and its health that seeks to revitalize and advance the notion of a bodily energetics. I will refer to this as the *naturalization of energy*, a process manifest through the rise of a codified vocabulary that has increasingly come to be associated with sound healing and that is most evident in the ambiguated usage of the terms “frequency,” “vibration,” and “resonance.”¹⁰²

Richard Zaner outlines two general interpretive medical modes relating to the body that he traces to ancient Greek medicine and that he argues still hold relevance for contemporary medicine. The first is *empiricism*, patterned after what may be observed by the senses (*phainomenon*); and the second *dogmaticism*, the idea that what is known from the observable realm is often determined by a metaphysical realm (1992:103). I suggest that the naturalization of energy is an expression of the need to come to terms with the tension expressed in these two inherited modes—a tension heightened by the problematic

¹⁰² I use the term “naturalization” to denote both the sense in which something is made to conform to the laws of nature as well as in which something is introduced into the vernacular and normalized.

differentiation between the physical body and immaterial phenomena. The naturalization of energy involves the re-orienting of the body's immateriality towards a scientific and secular—rather than predominantly dogmatic (in Zaner's sense of the term)—framework, as well as a desire to root principles of sound healing in the natural rather than supernatural order. This is enabled through the blurred boundaries between sound healing, CAM and conventional medicine and science and the contradiction between negating the biomedical body and scientific appeals. Yet, for sound healers, such a liminal space is “potentially a creative place where existing, established boundaries between things are looser than normal, where it is possible to make correlations and connections between things which are normally disjunct, to indulge in the kind of playfulness which is conventionally regarded as the stuff of games, art and literature rather than that of serious ‘science.’ Yet although it opens up a space for creativity, the redrawing of boundaries is also dangerous in its threat to established norms” (Gouk 1999:14).¹⁰³

There is a multivalent quality to the term energy by which seemingly disparate conceptual domains including those pertaining to sound, body, health, and medicine are able to converge. The medical dictionary MediLexicon.com, for instance, lists 34 different applications of the term energy.¹⁰⁴ In interviews, “energy” was the only term common to the

¹⁰³ Gouk is referring to Western European musical practices of the 17th century and their social and intellectual entanglement with other formative practices of the time such as science and natural magic. I hold this dynamic to be relevant to sound healing's relation to CAM and conventional medicine.

¹⁰⁴ MediLexicon, s.v. “energy,” accessed February 14, 2014
<http://www.medilexicon.com/medicaldictionary.php?s=energy&search=abbreviation&channel=7201801445&client=pub-1971793357249522&forid=1&sig=vptscazCworEUP7D&cof=GALT%3A%2300A12A%3BGL%3A1%3BDIV%3A%23FFFFFF%3BVLC%3A800080%3BAH%3Acenter%3BBGC%3AFFFFFFFF%3BLBGC%3AFFFFFFFF%3BALC%3A333399%3BLC%3A333399%3BT%3A44444%3BGFNT%3A00A12A%3BGIMP%3A00A12A%3BFORID%3A11&sa=Search>.

vocabulary of all the practitioners. There are several definitions of the term that account for both scientific as well as more general usage. Energy may be used to evoke the vigour or capacity with which an individual performs activities, such as in the definition “The ability to be active [or] the physical or mental strength that allows you to do things.”¹⁰⁵ Energy is also commonly affiliated with a physics-oriented understanding also applied in medicine and embodied in definitions such as “The capacity of a physical system to do work”¹⁰⁶ and “the capacity to move an object (of a given mass) by the application of force.”¹⁰⁷

Another usage is characteristic of sound healing discourse that places “energy” in alignment with the concept of a vitalistic force.¹⁰⁸ This has cultural analogues in a number of traditions and has been re-popularized in the Western world through the rise of CAM and so-called “energy medicine” (see Hurwitz 2001; Kaptchuk 2001).¹⁰⁹ It is a way of comprehending the dynamic interaction of the body’s energies that is distinct from the “static grasp of matter” (Micozzi 2001a:xv) and yet continues to be caught up in the ambiguity that has prevailed in the modern West in lieu of a praxis capable of bridging spirit and matter

¹⁰⁵ Merriam-Webster Dictionary Online, s.v. “energy,” accessed April 27, 2013
<http://www.merriam-webster.com/dictionary/energy>.

¹⁰⁶ The American Heritage Stedman's Medical Dictionary, s.v. “energy,” accessed April 27, 2013 <http://dictionary.reference.com/browse/energy>.

¹⁰⁷ The American Heritage Science Dictionary, s.v. “energy,” accessed April 27, 2013
<http://dictionary.reference.com/browse/energy>.

¹⁰⁸ “Vitalistic” refers to the doctrine of vitalism whereby it is believed the functions of a living organism cannot be not wholly accounted for by physicochemical forces or mechanical laws (see further Driesch 1914).

¹⁰⁹ According to Wendy Hurwitz, energy medicine is based on a belief “that in addition to a system of physical and biochemical processes, the human being is made up of a complex system of energy” (2001:238). Examples of energy medicine currently in existence are therapeutic touch, healing touch, and reiki. Vitalistic conceptions of energy are also evident in a number of CAM practices including homeopathy (“spiritual vital force”), chiropractic (“innate” or “universal intelligence”), Ayurvedic medicine (“prana”), and naturopathy (“vis medicatrix naturae”).

(Gouk 2000b). The idea of an all pervading energy underlying human existence, however, has been conceived in a multitude of ways across time and cultures, and it would be wrong to suggest that sound healers' allusion to the term can encompass or account for all of these variations.¹¹⁰ Practices of sound healing nonetheless perceive of energy as an intangible, all-pervasive life-giving aspect of existence that, whether by some mystery or yet unexplained process, is capable of directing the body towards wholeness and health.

Contrary to current popular belief, such a view is not wholly inherited from Eastern thought but also has origins in the elite European universities of the 18th and 19th centuries during which time opposition to the mechanistic and materialist worldview began to take hold in science (Kaptchuk 2001). As a result, the idea of a vitalistic energy began to be espoused and handed down in some form or other beginning with chemist-physician George Ernest Stahl (1659-1734) and his hypothesizing of an *anima* or “sensitive soul,” to Francois Boissier de Sauvages (1706-67) who passed on the concept to the Montpellier medical school in France using the less archaic term “soul,” to his student Paul Joseph Barthez (physician to Napoleon) (1734-1806) who introduced the phrase *principe vitale* (*vital principle*) (Kaptchuk 2001:44; Wheeler 1939). Since then, vitalistic thinking has splintered off into a number of schools of thought often relating the term to the concepts of soul, spirit, or mind with each exerting varying degrees of influence (Kaptchuk 2001; see further Bergson 1911).

¹¹⁰ Energy-related terms from around the world include *Ankh* (Ancient Egypt), *Arunquiltha* (Australian aborigine), *Bioenergy* (U.S. & U.K.), *Gana* (South America), *Ki* (Japan), *Life force* (general usage), *Mana* (Polynesia), *Manitou* (Algonquia), *M'gbe* (Hiru pygmy), *Mulungu* (Ghana), *Mumia* (Paracelsus), *Ntoro* (Ashanti), *Ntu* (Bantu), *Oki* (Huron), *Orenda* (Iroquois), *Pneuma* (Ancient Greece), *Prana* (India), *Qi/chi* (China), *Ruach* (Ancient Hebrew), *Sila* (Inuit), *Subtle energy* (U.S. & U.K.), *Tane* (Hawaii), *T(ix)* (Mayan), *Ton* (Dakota), and *Wakan* (Lakota; see further National Institutes of Health, 1994).

My claim is that sound healing inherited this vitalist conception of a life-giving, animating principle and continues to defend it using the catch-all term “energy.” Marc Micozzi encapsulates this version of the term (not to mention modern medicine’s ambivalence towards it) in the following explanation:

Ancient and indigenous medical systems think of the human body as having energy, the balance of which is critical for health and the flow of which can be manipulated to maintain and restore health. In this way medicine is not about the putting of things into the body but using outer resources to help mobilize the inner resources of the body. The body heals itself and maintains its own health... Modern Western medicine knows that body has its own energy. We know the body can heal itself. Practitioners know that the “placebo” effect is real. They know that the “laying of hands” can heal. But these things have not been in the realm of science for modern biomedicine, and even though we know they exist, they have not been studied until now. And although we know the body has energy, we have not until now used energy to heal. We measure of the energy of the heart (ECG), and muscle (EMG) to help address the material aspects of the body. We know now that bones can heal by using energy. However, this has not changed the central idea of modern medicine... So what is really an old idea has become a new idea consistent with the frontiers of physics but not yet the frontier of modern medicine, which still operates with 100-year-old central ideas. (Micozzi 2001a:xiv-xv)

Again and again interviewees articulated this revitalized conception of energy as a vital component of human existence whose significance has been marginalized by modern medicine. Take for instance Tascha, who professes “I always remember as a key in life that basically everything is energy”; Linda also maintains that the “body is full of energy... At a really basic level...we’re all energy”; and, likewise, Megha points out “The human being, or for that matter any living being, is just a projection of a kind of energy—it’s all energy.”

In this conception, sound healing works by virtue of the fact that sound, too, is an energy that can therefore engage and alter the energy of the body. As Marjorie de Muynck remarks in her sound healing manual, this is because “Sound healing works on the understanding that the body is not solid. Bodies are energy forms held together by sound or vibration” (de Muynck 2008:2) She similarly extends this logic to highlight sound’s

creational capacity, suggesting “Sound is energy; it is the basis of form and shape” (de Muynck 2008:10). Susan Barber, on the other hand, suggests in her article “Cymatics and the New Age of Miracles” that “We are made of energy. If we transmit a healthy frequency into diseased tissue, we cause it to take on the frequency — and thus, the actuality — of healthy tissue” (accessed August 12, 2013 <http://spiritofmaat.com/archive/mar1/cymatics.htm>). John Beaulieu, alluding to an “ingrained cultural fear about perceiving ourselves as beings of energy” in the contemporary west (1987:21), believes that for various ancient cultures both energy and sound essentially shared the same meaning and underscored the concepts of *Kung* (the cosmic tone) in China, *Om* (the soundless sound) and *Shabda* (Sanskrit for “speech-sound”) in India, music (or “Sacred Sound”) in the Sufi world, and the “music of the spheres” in ancient Greece (Beaulieu 1987:35).

Not surprisingly, more science-inflected interpretations also exist in sound healing. As of September 12, 2013, the website of American sound healer and spiritualist Dawn James (who recently offered a workshop and performance in Vancouver) gives a much more technical “bioelectrical” interpretation of energy:

Quantum physics has shown that we are bioelectric beings with electric currents flowing through our cells, nerves and muscles. In fact, bioelectricity is one of the fundamental forms of energy in the human body. Bioelectric potentials (potential energy) are generated by a number of different biological processes and are used by our cells to govern metabolism, impulses within the central nervous system and brain function, as well as regulate muscle contraction, to name a few. (<http://raiseyourvibration.ca/about-us/>)

Despite more scientific interpretations of the term, the idea of a vital energy underlying the body’s constitution and having implications for health is expressed in some form or other during interviews with most sound healing practitioners. Maria, for example, construes acupuncture and acusonics as “an added on treatment to balance all the energies.”

Karl explains how sickness arises when “there are blockages or... there is not enough [energy] or there’s too much energy... in the body and that causes the problems,” whereas sound healing involves “a process of getting rid of that negative energy.” Tascha also frames the ability of sound to heal in similar terms. “I think the gongs have an incredible power to release blockages. So wherever I might have been holding energy... as long as things are moving, they are moving out, as opposed to being held in... I think [that’s] a good thing.” She affirms, “The sound is vibration and the vibration is energy and that’s what we’re comprised [of]—I mean everything is energy.”

Like Dawn, Paul’s conception of the body’s energy emphasizes electromagnetic energy:

As we move we create a potential within the body which is an electrical charge and [this] has been shown in scientific studies... where they take pictures of leaves and even people, and it shows the auric field. And it’s actually a visual representation of the electromagnetic energy within the living thing. And depending on how active the person is, that field gets stronger and weaker... When you’re at a bigger level of charge, your body, your mind and everything about you has a higher potential for healing.

“Frequency,” “Resonance,” “Vibration”

Sound healing vernacular may be characterized by an ambiguated, though pervasive, use of a constellated vocabulary of terms each pertaining in some way to energy and sound, but resonating with the vocabulary of scientific disciplines such physics, acoustics, and engineering. Again, MediLexicon gives 32 different applications of the term “frequency,” 27 applications of the term “resonance,” and 4 applications of “vibration.”¹¹¹ In interviews, “frequency,” “resonance,” and “vibration” are the three terms in this constellation that are

¹¹¹ See <http://medilexicon.com/>

employed across the domains of CAM (by Dr. Shen, Pam, and Samantha Jennings) and sound healing (of the seventeen practitioners interviewed in Part II, four used the term frequency, eight used the term resonance, and twelve used the term vibration in their explanations of sound healing, the body, and health).

Frequency, the traditional remit of physics, is conventionally defined as “The rate at which a repeating event occurs, such as the full cycle of a wave... [and] usually measured in hertz.”¹¹² Resonance is defined as “Oscillation induced in a physical system when it is affected by another system that is itself oscillating at the right frequency.”¹¹³ Vibration, meanwhile, is defined as “a periodic motion about an equilibrium position, such as the regular displacement of air in the propagation of sound.”¹¹⁴

An analysis of vernacular usage by sound healers, however, shows a more differentiated usage of the terms, with practitioners applying meanings other than those originally intended for them. This demonstrates an interpretive, if not inaccurate, use of the terminology that suggests a need to appropriate the vocabulary of domains of Western medicine, such as physiotherapy and sports medicine, that have already recognized sound-based modalities.¹¹⁵

¹¹² The American Heritage Science Dictionary, s.v. “frequency,” accessed April 27, 2013 <http://dictionary.reference.com/browse/frequency>.

¹¹³ The American Heritage Science Dictionary, s.v. “resonance,” accessed April 27, 2013 <http://dictionary.reference.com/browse/resonance>.

¹¹⁴ Collins English Dictionary, s.v. “vibration,” accessed April 27, 2013 <http://dictionary.reference.com/browse/vibration>.

¹¹⁵ The terms “frequency,” “resonance,” and “energy,” for example, are all used in sound-based technologies such as ultrasound (for example, see Chapter 9 in Robertson et al. 2006 and ter Haar 1999).

The variegated usage of the frequency-resonance-vibration constellation is also evident in many of the sources already mentioned. As of September 12, 2013, Dawn James' website, for example, goes back and forth between conventional and interpretive use of the terms:

Vibrational frequency is the constant rate of electrical flow that is measurable between two points. The unit of measurement commonly used to measure vibrational frequency in humans, plants and food is Hertz (Hz). One Hz is one cycle per second. When there is frequency, there is electromagnetic potential. We are being influenced by the magnetic action (or attraction) of the frequencies that surround our lives each day, and frequencies influence our state of well-being.

When our vibrational frequency is suppressed due to stresses, toxins and external factors, the body weakens, the mind becomes dull or agitated and our connection to spirit/higher consciousness/Divine Wisdom is interrupted or short-circuited. (<http://raiseyourvibration.ca/about-us>)

Despite aspirations towards a common ground based on a shared vocabulary, James' use of the terms "frequency" and "vibration" at times belie common usage. For example, in some instances they are employed according to their conventional definitions whereas in others they are used to evoke some other nondescript measure of health in the body.

At other times "frequency," "resonance," and "vibration" are used to foreground the idea that two seemingly unrelated things can, in fact, be said to be connected, such as the often-cited phenomenon of sympathetic resonance whereby the vibratory rate of one body (such as tuning fork or stringed instrument) is enhanced by another nearby body due to harmonic likeness. In other words, sound provides the conceptual and theoretical grounds through which we may discover hidden relationships amongst different things, a tendency very much congruous with the vitalistic notion of an all-pervasive, life-giving force of nature. Here the ontology of a mechanically governed universe populated by discrete objects is overwritten by one in which nothing is completely separate or unaffected by anything else—a paradigm of connectedness rather than discreteness.

Reid and Kohinoor describe resonance as “the fundamental principle of sound healing,” which “can be described as the frequency of vibration that is most natural to a specific organ or system, such as the heart, liver or lungs. This innate frequency is known as the prime resonance” (2007:20).¹¹⁶ Kay Gardner surmises that “whenever an organ or gland’s frequency or wave pattern is duplicated by the sound of a particular musical instrument, it will be resonated and affected by that sound,” and that “instrumental sounds may be effective in stimulating areas of the physical body” (1990:155). Conversely, as de Muynck suggests, “The root of illness can be seen as the disruption of harmony in the body, which results in negative resonance or disease” (2008:12).

Jonathan Goldman expands on this concept in the following passage:

As the ancients seemed to know, everything in the universe is in a state of vibration... Everything has resonant frequency, whether or not we can audibly perceive it. From the orbits of the planets around the sun to movement of the electrons around atoms, everything is vibrating. It is also important to understand that, in alignment with this concept of sound, every organ, bone and tissue in your body has its own separate resonant frequency. Together they make up a composite frequency, a harmonic that is your own personal vibratory rate. Through resonance, it is possible for the vibrations of one vibrating body to reach out and set another body into motion... Just as it is possible to set an object into its own natural motion through resonance, so it is possible to restore the natural vibratory frequencies of an object that may be out of tune or harmony. When an organ or another portion of the body is vibrating out of tune, we call this “disease.” (2002:12)

Interviews are also marked by this use of this vernacular. Take, for example, Tascha, for whom everything “has frequency” and for whom the gongs are understood to function by emitting frequencies with which our bodies harmonize, thereby producing a beneficial result. In a similar vein, Paul believes that “when you bring two things together... they each have their own vibration... and the overlapping area creates something brand new.” Likewise,

¹¹⁶ Reid and Kohinoor state that the Prime Resonant Frequency of a person is in the range of 7–10Hz, the heart approximately 100Hz, and a typical cell approximately 1000Hz (2007:22).

Megha speculates “there is a connection between [inner-self], ...vibration, and the sound coming from [the] singing bowls.” He adds, “If people are sick, that means the sound frequency in [a] particular part of the organ or body is not normal.” In discussing her adoption of tuning forks into her patients’ acupuncture treatments, Samantha explains, “When I am talking about placing [the frequency] over the organ itself, there are points in that area... that go into the organ... So I can access and—through vibration—actually affect the entirety of that organ system... through applying a frequency... And I think that is the beauty of frequency.”

The use of the term “vibration” is more consistent in its evocation of an enigmatic and intangible substrate of existence, but with much more cosmic implications. Time and again, both in writing and interviews, vibration is referred to as that which underlies all phenomena in the universe, the very stuff of existence. One might refer to this notion—especially since it appears so consistently in sound healing—as the *all-is-vibration* hypothesis.

As of July 12, 2013, the World Sound Healing Organization website suggests, “Sound is a powerful tool, because it is vibrational in nature, and we are vibrational beings. Indeed most modern science shows us that all life is vibrational in nature. This is in line with age old mystical thought of most cultures, which often alludes to the vibrational nature of Creation” (<http://worldsoundhealing.org/SoundHealing.html>). Similarly, as of April 1, 2013, the Raise Your Vibration website further suggests “We are vibrational beings designed to be healthy, happy and live in harmony with nature” (<http://raiseyourvibration.ca/about-us/>).

The all-is-vibration concept, possibly having its roots in Nada yoga (an ancient Indian metaphysical system encompassing philosophy, medicine, and yoga), is popularly used by

sound healing practitioners to denote the idea that the entire universe or cosmos is pervaded by vibrations called *nada*.¹¹⁷ In *Mantra Yoga and Primal Sound*, David Frawley explains:

The main insight behind the Yoga of Sound is that reality consists of vibration, which in essence is sound. Even the formless silent Absolute has its own vibration or Shabda but remains contained in itself, a kind of breathing without the breath as it were... By going back to the reality of primal sound, we can return to the very heart of creation and reach the Absolute beyond time and space from which all creation arise. We can reach the state of silence or pure stillness that is total communication and complete unity. (2010:30)

Samantha alludes to this hypothesis during one interview, stating succinctly, “Well, sound is vibration, right? I mean everything... everything is animated, everything alive has animation, it has a vital life force and I think the application of sound—we’re really talking about vibration.” From his experiences offering gong baths, Paul is convinced, too, that an enigmatic yet crucial aspect of the human condition revolves around sound and vibration. “It always comes back to sound, you know? It’s vibration—everything.” As of August 21, 2013, Kathy’s website explains:

Everything in the universe is vibrating at it’s [*sic*] own natural frequency. We are vibrational beings and when we’re healthy, all of our cells, tissues and organs are vibrating in harmony or resonance. Illness results when a part of the body begins to vibrate at a different frequency, out of tune with the rest. Through the intentional use of sound and vibration, a more harmonious and optimal state of resonance can be achieved. (<http://www.thesoulofsound.com/sound-healing.html>)

Expressed in writing, the all-is-vibration hypothesis is usually given more thorough consideration. The late Don Campbell in his book *The Roar of Silence* noted: “All life is vibration. Each sense responds to distinct vibratory energies around the physical body... The eye is receptive to specific frequency ranges, the ear to others... The receptive abilities of your eyes, ears and nose allow the outer world to enter your inner cosmos” (Campbell

¹¹⁷ Because Nada yoga is complex and has been interpreted and practiced in numerous ways, a more nuanced treatment of its tenets is not possible within in this dissertation.

2000:82). Marjorie de Muynck provides us with several examples: “Sound healing is based on the principle that everything in the Universe is made of vibration. Sound healing is possible because the human body is not solid and is held together by vibration. Like a well tuned instrument, the body is a rhythmic, harmonious form unless its vibratory field is disrupted” (2008:1). Later she suggests “The body is made of vibration and responds well to vibration, and research shows that cells communicate with one another via vibration” (2008:42).

It is perhaps impossible to tell by which means the all-is-vibration hypothesis was introduced into the west. One possible candidate is the writings of musician and founder of the Sufi Order International Hazrat Inayat Khan, who in 1923 published *The Mysticism of Sound* (2005). Here he delivers the most elaborate rendition of the all-is-vibration hypothesis:

The mineral, vegetable, animal, and human kingdoms are the gradual changes of vibrations, and the vibrations of each plane differ from one another in their weight, breadth, length, color, effect, sound, and rhythm. Man is not only formed of vibrations, but he lives and moves in them; they surround him as the fish is surrounded by water, and he contains them within him as the tank contains water. His different moods, inclinations, affairs, successes and failures, and all conditions of life depend upon a certain activity of vibrations, whether these be thoughts, emotions, or feelings. It is the direction of the activity of vibrations that accounts for the variety of things and being. (Khan 2005:5)

... In other words, all is vibration.

The “Body-As-Vibration”

From the all-is-vibration hypothesis is derived a new conceptual model of the body that I would like to suggest is the unique outcome of sound healing’s negation of the biomedical body and its naturalization of energy. Whereas from conventional medicine we

have allegedly inherited the body-as-machine, and whereas complementary and alternative medical systems such as TCM have championed the body-as-garden, I propose that sound healing now presents us with a new and different sort of analogy deftly merging the perceived naturalism and re-enchantment of CAM and non-conventional (often read “Eastern”) thought with the positivism and perceived authority of established science: the *body-as-vibration*. As explained by Jane Brewer “The human body vibrates from its large structures, such as the aorta and arterial system, down to the genetically pre-programmed vibrations coded into our molecular cells. Atoms and molecules, cells, glands and organs all have a characteristic vibrational frequency that absorbs and emits sounds; thus, the human body is a system of vibrating atomic particles, acting as a vibratory transformer that gives off and takes in sound” (1998:9).

Yet this characterization needs some explanatory model by which the concept of affecting the body via sound can be grasped by skeptics. One such model is the characterization of the body as being predominantly composed of water. The body-as-vibration, as reported by users of tuning forks, is time and again said to comprise mostly water which science tells us is particularly amenable to sound, since sound travels much more quickly and efficiently through water than air.¹¹⁸ Simply put, “Our bodies are largely composed of water, and water conducts sound” (de Muynck 2008:2).

Take, for example, the way in which Dr. Shen characterizes the medical efficacy of sound:

¹¹⁸ As a statistical average, Arthur Guyton’s *Textbook of Medical Physiology* states that the percentage of water in the human body ranges from approximately 75 percent in a newborn infant to approximately 57 percent in a person weighing 70kg (2006).

Sound travels faster in water than in air and our body is 70 percent water so our body becomes a great resonator for sound, a receptacle for sound—it can be really affected by sound. And that really, I think, is why it helps so much for our body with healing.

The body's aqueous constitution is also reported as a matter of fact by Samantha when asked to explain sound's efficacy:

So the idea is that because we are primarily water and sound travels four times faster in water than it does in an aerial environment, when we apply that frequency to the body, the body naturally responds. So it's that idea. That's why it can be so effective because we are really affecting the watery content of who we are.

Jeffrey Thompson concurs on his website that “Sound travels through water 5 times more efficiently than through air—since the body is made of cells and cells are mostly water, the body is the perfect medium for transmitting sound. Sound is an excellent method for causing a deep stimulation of the cells” (Thompson 2000). And Jansen and de Ruiter in their singing bowl handbook state: “For the most part, our bodies are made of water. And these body fluids are also very easily being vibrated by the sounds around us... Yes, we may plug our ears, but our body fluids will still resonate with all these sounds that are present” (2008:54). (And so on and so forth.)

This new model of the body posits a living, sensing, physico-energetic entity endowed with an essential, if indefinable, intrinsic life energy whose very constitution, down to its cellular structure, is said to be consonant with the forces of vibration believed to be pervading all phenomena. Yet, by virtue of its multivalent quality, the body-as-vibration is simultaneously capable of superficially accommodating the rhetoric of the natural sciences through its obfuscation of the boundaries it shares with CAM, science, and medicine.

Whereas writers such as Foucault critically locate the birth of modern medicine and its practices in the dead or inanimate body, the body-as-vibration presents us with

epistemological inroads into a new medicine of the *lived body*.¹¹⁹ Its core meaning encompasses the dissolution of the strongly held distinction between matter and spirit (and by extension body and mind and animate and inanimate entities) and the assertion that the body is an “intending” entity (meaning it is deeply reciprocal to, and directed at, an experienced world; Leder 1992:25).

Like the hypermodern medical technologies of x-ray and MRI, sound healing technologies penetrate the body, but not with a view towards mapping its viscera for explanatory purposes; rather, it affirms its subjectivity and vitality. This it does in a non-invasive manner, using the energy of sound and vibration rather than the visualization of physical matter as its primary means, and all the while giving due to the body and nature’s vitalistic and energetic constitution. As a counter to mechanistic and techno-centric biomedicine, the body-as-vibration is also predicated on a naturalistic paradigm that privileges living “naturally,” meaning closer to the Earth and its self-sustaining processes and further from the artifices and excesses of human invention. In this view, health is best gained naturally (i.e., through shoring up the body’s own natural healing capacity and downplaying excessive technological and professional intervention) but with self-conscious consideration to scientific explanation. Furthermore, when the body’s vitalist energy can be construed within a natural—rather than supernatural—framework, this renders it more compatible with science, whose province is the realm of nature and its laws. “Frequency,” “vibration,” and “resonance” as conventionally undisputed concepts derived from and

¹¹⁹ The lived body is a concept developed as a counter to Cartesian dualism and has been articulated in a number of ways by various 20th-century philosophers and physicians including Merleau-Ponty, Marcel, Plügge, Buytendijk, van den Berg, Zaner, and others.

validated by science become the rhetoric of choice for characterizing sound's efficacy in medical application.

Weaving together all of the themes explored throughout the dissertation and fleshing out an episteme and ethos for sound healing, I suggest the body-as-vibration to be emblematic of a range of views, practices, priorities, and affinities that at once speak to and emerge from the dialectic shared between sound healing, CAM, and biomedicine. These include a privileging of: 1. the energetic, rather than solely material, dimension of human existence; 2. the body's natural healing powers, rather than pharmaceutical and technological intervention; 3. the body as a living, sensing—rather than passive and insensible—entity endowed with agency and intentionality; 4. an holistic and naturalistic, rather than reductionist and mechanistic, epistemological paradigm; 5. resonance of the (physical and energetic) body, rather than the dissection of the dead material body; 6. subjectivity and human experience, in addition to objectivity, in medical thought and practice; 7. a medical worldview grounded in embodied, rather than disembodied, terms; 8. the mystified dimensions of the body and its healing and transformative capabilities, rather than demystification; 9. the creational forces of sound, rather than the alleged destructive forces of technology and pharmaceuticals; 10. health as balance rather than absence of disease and proper functioning of body parts (see Table 8.2). The body-as-vibration, it would seem, entails a gentler medicine and “With a gentler medicine,” suggests Anthony Weston, “must come a gentler medical epistemology” (1992:82).

Table 8.2: The “Body-As-Machine” and the “Body-As-Vibration”

“Body-As-Machine” (biomedicine)	“Body-As-Vibration” (sound healing)
Material	Energetic
Pharmacological/technological intervention (outer resources)	The body’s natural healing powers (inner resources)
Passive, insensible (bereft of life or spirit)	Living, sensing (intending being)
Mechanistic, reductionist	Naturalistic, holistic
Dissecting the body	Resonating the body
Objectivity (representation)	Subjectivity, human experience (“being-in-the-world”)
Disembodied	Embodied
Demystification of the body	Mystification of the body
Destructive (medicine as warfare, eradication of disease)	Creational
Health as absence of disease	Health as balance

CHAPTER 8: CONCLUSION

After being pointed in the proper direction and making my way through the bustling lobby of the Confederation Seniors Centre, I pass through the turquoise doors of the multi-purpose room where the gong performance has already commenced. Today is the final sound healing event in my field research in Vancouver, and I have enough time left to see Kathy and Paul stand amidst a variety of gongs and instruments while leading about forty elderly participants through a visualization. “Take nice deep breaths,” instructs Paul raising his arms up and down while some of the attendees imitate. “Feel your breath,” he adds, “and note how your body feels.” I settle myself into my chair near the back of the room, focusing my attention on the quiet sound of gong strokes filling the room. One lady in the front row begins to make gestures with her palms facing upwards while another begins to repeat circular stretching motions with her arm. In front of me sits an elderly lady with white curly hair and golden hoop earrings whose head begins to droop downward (*Is she asleep? No. She has just raised her head. Stretching perhaps?*).

Kathy and Paul now begin to increase the loudness of their gong strokes sending shimmering waves of reverberations coursing through the audience. A momentary silence fills the room... As Kathy picks up a set of wind chimes and begins to gently sound them, a number of people open their eyes. Kathy continues playing the chimes as she walks through the audience waving them in a circular motion to the delight of many listeners. I notice a staff member standing intently off to the side with her eyes closed and hands to her side. Kathy stops playing the chimes, then, a cadential silence. As the performance ends and everyone applauds and begins to raise from their seats, Paul points towards me, announcing

my presence as someone from the university researching the effects of sound on health. Also, he points out, there is someone at the back of the room offering therapeutic touch for anyone interested (I turn around to note an elderly man, possibly East Asian, standing in front of a chair next to a bookcase with a sign reading “Health Library”).

It’s not long before I am approached by a few elderly attendants eager to express their views on the experience. Their remarks show a surprising consistency. “It helped me to relax and to focus. Usually I find it hard to focus”; “I find it very relaxing and had my eyes closed the whole time. Very enjoyable”; “It helped me to focus. I also found it energizing—I’m feeling energized right now.” Yet another elderly lady notes more colourfully how “it took me right to a Tibetan monastery. I found it very relaxing.”

My visit today ends with a conversation with the staff worker responsible for organizing Kathy and Paul’s ongoing visits to the senior centre. My presence here seems to validate her obvious enthusiasm for the potential of sound healing as a medical modality (although today I am not overcome by the usual need to explain that I am not engaged in scientific research). “It’s great to show how science connects with what’s being done with sound for therapy,” she remarks, inquiring if I will publicly present my research in the future. “We need to find ways of improving the health of seniors without medication.”

**

Summarizing previous chapters, we arrive at the end of my dissertation with what I hope is a better insight into sound healing’s entanglement with two broad and dialectically interpenetrating forces. The first set includes an inherited dualism positing material and immaterial as separate and irreconcilable; a mechanistically-oriented understanding of the body that is reducible to individually analyzed and manipulated parts; and a resultant system

of medical thought and practice seen as privileging materiality, reductionism, and pharmacological intervention. The second is expressed through a proliferation of complementary and alternative medical practices; a foregrounding of the energetic and/or immaterial dimensions of the body; and a corollary view of health privileging holism and naturalism in medicine and health care. As observed in the introduction, to frame my inquiry in this way is not to deny that there may exist other ways (including scientific) of understanding sound healing. On the contrary, following Drew Leder's lead, I wish only to suggest that "the 'metaphysics' of medicine must be examined and critiqued before focusing exclusively on its manifestations" (1992:3).

I believe the heterodox practice of using sound for health and healing warrants special consideration for several reasons. The first is because it calls attention to engagement with sound in embodied terms rather than as audioception via the ears. This forces us to consider sound as something *felt* rather than merely *heard*—sound as an embodied competency. This in turn compels us to think of how sound might be understood according to a much broader range of human experience and ability than what is normally considered. The challenge that sound healing presents is understanding sound without the necessary resort to established scientific conventions which privilege a separation between "subject" and "object" and a view of reality consisting of independently existing objects, views that are not taken for granted in sound healing or CAM communities (see further second chapter of Csordas 2002).

The acusonics/TCM case study described in Part I also demonstrates what happens when sound healing is grafted onto the preexisting framework of a long-established literary medical tradition—one whose influence in the contemporary west grows each day. Unlike other contemporary examples, the use of sound healing by doctors of TCM is guided by

etiological principles that in some cases have been given credence for millennia outside of the west. It also means sound healing is part of a systematized approach to diagnosing and treating patients. In other words, sound healing gets to stand on the shoulders of a formidable medical tradition and as such benefits from a degree of specificity it lacks in other contexts. Its adoption into TCM practice also means that it is wielded by licensed, credentialed health practitioners whose expertise and credibility are backed by extensive training and professional regulation.

As I have suggested from the outset, researching sound healing as a practice embedded in a particular historical moment or cultural frame makes inroads towards what might be called an “acoustemology of health”—how sound as a modality of knowing converges on medical and health-related thought and practice (Caballero 2011). While there is a vast literature on the history and philosophy of sound, as Jonathan Sterne points out, it remains conceptually fragmented. “The challenge,” he suggests, “is to imagine sound as a problem that moves beyond its immediate empirical context” (2003:4-5). While it has remained a unified intellectual problem in some science and engineering fields, sound is less developed as an integrated problem in social and cultural disciplines (Sterne 2003:3) which have not typically considered the idea of sound as being significant to health.

As shown throughout much of the dissertation, however, despite recurring critique of the many perceived fallacies of conventional medical thought and practice, there remains a decidedly optimistic—even utopian—streak in sound healers’ views on the matter. As Reid and Kohinoor suggest, “In the years to come we may well see diagnostic and therapeutic beds that resemble a scene from the futuristic, Star Trek sick bay. We will certainly see a proliferation in modalities in which sound is the governing principle” (2007:22). As Suzanne

Gerber asks, “What might we expect in the future, then: Tonal spas to rejuvenate our vibrational fields? Chanting centers in schools, workplaces and doctors’ offices?” (1998:72). On the other hand, suggests Sir Peter Guy Manners, “Medicine as it’s known today will be as out of date as chopping off limbs.”¹²⁰

Perhaps it is reassuring for sound healers to know they are not alone in their conceptions of a more enlightened paradigm for medicine in the west. The ideal of a dual CAM-conventional medical system, for example, is bolstered by increasing recognition by medical professionals who, though recognizing the inherent challenges, remain open and pragmatic about the influence of CAM and mind-body practices on current health care and medicine.

One local example is Dr. Arun Garg, Program Medical Director for Laboratory Medicine and Pathology at Fraser Health and Clinical Professor of Pathology and Program Director for the Global Outreach Cooperation and Engagement office at the University of British Columbia. In an e-mail message to the author on May 8, 2013, Dr. Garg recognizes “interest and understanding of Eastern Medicine is increasing,” although “We do require further academic rigor around the concepts and availability of expertise in academic centers for these therapies to find a place in mainstream therapeutic or health modalities.” He further comments that such concepts as “Pranayam, Chakras, [and] nadis have a place in understanding human health,” but that “better integration” and an “academic approach” is required to realize their potential.¹²¹

¹²⁰ Quoted in <http://www.spiritofmaat.com/archive/mar1/cymatics.htm> (accessed September 12, 2013).

¹²¹ The term *Pranayam* refers to the yogic practice of breath control. *Nadi* refers to the Indian medical and spiritual concept of the body’s subtle energy channels. Dr. Garg has spoken publicly throughout Vancouver about the potential significance of yogic practices for health.

Whether or not this envisioned model of a CAM-conventional Western medicine is ever fully realized is not under the purview of my dissertation. Instead, what I hope to have taken are modest first steps towards a “first principles” for sound healing. I have described *negating the biomedical body*, the *naturalization of energy*, and the *body-as-vibration* as three exemplary concepts for sound healing in thought and practice. The next step in a grounded theory approach to researching the subject would be to test the validity and relevance of these models by applying them to new cases—ideally in other locales and with a larger pool of research participants—and refining as necessary. With this aspect traced out in more detail, we could then also be in a better position to determine what sorts of other questions might be asked about sound healing, be they cultural, medical, practical, or metaphysical.

For the time being I believe there is much about sound healing that is revealed by my examples that warrants further investigation. It is hard to ignore, for example, the tantalizing hints of sound’s healing efficacy, however mysterious they may seem at this time. For instance, what are we to make of Christine’s rather sudden and remarkable recovery from her auditory trauma following her first gong bath? (Not to mention the demonstrated appeal of gongs and singing bowls to individuals who have suffered trauma?) It would also be virtually impossible to disregard the near-unanimous association of drone-producing instruments such as tuning forks, gongs, singing bowls, and voice (as well as other sound healing instruments such as didgeridoo, rattlers, and shruti boxes).

Finally, might we consider what current practices of sound healing in the west have to say about Western modernity as a whole. What does the routine exclusion of immaterial phenomena, for example, from the disciplined research of the body and health (so frequently

flagged by sound healers) reveal about our grasp of the human condition? What are the implications of increased public agency—not to mention spending and commerce—for health-seeking behaviours, practices, and other human endeavours? And what does the shift from an industrial to a naturalistic paradigm (however problematically construed) say about the collective path that we are taking culturally, socially, and economically? In the meanwhile, I take pleasure in the idea that, indeed, “the sensual, bodily, experiencing of sound is a special kind of knowing” (Feld 1994:11).

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