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Qi: Reconsidering its Role in the Academic Study of Chinese Medicine

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ABSTRACT

Qi: Reconsidering its Role in the Academic Study of Chinese Medicine

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Koji Otsuka

The marked absence of the concept of qi in the academic literature concerning Chinese medicine is highlighted by 1). delineating its importance in the contemporary North American context, and 2). exploring the possible methodological reasons for this shortcoming. The mapping of contexts within which Chinese medicine is received in the U.S. is accomplished by tracking how the concept of qi is translated, understood, and appropriated. Part I explores the North American instantiations of Chinese medicine and situates them within the biomedical context of Complementary and Alternative Medicines (CAMs) and a broader cultural discourse of East-West integrative thought. Part II explores the possible methodological reasons for the neglect of qi in academic discourse. The embodied and tacit nature of qi--as more than an intellectual concept but rather a practical ability--is explored through the concepts of tacit knowledge and orthopraxis. The anthropological literature on embodiment and phenomenology is also reviewed.
Acknowledgements

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The current thesis is a critique of the extant literature in the academic study of Chinese medicine. The main purpose of the thesis is to highlight the marked absence of the concept of *qi* in the academic literature concerning Chinese medicine by 1) delineating its importance in the contemporary North American context, and 2) exploring the possible methodological reasons for this shortcoming. The thesis is divided into two parts. Part I examines the North American instantiations of the global and heterogeneous phenomenon of Chinese medicine, and situates them within the biomedical context of Complementary and Alternative Medicines (CAMs) as well as within a related broader cultural discourse which blends elements of eastern mysticism, western psychology, and modern physics. The mapping of contexts within which Chinese medicine is received in its contemporary North American guise is accomplished by tracking how the concept of *qi* is translated, understood, and appropriated. Part II explores the possible methodological reasons for the neglect of *qi* in academic discourse. Here the embodied and tacit nature of *qi*--as more than an intellectual concept but rather a practical ability--is explored. Such more esoteric elements of Chinese medicine are difficult to research using conventional academic methods which attempt to represent knowledge based primarily as a system of meanings. The anthropological literature on embodiment and phenomenology is reviewed as a possible way to deal with the neglect of *qi* in the academic study of Chinese medicine.
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PART I: Qi in North American Instantiations of Chinese Medicine

INTRODUCTION

The majority of academic work in Chinese medicine\(^1\) has focused specifically on the systematized and state-sanctioned form known as "Traditional Chinese Medicine" (TCM). However, there is considerable plurality and heterogeneity in Chinese medicine and consequently, as suggested in the work of some academic scholars of Chinese medicine, a need to reassess academia's monolithic approach towards its representation.\(^2\) The work of such scholars have therefore encouraged a distinction between the specific term "TCM"--implying a set system of modernized theories and practices exercised in government hospitals--and the more general "Chinese Medicine" which can include a broader variety of regional practices, theories, and standards. Such a reassessment is especially relevant in light of Chinese medicine's increasing global circulation and popularity over the past few decades. Due to its extensive circulation, it has been suggested that Chinese medicine is "no longer a purely 'Chinese' phenomenon."\(^3\) For instance, Chinese medicine has long been absorbed by Japan, creating its Japanese form, *kanpo* \(^4\); the World Health Organization (WHO) has actively supported its use\(^5\); and recently, the emergence of an "American Acupuncture" has also been suggested.\(^6\)

Yet, to date, there has been no comprehensive academic work done on Chinese medicine in the US. Part I of this paper is an initial and broad attempt to map out the

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\(^1\) See Porkert (1974), Sivin (1987), and Farquhar (1994).
\(^2\) Most notably, Unschuld (1987), Hsu (1999), and Scheid (2002).
\(^3\) Scheid (2002:18).
\(^4\) Locke (1980).
\(^6\) Barnes (1998).
general contours of the contexts within which Chinese medicine is received within the US. I focus on two particularly important influences: 1) The biomedical rubric of Complementary and Alternative Medicines (CAMs), and 2) "East-west integrative thought."

Chinese medicine has become increasingly accepted into North American medical consciousness in large part due to the biomedical trend in complementary and alternative medicines (CAMs). The rubric of CAMs was established to account for the variety of "unconventional" (in respect to biomedicine) forms of therapy. An influential medical survey published in the Journal of the American Medical Association revealed that billions of dollars were being spent out-of-pocket annually on alternative therapies.8 Previously hostile attitudes towards unconventional medicine and attempts to shut down its practice have given way to efforts to connect its practice to the biomedical sphere. With the establishment of the rubric of CAMs, unconventional medicines have been placed under scientific scrutiny to validate any claims to safety and efficacy. More recently, the interaction of CAMs and biomedicine has produced a discourse referring to an "integrative medicine" which attempts to combine the best of both conventional and unconventional health care. However, such a project is complicated due to fundamental differences in epistemologies and metaphysics underlying the theories of western biomedicine and such "unconventional" medicines.

In addition to its recent institutional contextualization within the biomedical discourse of CAMs, Chinese medicine has also intermingled with a broader cultural discourse of holistic health, psycho-spiritual healing and self-cultivation as manifested in

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8 Ibid.
trends or movements that have variously been referred to as: New Age, holistic, self-help, and the Human Potential Movement. Eugene Taylor (2000) has referred to this cultural discourse as "Shadow Culture." According to Taylor, Shadow Culture is characterized by a discourse of "transformative" notions of the self; relying on a flexible and eclectic mix of esoteric, indigenous, mystical, psycho-spiritual practices and philosophies. In particular, Eastern esoteric and mystical disciplines have played a dominant role in such movements. The counter culture of the beat and hippie generations embraced such practices as Zen Buddhism, yoga, and tai chi as ways of altering states of consciousness as well as disowning Judeo-Christian values. A prominent example of Taylor's Shadow Culture is the genre referred to as "East-West integrative" thought (sometimes referred to simply as "integrative," “integral,” or "East-west" thought). As its name suggests, this particular strand aims to integrate the epistemology and metaphysics of eastern mystical practices with that of western disciplines--namely psychotherapy and physics. Along these lines, "alternative" research institutes like Esalen have sought to provide alternative metaphysical paradigms to that of "mainstream" or "establishment" science.

The past decade has seen a resurgence in such integrative thinking, bolstered by the increasing popularity and extensive commercialization of Eastern mind-body disciplines such as yoga, tai chi, and qigong concomitant with the rise of CAMs. Within the overlapping areas of discourse between CAMs and integrative thought, qi or "vital energy"--a central yet academically taken for granted concept of Chinese medicine--arises as a definitive locus of understanding.

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10 Basically, qi can be understood as a "vital energy" or "life force." See pp. 7-8, 22-29 of the current thesis for an in depth discussion. For a majority of practitioners of Chinese medicine in the PRC, the concept of qi is understood as a "given". It's existence or epistemological status, for the most part, is not a
CHAPTER 1

*Chinese Medicine within the Context of CAMs:*

In response to the overwhelming public demand for CAMs, in 1998 the National Institutes of Health (NIH) established the National Center for Complementary and Alternative Medicine (NCCAM) to assess the safety and efficacy of CAMs. NCCAM states as part of its mission to test if a given therapy works, and if so conduct research to ascertain how it works. In organizing this effort it has developed a five-tier classificatory scheme delineating types of CAMs: 1). Traditional medical systems, 2). Mind-body therapy, 3). Biologically based therapy, 4). Manipulation and body based therapy, and 5). Energy-based therapy. Within this scheme, Traditional Chinese Medicine (TCM) is cited within the category of "traditional medical systems" along with Indian Ayurvedic medicine, homeopathy, and naturopathy.11

This classificatory system divides up and considers separately some of the modalities which are traditionally included within Chinese medicine. Although often considered as a modality of TCM, *qigong* therapy is classified as an "energy-based therapy" along with therapeutic touch (TT) and Reiki healing. Further, meditation--an integral part of *qigong* practice--is listed under "mind-body interventions" along with hypnosis, dance, music, art therapy, and prayer/mental healing. As such, seen from the point of view of TCM, some artificial divisions are imposed within modalities of TCM and their sub-practices. Obviously, some such division is unavoidable given the task of establishing a classificatory scheme based on a comparative framework including the

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11 It should be noted that the NIH's usage of the term TCM is rather non-specific in terms of the new academic distinction made between "TCM" and "Chinese Medicine" as discussed in the introduction.
various different techniques and disciplines in circulation. Further, the categorization is accurate insofar as both qigong and meditation do exist in their own right as practices separate from TCM. What is of note however, is that this comparison is conceptually structured to generically contrast the various CAMs against a western biomedical standard. Therefor, in the context of CAMs, Chinese medicine is situated within the spectrum of various other non-biomedical practices whose legitimacy must be researched within the parameters of western science and biomedicine. This entails clinical trials and laboratory experimentation to establish efficacy, safety, and explanatory mechanisms.

Within this context, the concept of qi becomes a central locus of questioning. Within the context of CAMs which seeks out the if (efficacy) and how (mechanism) of therapy, questions naturally arise concerning the clarification of the nature of qi and the mechanism of efficacy of qi-based therapy: Does qi-based therapy work? If so, how? Is there a more suitable (chemical, biological) explanation of the mechanism of therapy? Can the existence of qi, as an "energy" be detected and quantified? These questions hinging around the clarification of the reality or nature of qi heavily influence the rendering of Chinese medicine in the biomedical sphere.

**Qi under the microscope: Efficacy, mechanism, and placebo response**

Qi is often translated into English as "vital energy", or simply "energy." Chinese medicine posits that illness and health is manipulated by the movement of qi, and defined by the balance of qi within one's body. Diagnosis of illness is therefor based in terms of excess and deficiencies of qi, often described in such terms as "full", "depleted", or "blocked". It is thus one of the main conceptual elements underlying therapy. Qi is
traditionally understood as a given; its reality is taken for granted. At the same time, its metaphysical or epistemological status is ambiguous and undefined. Until recent biomedical and scientific forays into Chinese medicine, "whether qi is some kind of 'real' quantitative energy in the western sense (akin to 19th century vitalist life-force notions) or a metaphoric way of depicting and experiencing connection [was] not a serious intellectual issue." In the field of Chinese medicine in China, the efficacy of Chinese medicine is to a large extent unquestioned due to millenia of native usage. In many hospitals, biomedical clinics cooperatively exist side by side with Chinese medicine clinics. TCM enjoys a level of distinction as it is often considered to be more effective than biomedicine for the treatment of certain chronic illnesses.

In the US however, Chinese medicine exists in a domain which is still institutionally separate from biomedicine. Although biomedical doctors are beginning to refer some of their patients to Chinese Medical doctors for ailments such as pain management, CAMs have by no means penetrated the mainstream of biomedicine. As such, the issue of efficacy is of major concern for Chinese medicine within the US context. This question of efficacy is intimately linked to questions of its explanatory mechanisms and whether or not a placebo or psychosomatic element plays a role in this efficacy.

Although they are all modalities of Chinese medicine: herbs, acupuncture, and qigong do not elicit the same type of scientific scrutiny. For instance, the efficacy of a Chinese herb is readily able to fit into established protocols of pharmacological testing and be proven by clinical trials. Within this context, the efficacy is likely to be explained

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12 Kaptchuk (2002:375). Kaptchuk's work will be cited extensively as he is the leading practitioner scholar on acupuncture and CAMs.
chemically by isolation of the "active ingredient." In such a chemical explanation the
question of the material existence of qi can be bracketed. Instead, the herb is understood
within the parameters of pharmacological discourse. Isolation of the active ingredient
and the ability to control its dosage allows for a methodologically tidy clinical trial in
which non-specific or "placebo" effects can be ferreted out. The efficacy of herbs can
then be tested in terms of concepts such as purity and dosage.

Clinical trials of acupuncture are slightly more problematic in many respects.
First, acupuncture does not lend itself to isolation of an "active ingredient" as required in
the pharmacological ideal. Unlike drugs which can be dispensed by anyone, the act of
acupuncture needling cannot be disconnected from the acupuncturist, making double-
blinding a tricky matter.\(^{14}\) This makes it difficult to ferret out placebo effects. Second,
the reasoning behind its application does not correspond to the rationale of dosage (i.e.
more needles or longer needles does not necessarily equal a "higher dose"). Third, there
are also problems in sampling due to the wide individual/school variations in treatment of
the same symptom.\(^{15}\) Finally, the disease entities of Chinese medicine do not correspond
to the disease entities of biomedicine; the grouping of symptoms which from the
biomedical viewpoint indicate a single disease entity may from the viewpoint of Chinese
medicine be grouped differently and understood as resulting from several different types
of qi imbalance.\(^{16}\) These problems affect the methodology of clinical trials and ultimately
affect either the outcome or credibility of results.

\(^{13}\) Kaptchuk (1983:35-36).
\(^{14}\) Kaptchuk (2002:379).
\(^{15}\) The location and numbers of needles placed varies widely according to practitioners and textbooks. See
Birch and Sherman (1999).
\(^{16}\) See Kaptchuk (1983) introduction and Ch 1.
Despite these methodological difficulties, some basic science evidence in the laboratory has shown replicable physiological effects meriting further studies of its mechanism.\textsuperscript{17} For example, successful pain management by acupuncture (for chronic pain, or as local anaesthetic) has garnered much scientific attention because conventional biomedical knowledge of nerves and their pathways cannot account for reports of pain relief gained through the needling of another totally unrelated area of the body. In TCM, practitioners account for this effect by means of the theory of $qi$ and meridians (conduits of $qi$); which differ in their location from that of biomedically established nerve pathways. The locations of needle insertion and pain relief are connected by such meridians. However, this explanation is unacceptable in the biomedical view because unlike nerve pathways, meridians do not have a corresponding anatomical structure that can be dissected and analyzed. This has lead to the proposal of several new psychoneuroimmunological hypotheses as its mechanism of efficacy. In the "gate" theory of pain, the acupuncture needles are believed to "jam the lower nerve bulndles in the central nervous system so that other pain signals--those from an incision--cannot reach the brain."\textsuperscript{18} Another popular hypothesis has cited the release of endorphins as the active mechanism in dulling the pain.\textsuperscript{19}

Historically, medical opinion on the validity and legitimacy of the placebo response as a tool of medicine has varied.\textsuperscript{20} In general however, the dominant biomedical paradigm tends to prioritize cures that work regardless of the beliefs or psychological dispositions of the patient. Pharmacological agents are expected to work through

\textsuperscript{17} Kaptchuk (2002:379).
\textsuperscript{18} Kaptchuk (1983:81).
\textsuperscript{19} Ibid.
\textsuperscript{20} Kaptchuk (1998a), de Craen et al. (1999).
mechanisms at a biochemical level. In lieu of a concrete mechanism, the power of psychological suggestion or expectation and its effect on perception has also been considered as a possible explanation. However, these psychosomatic hypotheses are of a different ilk than pharmacological/psychoneuroimmunological explanations. In the latter, a specific effect is caused by a physical thing or "active ingredient"—i.e. external agents that work through chemical mechanisms. In contrast, for the psychosomatic the emphasis is not on a specific external agent causing a specific effect, but rather the effect is the result of an internal response involving the "mind"—i.e. emotional or psychological states. Although the "mind" can be (and indeed often is) reduced to its chemical responses in the brain, explanations for the efficacy of acupuncture often tend towards scientifically "softer" or more psychological terrain. It is believed that patients get better largely as a result of their own belief that they will indeed get better. As such, a dominant popular scientific hypothesis of the efficacy of acupuncture has been the placebo response.

It is interesting to note that in the initial inquiry into acupuncture, the placebo response was used to dismiss acupuncture as a sham or empirically baseless treatment. More recent studies have been less eager to dismiss acupuncture (or other CAMs) on the basis of possible placebo response or the lack of a scientific 'mechanism' of efficacy. This reflects a shift in perspective concerning the utility of placebo and the rise of the paradigm of "mind-body" medicine which considers more seriously the relationship between psychological/emotional factors and the biological/physiological components of illness. Thus, instead of being a negative terminology labeling the supposed inefficacy

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of a procedure, the placebo response is currently being reconsidered by some as a therapeutic tool worth analyzing in its own right.\textsuperscript{22} As such, the introduction of Chinese medicine (and other CAMs) into the arena of clinical testing has influenced notions and standards of efficacy, especially concerning the meaning and role of the placebo. Although beyond the scope of this paper, this influence merits some attention as most academic studies of Chinese medicine have focused on how biomedicine has affected it rather than vice versa.

\textit{Energy medicine: Qigong}

Eisenberg's (1998) survey has shown that the demand for "energy-based medicines" (or "energy medicine" as it is commonly referred) is among the fastest growing in CAMs. Energy-medicine is described as any therapy involving the transference of healing "energy" to a patient. Predictably, it has received considerable attention as a therapy based on the placebo response. A popular form of energy medicine is \textit{qigong}, an ancient modality within the TCM system that is variously used as a form of meditation, exercise, spiritual discipline, and medical therapy. \textit{Qigong} therapy can be largely divided into two types: \textit{internal} and \textit{external}. Internal \textit{qigong} refers to the manipulation of one's own \textit{qi} through a series of postures coupled with a focus on deep breathing and relaxation. Some styles of internal \textit{qigong} are practiced by holding the body in still postures while utilizing the mind and breath to direct the flow of \textit{qi} throughout the body. Other styles utilize soft flowing movements in addition to the focus on mind and breath to aid in the flow of \textit{qi}. \textit{External qigong} involves the projection of \textit{qi}

\textsuperscript{22} Kaptchuk (1998a,b), Walach (2001).
from a seasoned practitioner or 'master' of qigong to the patient. In addition to infusing the patient with his healing qi, the qigong master may also manipulate the qi flow of the patient by removing 'blockages' of qi, or 'diseased' qi. When compared to the other modalities of TCM, qigong therapy poses the most challenges towards scientific validation.

In the case of herbs and acupuncture, even those who are skeptical to the existence of qi have acknowledged the possible efficacy of such treatments based on the chemical effect of the "active ingredient," manipulation of nerves, or the neurochemical correlate of a psychosomatic/placebo response. However, external qigong and other energy-based therapies have more often been dismissed as outright fraud.\(^{23}\) Since there is often no physical contact between the healer and patient in external qigong therapy, there is no obvious active ingredient or mechanism present. Thus without the acknowledgment of the material existence of qi, from the biomedical viewpoint there is no possible explanation other than the placebo effect. Logically, if skeptics are able to accept the efficacy of herbs and acupuncture as the result of placebo, they should just as easily be able to accept the efficacy of qigong based on the same premise. Yet, qigong has encountered much resistance from many in the biomedical sphere, perhaps due to the lack of any pill, instrument (needle), much less physical contact between the healer and patient.

It is likely that in the view of many biomedical practitioners, a belief in qi amounts to a sort of shamanism—which crosses from the realm of science or biomedicine to that of superstition or religion. Thus, despite the fact that "energy-based medicines"

\(^{23}\) See Barrett in Humber and Almeder (1998).
forms one category within the NIH's classification of CAMs, it is ostensibly received with the least amount of seriousness when compared to other categories. Yet, it is interesting to note that prayer (listed under "mind-body interventions") is regularly accepted as a valid method of promoting healing. This inconsistency may be due to the fact that prayer remains more neatly within the cultural domain of religion and personal beliefs (a realm that is held separate from science and thus does not pose a serious challenge), whereas qigong's positing of a transmission of a "life energy" infringes upon the basic premises of biomedical science. To entertain the possibility of the existence of qi would require such a drastic change in the biomedical paradigm as to suggest an alternative metaphysics.\textsuperscript{24} This last point will later be discussed in more detail in relation to the cultural discourse of "east-west integrative" thought.

For these reasons, biomedical studies of qigong have been far fewer than other modalities of TCM. According to Ai et al (2001), despite the widespread use of qigong therapy in the medical setting in China, very little documentation exists on its clinical efficacy, since its efficacy is considered a given.\textsuperscript{25} In the US biomedical context, the efficacy of qigong will need to be proven in clinical trials before being considered a legitimate form of therapy.\textsuperscript{26} Many researchers have insisted on prioritizing the clinical trials of energy healing before spending the time and effort to inquire into the possible existence of qi as a material substance or understand other (placebo-involved) mechanisms of therapeutic effect.\textsuperscript{27}

\textsuperscript{24} For examples of new paradigms which encompass various metaphysical elements such as chakras and qi theory with biomedical language, see Shang (2001).
\textsuperscript{25} Ai et al (2001: pp. 84, 85).
\textsuperscript{26} Whether or not patients and consumers will continue to seek out energy healing is another matter.
\textsuperscript{27} "If trials on energy healing fail to provide evidence of efficacy, questions about mechanisms will become irrelevant to clinical medicine," Ai et al. (2001:85).
External Qigong and Randomized Controlled Trials (RCT)

Clinical trials of "energy-based medicines" involving the testing of a material "energy," under the double-blind, randomized controlled trial (RCT) format is inherently problematic. The classic RCT format was first established as the "gold standard" of science within the context of pharmacological testing.\textsuperscript{28} In the classic RCT, an "active ingredient" must be isolated by factoring out other possible agents which may influence the outcome. The control group is 'controlled' by receiving treatment that lack this active ingredient. In the case of energy healing, a double blind placebo treatment cannot be so clearly defined. "A basic difference between drug and energy-healing trials lies in the fact that the former do not involve a living person as the tool of intervention, [and] whereas neither clinicians nor patients can distinguish a placebo from a real drug, it is difficult to envision energy healers blind to whether they are doing real therapy."\textsuperscript{29} Thus, a strict RCT (of classical pharmacological standards) on energy medicine would operate on the assumption of an isolatable "active component of energy itself" as well as the possibility of separating this component out from other possible factors such as practitioner charisma, patient expectation/suggestibility, and staff/practitioner bias.

Therefore, as Ai et al puts it, "from a conventional perspective, the very notion of energy healing appears to fall into the category of what allopathic medicine terms the placebo effect, which seems to be created from nothing more than the minds of physicians or patients."

\textsuperscript{28} Kaptchuk (2001c).
\textsuperscript{29} Ai et al (2001:85).
Some researchers have attempted to creatively navigate around this obstacle by devising alternative strategies for clinical trials. Following the psychotherapy outcome literature, many researchers have begun to consider the potential role of the placebo effect in treatment efficacy by including it as an explicit part of research design (rather than designing the research to eliminate their effects). Instead of eliminating the placebo effect by keeping their subjects blind to when they were being treated, efficacy of the placebo is tested for by devising a 'sham' or mimic qigong therapy. The subjects knew when they were being treated but unaware of the prospect of being treated by sham treatments. This way the placebo was kept constant while the "active ingredient" (any 'real' component of qi as active mechanism) was varied. Theoretically, this would reveal the efficacy of any such 'real' component of qi.

**Internal qigong**

Since *internal qigong* does not necessarily posit the transference of qi between people, the implications of determining the health benefits of *internal qigong* is slightly less controversial. The existence of qi is bracketed through observing the physiological response to individual qigong practice. The efficacy of qigong practice is determined for many chronic, stress-related, age-related, and musculoskeletal illness through physiological measures such as blood pressure, heart rate, oxygenation level of the blood, hormone levels, and bone density. Measured before, during, and after qigong practice, (in both short term as well as long term) these values help to provide quantifiable information on the changes taking place in the body. These measures are understood to be an explanation of what is 'actually' taking place in a physiological sense, regardless of
the validity of qi theory. These observable physiological changes are concrete and basic enough so that there is nothing more to explain. For example, the measures of lowered blood pressure and resting heart rate induced by qigong practice can be understood on its own without recourse to qi theory. In this case, placebo responses do not need to be factored out or negatively scrutinized. Any efficacy is understood as an ultimately material (biological/biochemical) phenomena regardless of patient expectation. Thus, internal qigong is observed and understood from a similar framework as utilized in the biomedical analysis of different forms of physical exercise.30

These types of studies historically find their precedent in earlier scientific attempts to verify or explain metaphysical claims--such as enlightenment or satori--made by Eastern esoteric spiritual adepts (such as yogis and Zen masters). The self-induced mystical states of spiritual adepts were translated into physiological measures such as heart rate, oxygen consumption, blood chemistry, brainwave function, and galvanic skin response.31 These measures were often compared to those derived from western psychological states of ‘self-actualization’, or similarly altered states of consciousness derived from the participation in sports, music or hallucinogenic drug use.

Scientific research used to probe or validate esoteric and mystical disciplines based on altered states of consciousness became a major area of focus in so-called East-West integrative institutions such as Esalen Institute. Much of the pioneering research of Esalen hinged around the tenets of western psychology's Human Potential movement: the maximizing of biological, psychological, and spiritual capabilities towards exceptional human functioning as exhibited by masters and adepts of martial arts, sports and spiritual

31 See Murphy and Donnovan (1996) for an extensive bibliography.
disciplines. In the context of integrative thought, such research had larger implications extending beyond personal development and health, towards the biological and spiritual evolution of the human species. Here, these physiological measures were conceived as a mere correlate to a larger as yet unexplained or unexplainable process which necessitated a metaphysical revisioning of the world.

Detection and graphic representation of qi

Beyond questions of clinical efficacy and scientific mechanisms which have bracketed the existence of qi as a material substance, some attempts have also been made in the detection and graphic representation of qi itself. Some have theorized qi as a low-level electro-magnetic field resulting from the natural electrical activity of the human body and have attempted to measure these quantitatively using electronic equipment. Some researchers have claimed to detect a change in the electrical conductance of the skin above acupuncture points measured using low voltage and low current.\footnote{Known as electroacupuncture according to Voll (EAV). See Sancier (1994; 1996). Yet, despite various efforts into the detection of qi, its existence is generally considered to be as yet unsubstantiated within the larger scientific community.} Yet, despite various efforts into the detection of qi, its existence is generally considered to be as yet unsubstantiated within the larger scientific community. Some proponents of the existence of qi have faulted the equipment for the lack of results, claiming that measurements of qi require instruments far more sensitive than is available (or acceptable) in current mainstream technology. Others have pointed to non-mainstream methods such as Kirlian photography as visual evidence of qi.

Yet, such means of proof often are associated with the label of "new-age" or "pseudo-science," and lumped with so-called "frontier" or more pejoratively, "fringe"
sciences such as parapsychological (psi) studies and the physics and consciousness
movement. These are considered to be on the frontier/fringe largely because they require
an alternative epistemology and metaphysics beyond that accepted by "establishment
science." Indeed, the purported abilities of qigong masters ---including spontaneous
healing and telekinesis--are well within the realm of the parapsychological, and have thus
been a topic of interest for researchers in psi-studies. As such, qi also participates within
a discourse of alternative epistemology and metaphysics, as evinced by its large role in
the East-West "integrative" institutes. An example of integrative thought is the physics
and consciousness movement, in which an alternative paradigm of science and medicine
is sought through the integration of the insights of quantum physics with eastern mystical
and healing disciplines.

Before I discuss how qi fits into integrative thought, I introduce two translations
of the concept of qi given by western scholars of Chinese medicine: Ted Kaptchuk, a
doctor of oriental medicine (OMD) and director of the Center for Alternative Medicine
Research at Beth Israel Medical Center; and Sinologist Manfred Porkert, the author of
one of the definitive monographs on TCM\textsuperscript{34} in the West.

\textsuperscript{34} A few claims have been made on the scientific detection of qi in China in the late 70's and early 80's. See
CHAPTER 2

Qi in the Academic Setting:

Translating qi

Sinologists and western practitioners of Chinese medicine have often struggled with the task of translating certain concepts due to their polysemy and or inherent ambiguity. Needham and Lu (1975) have referred to the "irreducible residue of ambiguity"\(^{35}\) encountered in translating many Chinese concepts. For Coutinho (2002) the difference between the "highly temporalized worldview" of the early Daoists and the "predominantly substantialist ontologies" of much of traditional western metaphysics results in what seems to be a problem of "vagueness"\(^{36}\) in Sinology or comparative philosophy. As a concept with multiple shades of meaning depending upon the context of its use, *qi* has been one such concept that has been notoriously difficult to define or translate. Within the field of Chinese medicine, it has roughly been translated as a "vital energy," that runs through conduits or "meridians" (*jingluo*) which permeate the body. One's health and vitality depends on the balanced flow of *qi* through the meridians.

Academic renditions of *qi* have generally expounded upon this basic medical definition of *qi*.

However, *qi* is not a term which is restricted to medicine. *Qi* is also associated with various other Chinese disciplines such as martial arts, calligraphy, and *feng shui*.\(^{37}\) Mastery of these disciplines often depends on the practitioners' embodied experience of *qi*. Heavily embodied disciplines such as *qigong* and *tai chi* emphasize not only a

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\(^{34}\) The Theoretical Foundations of Chinese Medicine: Systems of Correspondence (1974).
\(^{35}\) Needham and Lu (1975:491-492).
conceptual understanding of qi, but attempt to develop the ability to somatically feel the flow of qi within the body. In addition to a learned somatic awareness, adepts eventually gain the ability to control the flow of qi through repeated embodied practice. For example practitioners of qigong and Tai Chi will repeatedly practice set routines of flowing movements, or "forms" as a means to: become aware of their qi, to produce more of it, and to control its flow to different areas of the body. Within these circles, qi gains most meaning as a type of practice. Liao states the importance of the concept of "qi development" in Tai Chi: "...qi is to Tai Chi what gasoline is to a gas-powered engine. Just as without gasoline the engine could not have been invented, if there had been no concept of qi development, the art of Tai Chi would never have come to be." (Liao:18).

Yet, "feeling the qi" is sometimes described as part of the process of honing the skill of acupuncture needle placement. Patients often help the doctor by confirming the correct placement of the needle, when they "feel" or "obtain the qi" (deqi). However, some practitioners claim that they can somatically feel when the needle obtains the qi. Ostensibly, there are many such tacit elements of practice within TCM, some of which concern an embodied knowledge of qi. However, these types of tacit knowledges are more likely considered the nuances of skill which one gains through experience, rather than something that is explicitly taught or written in texts. Although it is unclear to what degree these other more subtle or embodied understandings of qi affect the doctors' practical knowledge of qi, these subtleties do not

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37 Fengshui is the art of arranging living quarters according to highly complex rules of cosmological influence. The flow of qi through the living quarters is harmonized according to these rules.

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Most texts of TCM offer only perfunctory information on the basic concept of qi.\(^{41}\) Some refer the reader to ancient Chinese philosophical writings for further historical information and etymology of qi. Yet, even in such writings, qi is not given a systematic definition. According to Sivin (1987) early meanings of qi are associated with gaseous phenomena such as breath, the mist on mountain tops, or vapors of steam rising from cooking rice.\(^{42}\) Although unthinkable to those schooled within the western scientific and analytical tradition, qi is thus a 'given,'--something which is accepted without explicit proof or documentation aside from the indirect proof given by its historic therapeutic utility and success in the clinical setting. Nowhere until recent biomedically influenced studies, has there been an impetus to question the existence or nature of qi and measure it in objective quantifiable terms.\(^{43}\)

Kaptchuk (1983) attributes this acceptance to an inherent principle of "immanence"\(^{44}\) as a fundamental character of Chinese religion, philosophy, and culture. Indeed the Taoist influence in Chinese thought does place an importance on the interconnectedness of phenomena, and a lack of a conception of an external transcendent "truth" operating from without. Thus, as Kaptchuk states, the relationship of parts to whole, mutual influence (simultaneous correspondence) and the importance of balance indeed permeates the logic of Chinese medicine. This is in stark contrast to scientific and biomedical thought which emphasizes autonomy of parts and seeks to assign a root cause

\(^{41}\) For example, a typical explanation on the nature of qi is as follows: "Qi refers here to both the most basic substances constituting the human body and maintaining life, and varied functional activities that those vital substances possess. Qi initially belongs to the ancient Chinese philosophic concept which held that qi is the most basic substance comprising the world and everything in the universe results from the movement and changes of qi." Zhang and Cheng (1996:72).

\(^{42}\) Sivin (1987:47).

\(^{43}\) Kaptchuk (2002:375).
for illness. Such fundamental philosophical differences make a translation of qi extremely difficult.

The idea of qi is fundamental to Chinese medical thinking, yet no one English word or phrase can adequately capture its meaning. We can say that everything in the universe, organic and inorganic, is composed of and defined by its qi. But qi is not some primordial, immutable, material, nor is it merely vital energy, although the word is occasionally so translated. Chinese thought does not distinguish between matter and energy, but we can perhaps think of qi as matter on the verge of becoming energy, or energy at the point of materializing. To Chinese thought, however, such discussion of what a concept means in itself—a discussion that the Western mind expects in any systematic exposition—is completely foreign. Neither classical nor modern Chinese texts speculate on the nature of Qi, nor do they attempt to conceptualize it. Rather, Qi is perceived functionally—by what it does.\(^4^5\)

Kaptchuk's explanation stresses that within the context of TCM, qi is more of a functional concept rather than a metaphysical concept.\(^4^6\) Although lacking any systematic exposition on the substantial nature of qi, qi is understood in terms of its functions, types, and disharmonies.\(^4^7\) Thus, in TCM, what qi is, is ostensibly not as important as knowing what it does.

In one of the definitive monographs of TCM, Porkert (1974) has similarly noted the difference between the western "analytic" tendencies, versus the Chinese "inductive"

\(^4^4\) Kaptchuk (1983:256-258).
\(^4^5\) Ibid (35-36).
\(^4^6\) Yet, despite Kaptchuk's insistence that it is more of an operational concept, a metaphysical bent creeps back into his description/definition of qi: "Qi is not the cause of the movement, because Qi is inseparable from movement." Thus, Kaptchuk's definition is also ambiguous concerning the ontological status of qi. For example, he states: "Qi is the source of growth in the body, but also grows with the body. For Chinese, Qi is not a metaphor; it is a real phenomenon that makes possible integrative descriptions of bodily changes. Diagnostic methods exist for determining its strength and motion, and there are specific treatments for supplementing its deficiency, draining its excess, and regulating its flow," (37).
\(^4^7\) Qi has five functions in the body: 1). It is the source of all movement in the body and accompanies all movement, 2). It protects the body, 3). It is the source of transformation in the body, 4). It governs the retention of the body's substances and organs, 5). It warms the body. Qi also has five major 'types' 1). Organ 2). Meridian, 3). Nutritive, 4). Protective, 5). Ancestral. There are two major patterns of disharmony: 1). Deficient, and 2). Stagnant. See Kaptchuk (1983:36-40).
tendencies. Porkert states that qi has been grossly misrepresented in the west in being compared to the quantum energy of modern physics.

In Chinese medicine, more than a dozen basic forms of energy, and well over two dozen accessory forms, are described. It would be misleading to propose a parallel between this family of terms, at first disconcertingly prolific, and the simple, clear, and universal concept of energy in modern physics. (...) Within the framework of Chinese thought no notion may attain to such a degree of abstraction from empirical data as to correspond perfectly to one of our modern universal concepts. Nevertheless the term qi comes as close as possible to constituting a generic designation equivalent to our word "energy." (...) And yet unlike our concept of energy, qi, whatever the context and absolutely without exception, always implies a qualitative determination of energy. In other words qi means energy of definite (or definable) quality. For this reason we use for the technical term qi the standard definitions "configurational energy"--i.e., energy of a definite direction in space, of a definite arrangement, quality, or structure--and "energetic configuration".

Porkert's translation of the concept of qi, like Kaptchuk's, hinges upon fundamental philosophical differences underlying western and eastern medicines. To fully unpack these differences is beyond the scope of this paper. It is sufficient for present purposes to reiterate Porkert's main point: within the context of TCM, qi is understood as a specific and empirically (qualitatively) verifiable entity, not some vague theoretical universal substance. Porkert suggests that a more epistemologically

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48 Needham and Lu (1975) have criticized Porkert's polarization as too general yet at the same time seem to agree to a certain extent as they assert that "Chinese thought rather characteristically avoided substance and clung to relation." (497).


50 Briefly, Porkert distinguishes between the "analytic" and "inductive" natures of western and eastern medicine respectively to account for the striking fundamental difference between the two types of medicines. The analytic mode is causal in nature and thus requires a "logical link between two effective positions given at different times at the same place in space;" while the inductive mode "corresponds to a logical link between two effective positions existing at the same time in different places in space." (1). This difference is most obviously manifest in the difference between biomedical anatomy and TCM anatomy. In TCM anatomy, the 'functional system' of an organ defines its identity—the physical location and organ itself is secondary. Thus, in TCM, disease is understood as an imbalance in the 'functional system' of an organ; therapy is understood as a matter of rebalancing the functions of which the organ is merely a substratum. On the other hand, biomedicine locates the diseased organ and attempts to affect a direct change in the organ itself.
appropriate analogy to the concept of qi would be to compare it to the terminology of electrical energy in the field of electrical engineering.\textsuperscript{51}

If qi is indeed misconstrued in the American context as Porkert suggests, it is important to probe the possible reasons for this misconstrual. Why has qi come to be associated with or understood in terms of the language and concepts of quantum physics if the language of electrical engineering provides a more appropriate analogy?

Unfortunately, Porkert does not attempt to describe the possible reasons for this misconstrual, as his attention is focused on an accurate representation of the systematic body of knowledge of official TCM. He also does not delve into the multiple non-official understandings of qi which lie outside of official TCM theory. He does not attempt to broach the topic of the embodied and tacit elements of qi. Yet, popular accounts of Chinese medicine\textsuperscript{52} as well as the popular practice of qigong\textsuperscript{53} and tai chi reveal that a version of qi that is perhaps less technical—but more metaphysical and embodied in nature—seems to be shared as a fundamental cultural understanding of qi. These metaphysical understandings of qi seem to be closer to the older Taoist or medieval demonological traditions to which Chinese medicine originally traces its roots,\textsuperscript{54} only to be more recently modernized and "scientized," in its reformulation as TCM. It is possible that the generic misconception of qi as "energy" (akin to the concept from modern physics) is more reflective of an emphasis of these metaphysical folk understandings of

\textsuperscript{51} "A legitimate—and from an epistemological point of view instructive—comparison is between the multiform terminology of Chinese energetics and the no less diversified terminology of electrical engineering in which expressions such as direct current, alternating current, light current, heavy current, high tension (…), and so on, always designate one basic phenomenon, electrical energy, which each term describes in regard to only one single, narrowly defined, empirical (technical) aspect which in ordinary language is not specified. Exactly the same principle applies to the qualitatively rather than quantitatively differentiated energetic terminology in Chinese practical medicine," (Porkert: 1974:167).

\textsuperscript{52} See Eisenberg (1985) and Moyers (1979).

qi. It is unclear to what degree these more metaphysical, embodied, and thus unofficial understandings of qi still inform the actual practice of contemporary TCM. As mentioned in the introduction, as a whole, the academic work on Chinese medicine has more or less completely neglected these aspects of qi.

The current thesis proposes that the analogy made to quantum energy is not merely a poor choice of analogy but is revealing of the proclivity towards a sort of alternative metaphysics espoused by many proponents of CAMs. Historically, the current public interest in CAMs is linked to a counter-cultural tradition of alternative health, psychological, and spiritual practices exemplified by movements such as the New Age and the Human Potential Movement--what Taylor (2000) has termed Shadow Culture. These movements in one way or another, all express an urgency for initiating a paradigm shift in mainstream science and biomedicine. The next chapter of the thesis attempts to flesh out this relation by making clear the broader cultural context within which acupuncture has been embedded in the US.

CHAPTER 3

*Alternative Metaphysics*

Porkert's claim that *qi* is mistranslated may be an accurate assessment in understanding *qi* strictly within the context of official TCM theory in the modern state-sanctioned institutions of China. Yet, from an anthropological perspective this new rendering of *qi* is interesting as it may help to further contextualize Chinese medicine in the US. In this larger American context, *qi* has taken on a more explicitly metaphysical tone, combining with psychological, scientific and spiritual discourses.

*Qi and psychology*

Barnes (1998) has referred to the emergence of an "American Acupuncture" within a general trend of "psychologizing" Chinese healing practices in the US. According to Barnes, US practitioners of acupuncture speak of illness in terms of "energy blockages," following the popular psychological language of emotions: being "stuck," "blocked," and needing to "let go," "release" or become "unstuck." In the US, "illness is thereby construed as the somatized expression of blocked or suppressed emotions," whereas in China, "people do not tend to think of these matters as belonging in the medical arena (...) they are also not usually thought of as falling within the domain of matters for which one would seek professional help." Consequently, due to the psychological orientation popularized by psychotherapy, self-help, and the emergence of mind-body medicine, North American contexts of medical treatment (especially within psychological or CAM therapies) increasingly allow for the inclusion of personal

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56 Ibid (419).
dimensions of life in the biomedical domain. However in China, "the lines between the personal and the medical are...clearly drawn, the relationship between doctor and the patient [are not] envisioned as including the personal."\textsuperscript{57}

Yet, the emergence of the personal life of the North American patient into the medical purview extends beyond the emotional. According to Taylor (2000) there exists a long North American tradition of alternative metaphysical thought and spiritual folk psychology. Spiritualist and psychic movements such as Swedenborgianism, Mind-cure, Mesmerism, Grahamism, Theosophy, and Transcendentalism have intertwined with several psychotherapeutic schools of thought as well as Asian esoteric and mystical imports forming a complex matrix of psycho-spiritual thought. Taylor has coined the phrase "Shadow Culture" in reference to this matrix. Especially with the development of humanistic and transpersonal psychologies, and the rise of the Human Potential Movement, psychological and spiritual concerns have in many schools of thought converged and have become important issues in psychotherapy. And with the rise of mind-body medicine, the spiritual domain has also entered the medical arena via psychology. As Taylor notes, Shadow Culture has also become a major influence within mainstream consciousness, including science:

"[Shadow culture] has become a permanently embedded influence within American society informing lifestyles, living arrangements, child rearing, definitions of family, and the meaning of work. At the same time, within certain quarters of the science establishment, objective interest in the intuitive and visionary dimensions of consciousness began to define a number of new social institutions at the intersection between higher learning and popular culture. The physics and consciousness movement, holistic health, transpersonal psychology, energy medicine, and what has come to be called frontier science are but a few of the names associated with the new awakening."\textsuperscript{58}

\textsuperscript{57} Ibid.
\textsuperscript{58} Taylor (2000:237).
With the introduction of Shadow Culture into mainstream thought; the scientific, religious, psychological, and the mystical have found increasing space for dialogue--allowing non-scientific (and thus previously taboo) ideas to be considered.\textsuperscript{59}

For example, notes that many American practitioners/theorists of acupuncture, --most notably Kaptchuk-- have borrowed material from older Chinese medical texts (those pre-dating Mao's modern reformulation of TCM) as a means to address the American psychospiritual orientation. It is interesting to note that the elements that practitioners like Kaptchuk are currently mining are the very elements which were specifically removed in the making of the 'official' TCM for being too "superstitious," "feudal," "obsolete" and "backwards." Thus, ancient medical treatment methods that are usually considered taboo (such as effective acupuncture points for illnesses caused by ghosts and spirits) are now being reconsidered for use in the North American context. Authors like Kaptchuk believe these so-called "superstitious" elements may be flexibly put to use in addressing the North American psychological orientation towards illness.

According to Taylor, such bricoleurian flexibility of usage is characteristic of Shadow Culture. Yet, to simply brush away the significance of this flexible borrowing under the label of Shadow Culture may be a bit too generalized. It is unclear whether for borrowers like Kaptchuk, the fundamental philosophical differences underlying such disparate views are forgotten, resolved, or even considered a problem. Indeed, for medical anthropologists, this type of simultaneous usage of both 'traditional' and

\textsuperscript{59} According to Taylor, Shadow Culture has become a "filtering mechanism" through which "all foreign influences must pass in order to have an impact on American culture, regardless of their source or content." And further, by "psychologizing them, by imbuing them with a teleology, by reifying them into a worldview, and by retailing them into a mass-marketed commodity, we have Americanized such diverse
'modern' medical philosophies and practices has been one of the nagging questions of medical pluralism. Situations such as these beg the question of how this type of borrowing can occur with such disparate metaphysical grounds.

The borrowing of so-called "backwards" knowledge from ancient TCM texts and transplanting them into the American psychospiritual framework does not necessarily mean that US practitioners like Kaptchuk are modifying their own metaphysics to include medieval Chinese demonological influences of ghosts and spirits. Rather, it is more likely that they believe that the experience of illness that ancient Chinese explained in terms of demonology may correspond to some degree to western psychological disease entities such as described in the DSM-IV. Thus, practitioners may bracket the issue of metaphysics and attempt to work experimentally, by simply seeing if a particular method has any positive effect. In this manner, borrowing of information and techniques has often occurred without too much concern for reconciling metaphysical contradictions and synthesizing new realities. Yet, there also exists a prominent strand of thought which has indeed attempted to address this issue to offer a metaphysical synthesis between Eastern mystical thought and western scientific thought. Analyzing this strand of thought might help contextualize the misinterpretation of qi as the "energy" of modern physics.

Qi and energy: physics and mysticism

New Age discourses have long adopted the theory and language of quantum physics in "scientizing" their alternative metaphysics and epistemologies.60 Thus, the physics and consciousness movement has figured prominently in Shadow Culture. In the

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influences as Darwinian evolutionary theory, logical positivism, Freudian psychoanalysis, and Zen Buddhism," (20).
physics and consciousness movement, quantum physics is adopted as a symbol of rupture from the Newtonian mechanistic world-view. It has attempted to establish a more flexible and relativistic world-view which allows for the integration of the insights of eastern mystical traditions with that of modern physics. The work of Capra is exemplary in this regard, and is a popular reference for the tradition of East-West integrative studies. His book repeatedly places side by side the quotes of Zen masters and influential modern physicists as well as excerpts from ancient texts of Hindu, Buddhist, and Taoist sources.

According to Capra, extrapolating from the advances in quantum physics necessitates a re-evaluation of the perception of everyday reality and human consciousness as it relates to the world 'out there'. Heisenberg's uncertainty principle is cited as one example. In this case, the act of observation is understood to affect the outcome of the phenomena observed; subject and object are thus intimately intertwined making impossible any disconnected "objective" observation.

Quantum theory thus reveals a basic oneness of the universe. It shows that we cannot decompose the world into independently existing smallest units. As we penetrate into matter, nature does not show us any isolated 'basic building blocks' but rather appears as a complicated web of relations between the various parts of the whole. These relations always include the observer in an essential way (...) This means that the classical ideal of an objective description of nature is no longer valid. The Cartesian partition between I and the world, between the observer and the observed, cannot be made when dealing with atomic matter. In atomic physics, we can never speak about nature without, at the same time speaking about ourselves.

With this outcome, Capra draws a parallel to Eastern mystical practices such as those found in Zen Buddhism, Taoism, and Hinduism. These traditions have similarly

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60 For example, see Capra (1975), Zukav (1979), Brennan (1988), Chopra (1993).
61 It is interesting to note that the parallels offered by Capra are not only of his own making, but also suggested by the famous physicists themselves (e.g. Bohr, Heisenberg). See for instance the photo of Niels Bohr's coat-of-arms, which prominently features the Taoist “yin-yang” (taiji) symbol (Capra:1975:144).
espoused a cosmology in which the dualism of a separate individual consciousness apart from external reality is problematized. Capra quotes a Tantric Buddhist, Lama Anagarika Govinda:

The Buddhist does not believe in an independent or separately existing external world, into whose dynamic forces he could insert himself. The external world and his inner world are for him only two sides of the same fabric, in which the threads of all forces and of all events, of all forms of consciousness and of their objects, are woven into an inseparable net of endless, mutually conditioned relations.  

In this so-called “integral” or “integrative” type of thought, the omnipotence and validity of mainstream scientific or biomedical knowledge/experimentation is questioned through the uncertainty principle. It simultaneously opens the door to an alternative metaphysics while questioning the very foundations of knowledge in western epistemology. A comparison of the uncertainty principle to Eastern views of consciousness attempts to evoke the notion that the metaphysical insights of Eastern mystical traditions are not far from the nature of reality posited through the rigors of modern experimental physics. Such a view then helps to philosophically ground the efficacy and reality of many CAMs, especially modalities of TCM which operate around a central concept of qi or "energy."

Quantum field theory is another major focus in integral thought. Field theory dispenses with the classical concept of an ‘empty space’ in which solid particles interact. Instead, the quantum field is everywhere present as the underlying stuff of the universe; seemingly solid particles are in fact temporary local condensations of energy arising-out-of and dissolving-back-into the field. Similarly, Eastern metaphysics posit

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63 Capra (1975:143).
"consciousness" as the fundamental reality from which phenomena arise. Capra also compares this to the concept of qi:

The Neo-confucians developed a notion of qi which bears the most striking resemblance to the concept of the quantum field in modern physics. Like the quantum field, qi is conceived as a tenuous and non-perceptible form of matter which is present throughout space and can condense into solid material objects (...) Thus qi condenses and disperses rhythmically, bringing forth all forms which eventually dissolve into the Void. ⁶⁴

For Capra, modern physics and mysticism are "ways of knowing and seeing" -- methods for gaining access to the unified nature of reality veiled behind ordinary perception. Thus, the work of the physicist in the laboratory and the work of the mystic on the meditation cushion are thought to be simply two polar yet complementary approaches of understanding the ‘true’ nature of reality. As such, both activities are thought to bring about a radical change of perspective. In physics, this amounts to a scientific paradigm shift; and in meditation it is known as an enlightenment experience.

A comparison of quantum physics and mysticism allows for lending scientific plausibility for many seemingly impossible phenomena such as psychic abilities and spontaneous healing. For many, the convergence of such scientific theories and mystical insights lends credibility to more esoteric practices from eastern mystical traditions. This may in turn lead to a 'suspension of disbelief' and a willingness to dabble and believe in the “energetic” or “quantum” healing capabilities of disciplines such as acupuncture, yoga or tai chi.

Energy, self-cultivation, and spirituality

⁶⁴ Ibid (213-214).
Like Capra, New Age author Deepak Chopra MD applies East-West integral thought to advocate what he refers to as "quantum" mind-body medicine. In best-selling books such as "Timeless Mind Ageless Body," and "Quantum Healing," the biomedically trained Chopra weaves a modern New Age self-help metaphysics by combining eastern metaphysics with references to biomedical and scientific information including quantum physics, biochemistry, genetics and gerontology.

For Chopra, the quantum and mystical world-view should not merely affect ways of seeing, but affect ways of being; ultimately leading to a type of Foucaultian "care of the self." He begins by emphasizing the effect that awareness, intention, and beliefs have on the human physiology. Chopra contends that negative conditioned beliefs about old age will affect the levels of stress hormones and other physiological factors to actually speed up the aging process:

The biological process of aging does not have to be manipulated; the desired results can be achieved through awareness alone. In other words, meditation alters the frame of reference that gives the person his experience of time. At a quantum level, physical events in space-time such as heartbeat and hormone levels can be affected simply by taking the mind to a reality where time does not have such a powerful hold. The new paradigm is showing us that time has many levels and all are available to us in our own consciousness.65

Once linking awareness, intent, and belief with physiological realities, he continues by explaining the connection between daily regimen and "energy." Much like the Chinese Taoist traditions of self-cultivation (yangsheng) he offers guidelines in diet (such as organic vegetables), exercise, breathing, behavior, and emotions conducive to cultivating the proper "energy." Chopra thus makes a connection to the "energies" of

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65 Chopra (1993:33).
various esoteric traditions: the prana of yoga, qi of tai chi, as well as other similar concepts found in Sufism, and mystic Christianity. Similar to ancient Taoist and Yogic beliefs, in Chopra's view, the practitioner can not only avoid disease and lengthen one's life span but also "evolve" spiritually by maintaining or refining one's energy through these regimens. The care of one's "energy" is therefore related to both physiological and spiritual realms. Taking care of the body is correlated to having "good energy," and having "good energy" is subsequently correlated with spiritual balance or progress. In this way, "spirituality" is blended with the scientific explanations of "energy."

It is thus unsurprising to see the health food movement marketing such "energy" practices utilizing the same blended discourse of science and spirituality. A leading chain of organic foods stores, Whole Foods Market, has a section dedicated exclusively for such products as: yoga mats, tai chi videos, various books on "energy" as well as books on the benefits of raw juice diets, macrobiotics, colon cleanses, parasite cleanses, and other alternative health care practices. They are all understood within a paradigm of "holistic health."

The works of Capra and Chopra are representative of many others in a growing genre of popular books which concerns the cultivation of energy. Countless books on tai chi, qigong, yoga, or other "energetic" practices are being published at a dizzying pace to accommodate the "energetic" appetite of holistic consumers. Often with such scientific references to the quantum field, DNA, or electromagnetics, these books cater to the educated holistic consumer who is at once savvy to the ancient wisdom of mystics while

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66 It is interesting to note here that balancing one's "energy" is most frequently expressed as a "spiritual" concern, as opposed to a "religious" concern. This reflects the popular notion that "spirituality"--understood as the personal and transcendent element of any religion--is somehow more compatible with science than "religion" proper.
believing in the explanatory powers of science. It is within this context which the current popularity of "energy" flourishes.
CHAPTER 4

Conclusion Part I

The spread of Chinese medicine and its various global instantiations is a topic of growing academic interest. Although the increasing prevalence of the label "American acupuncture" suggests the emergence of a characteristically "American" rendering of Chinese medicine, very little work has been done to document the various North American instantiations of Chinese medicine. The work of Barnes—which has coined the term "American Acupuncture"--has been an exception. As Barnes has pointed out, one main characteristic of acupuncture in the US has been its psychologization due to the prevalence and rising popularity of psychological/psychotherapeutic discourses of health. Barnes' focus on psychologization is informative, but ignores a more fundamental characteristic in the American instantiation: the centrality of the concept of qi. The various ways in which qi is defined or understood is vital in understanding Chinese medicine's many North American instantiations, of which Barnes' psychological model is only one. Although Barnes' study rightly points out the occurrence of a psychological orientation towards the reception of Chinese medicine on the one hand, it ignores the scientific scrutiny with which it is also received.

As I have shown above, some American instantiations of Chinese medicine do not rely only on the psychological framework, but rather mainly on the biomedical. In a stricter 'more scientific' setting, (such as the NIH) qi stands out as an unknown substance or mechanism which needs quantification or explanation according to more 'scientific' or 'hard' standards: such as through double blind RCT testing or pharmacological protocols. Barnes' work lacks an in depth analysis of this aspect of American instantiations of
Chinese medicine—as a foreign method which faces legitimization by the scrutiny of biomedical standards and methods.

In distinction, the current paper foregrounds the centrality of qi as a locus of concern in American instantiations of Chinese medicine. By foregrounding the centrality of the concept of qi, and the efforts towards its cultural translation, I was able to illustrate opposite ends of the spectrum between 'hard' (biomedical) and 'soft' (psychological) renderings of Chinese medicine.

Yet, it should be pointed out the stark labeling of 'hard' and 'soft' instantiations of Chinese medicine are in reality not so clear. As exemplified in the differential biomedical acceptance of herbs, acupuncture and qigong, some elements of Chinese medicine were more easily explained in scientific terms and thus more readily accepted as legitimate and effective than others. In particular, herbs were most readily assimilated through the scientific language of chemical structure and dosage; acupuncture moderately so; while qigong offered the most difficulty in being scientifically explained, thereby making its legitimization quite problematic. In the former (herbs), the question of whether qi exists can be sidestepped through biochemistry, while in the latter (acupuncture and qigong), the possibility of the existence of qi can enter the equation. In most cases, however, the explanation of 'placebo' effects are favored over that of qi. Placebo effects are likely favored because they are readily translated into the biochemical correlates of psychology--i.e. neurochemicals produced through the patients' expectations or emotions. In contrast, the “integrative” assertion (that an as-of-yet unconfirmed substance called qi actually exists) challenges the established standards of reality as dictated by the 'hard' sciences and biomedicine. The works of Capra and Chopra
represent an increasingly popular counter-cultural current of such integrative thought which attempts to usher in a new scientific paradigm by blending the 'soft' (mystical and psychological models) with the 'hard' (scientific and biomedical). A metaphysical synthesis combining elements of psychology, eastern mysticism, and quantum physics is offered as a sort of alternative metaphysics to reconcile the fundamental philosophical differences between 'establishment science' and the various traditional and esoteric medicines included in the rubric of CAMs.

Although Chinese medicine may no longer be—as Scheid suggests—a "purely Chinese' phenomenon," it is uncertain whether the examples covered in Part I of this thesis cohere to the degree that merits a pronouncement of a characteristically 'American' Chinese medicine. The variety of ways in which qi is regarded seems to indicate that such a monolithic pronouncement would be strained at best. However, regardless of the variability in the American instantiations of Chinese medicine, future analyses will likely benefit from a closer focus on qi—how it is translated, explained, or assimilated.

In examining the intersection of both CAMs and integrative thought, I have attempted to show how qi figures prominently within both contexts. In the context of CAMs, qi is a substance whose efficacy and existence need to be explained within pharmacological and thus biochemical mechanistic parameters. Within the context of integrative thought, qi is understood within a new metaphysics of a 'quantum mysticism' integrating the insights of modern physics with eastern mysticism. The alternative metaphysics espoused is intimately linked to the holistic lifestyle, which has adopted "energetic" disciplines as a contemporary "care of the self." Due to the influence of both
CAMs and integrative thought, any future research on American instantiations of Chinese medicine should be understood in relation to these spheres, and their focus on qi.
Part II: Tacit and Embodied Elements of Chinese Medicine: Qi and Shen

INTRODUCTION

A comparison of academic accounts of Chinese medicine with its popular accounts reveals a considerable difference in the understanding of esoteric concepts such as qi and shen\(^7\). Academic accounts inevitably emphasize a textual and intellectual (theoretical) knowledge while popular accounts exhibit more emphasis on its somatic and embodied aspects (phenomenological experience). The distinction I make here between "academic" and "popular" accounts is loose. It is made in order to distinguish between works which 1). primarily work analytically with the body of theoretical knowledge in Chinese medicine (i.e. most academic accounts of TCM); and 2). primarily attempt to offer a descriptive and/or experiential account of the practice of Chinese medicine. The distinction I make may further be clarified by the epistemological bent of the account. For example Porkert, Sivin, and Farquhar are characteristic of academic accounts which relate a highly theoretical system of "knowledge" similar to that of western epistemology; whereas popular accounts such as Eisenberg's relate a more esoteric and embodied form of "knowing" or experiential knowledge. Admittedly, these differences between "academic" and "popular" accounts of Chinese medicine may partially be due to a sort of orientalism and a penchant for the exotic in popular accounts. Yet, personal communication with acupuncturists as well as students of TCM have confirmed a gulf between the textual representation of the theories in TCM as opposed to the "knowing"

\(^7\) Shen is roughly translated as 'spirit.' Although not as conceptually prominent as qi for most modern schools of Chinese medicine, the abundance or lack of shen is also believed to play a role in the health of the patient.
involved in practice. Indeed this gulf has also been addressed by Farquhar (1996) whose work I will critique below.

Considering the centrality of the study of ancient texts in the pedagogy of much of Chinese medicine (especially in TCM), an analysis of the structure of the theoretical system of knowledge is no doubt an important site of study. Even so, the tacit and embodied aspects of Chinese medicine are severely under-represented in scholarly representations, presenting an overly intellectualized account of knowledge in Chinese medicine as a whole. In Part II of the thesis, I attempt to make a connection between the ethnographic methodological difficulty of gaining an understanding of such types of knowledge, to the current scholarly debate about the academic tendency of representing a monolithic doctrine of medicine in China based on the official, state sanctioned form termed "Traditional Chinese Medicine" (TCM).

In chapter 5, I briefly describe the creation of TCM, and review the academic debate concerning its representation. Chapter 6 explores the difference between "knowledge" and "knowing" through exploring the concepts of "tacit knowledge" and "orthopraxis." The ideas of tacit knowledge and orthopraxis are employed to bring into focus the difficulty of producing academic knowledge about a skill or ability. Chapter 7 discusses the relevance of phenomenology and the embodiment literature in anthropology and surveys the approach of several anthropologists in this field.

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68 Polanyi (1966).
69 Carruthers (1999).
CHAPTER 5

TCM—Standardization of Knowledge:

Much of the academic research on Chinese medicine has largely focused on the
standardized, and state-sanctioned form commonly referred to as "TCM." Yet, in actual
practice, Chinese medicine varies widely from the more 'official' and 'scientific,' (like
TCM) to the more 'folk,' and 'spiritual,' (like qigong healing outside of the TCM context).
Thus, works which focus on the theoretical system of TCM71 have been critiqued as
emblematic of the academic tendency to monolithically equate the whole of Chinese
medicine with the government sanctioned official practice known as TCM. This over-
representation of TCM results in a highly intellectualized representation of knowledge in
Chinese medicine, and a marked absence--or at best only a perfunctory description--of
more esoteric elements of knowledge embodied in concepts like qi and shen. The
monolithic tendency towards TCM has been critiqued by scholars such as Unschuld
(1985), Hsu (1999), and Scheid (2002), who believe that TCM, although politically
dominant, should not be assumed as a model for the entire field of Chinese medical
practices. As a historian, Unschuld has preferred to understand TCM as only a short
period in the long and varied history of thought in Chinese medicine. Hsu, from a
sociological perspective, has suggested different "styles of knowing" between official
TCM, the practice of laozhongyi72 and the practice of qigong masters. Scheid has
emphasized the inherent plurality and heterogeneity of Chinese medicine, and the

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70 Jackson (1989), Desjarlais (1992), and Ots (1994).
71 For example, Porkert (1966), Sivin (1987), Farquhar (1994).
72 Laozhongyi (senior doctor) refers to the experienced practitioners of Chinese medicine which were
educated before the instantiation of official TCM. The term is often used to describe such doctors working
outside the state-sanctioned TCM institutions, often in private practices. See Hsu (2000: note 11) and for a
problem of reification of the official TCM discourse; emphasizing the political aspects of the term TCM and critiquing the tendency to present it as a homogeneous topic of study. As such, there has been a lively academic debate as to where the focus of the scholarly study of "Chinese medicine" should lie. Yet, despite the efforts to deconstruct the academic reification of TCM discourse and shift the topical focus to non-TCM types of Chinese medicine, scholars continue to ignore the more subtle elements of knowledge that lie outside of official and textual knowledge.

TCM was established in the 1950's by Mao's orders to modernize and systematize the variety of idiosyncratic regional and individual practices of Chinese Medicine. By standardizing the varied repertoire and theories, the aim was to make Chinese medicine more scientific and thus more comparable--ultimately more compatible--with western biomedicine. This transformation included the pedagogical dimension; the transmission of knowledge shifted from the apprenticeship model to a college classroom model. To enable standardized transmission of Chinese medical knowledge, terminology was also standardized. In the process, certain concepts were considered "non-scientific," "feudal," or "backwards" and thus largely eliminated from its pedagogy (e.g. the concept of 'spirit' or shen). As knowledge became standardized and parceled out in the institutional college setting, certain esoteric or subtle elements of the practice were less likely to be transmitted. The opinion that the "art" or "subtlety" of Chinese medicine has been lost can be seen in the work of Hsu (1999) in the attitude of laozhongyi who consider their version of Chinese medicine to be "real" as opposed to the standardized education of TCM. This opinion is also apparent in Winn (1999), an American practitioner of Chinese medicine, as he suggests that: "[the] Chinese tendency to excessively 'somatize' all
mental and emotional complexes is the result in my opinion of the partial 'spiritual lobotomy' that classical Chinese medicine underwent by Maoist designers of modern TCM." Winn further notes:

"TCM curriculum in China is NOT truly 'traditional.' Some jokingly call TCM 'Truncated Chinese Medicine' because it has in practice removed much of the spiritual aspects of 'shen' (soul or spirit) therapy mentioned in the classics. Modern TCM may pay lip service to shen theory, but it is largely 'needle by number' protocols (...) The acupuncture points have the old spiritual names, but no spiritual healing is mentioned in modern textbooks."73

Partly, these changes were pragmatic, and played out according to the relationship between the pedagogical and epistemological. That is to say, changing the contents and pedagogy of knowledge was concomitant with the process of reconceiving the nature of knowledge itself. Due to the pragmatics of standardized education, knowledge (in theory at least) could no longer be esoteric and opaque,74 as is characteristic of Classical Chinese thought. In order to be more scientific, knowledge had to be akin to a transparent container, allowing its contents to be seen axiomatically in the light of provable, or unprovable. Whereas the former apprenticeship pattern of pedagogy conceived knowledge as something transmitted through close personal contact with the master or teacher, to learn within a standardized college classroom setting, knowledge had to be transmissible in terms of specific pieces of information. Thus, aside from being

73 Winn (1999:19).
74 I say "in theory" because even in current standardized TCM education, the knowledge contained in the terse aphoristic verses of classic cannon which students are required to study (e.g. Su Wen) are still opaque to a certain degree. They are first memorized rote, only later to have greater meaning in the context of clinical experience.
pejoratively labeled as 'feudal' or 'backwards,' esoteric concepts like shen could not fit into this standardized framework due to the pragmatics of standardized pedagogy.

However, this is not to say that such changes were simply in service of standardization of knowledge, occurring in an ideological vacuum. As Farquhar and others have noted, the political motivation of this epistemological shift should not be overlooked. TCM was not created and promoted simply as a practical and inexpensive means of healthcare. In order to be taken seriously by biomedicine and ultimately a western audience in the face of China's increasing communication with the west, Mao felt the need to revamp the image of Chinese medicine from a seemingly incoherent and outmoded collection of idiosyncratic cures, to a science with a rational and coherent underlying theoretical system developed over millennia of collective medical experience. As such, the creation of TCM and its reflexive discourse was in large part motivated by and catered to the western gaze.

The creation of TCM was often portrayed as a rupture from 'pre-modern and unscientific' to 'modern and scientific'. Thus the extent to which the change to TCM was actually as abrupt as to be considered a rupture may have been exaggerated. While the creation of TCM did in fact systematize and standardize knowledge to a certain degree, the historical and political context of its synthesis may point to a degree of reification in asserting such a discontinuity of thought in the official discourse of TCM.

Yet, at the same time, the continuity with the "ancient wisdom" of the sage-like forefathers of Chinese medicine is also often emphasized in the political discourse of TCM. And in actual practice, TCM may still share many continuities with the 'old' Chinese medicine. Thus, some of the self-reflexive discourse pull in opposite directions,
as does the actual retaining or casting off of idiosyncratic practices and methods. This has created confusion for scholars who attempt to separate the rhetoric from the actual current practices of TCM or Chinese medicine. To complicate matters further, while the official discourse may have dismissed certain esoteric terminology, it is possible that some of these esoteric elements are preserved in the embodied skill of being a practitioner of Chinese medicine.

Scheid's argument for the heterogenous nature of Chinese medicine hinges around these problems. He suggests that there is a parallel aspect of this reification of TCM implicit in the academic process of representing TCM. It occurs as an artifact of the pragmatics of argumentation, reflecting the specific academic intentions of the scholar—for example, which theoretical problem the ethnographer seeks to address—rather than accurately describing the actual plurality and heterogeneity involved in the overall practice of Chinese medicine.

This tension between the scholars' intellectual agenda and the experience of the 'natives' is highly apparent in Farquhar's struggle with understanding how Chinese medical doctors put their medical knowledge to practice—what she calls "knowing practice." It is worth quoting at length:

I sometimes pointed out apparent contradictions between textbooks or clinical scenarios in which conflicting explanations might equally be plausible. My question often was "How do doctors know which statement or explanation is correct?" Invariably the answer was "We take experience (jingyan) to be our guide," or, rebuking me for my literal-mindedness, "We take practice to be the main thing." (...) The long process in which I came to accept these responses as "the answers" for an ethnographic study of Chinese medicine has led to the structure and argument of this book. I began to realize as I gained more familiarity with Chinese medical textbooks, clinical practices, and technical literature that my questions had been forged in an intellectual environment quite different from that occupied by my teachers in Guangzhou. Their answers were not so much evasive as they were effective in casting doubt on the value of my
questions. By following their advice and altering the abstract epistemological bent of my original interests, I was able to perceive these notions of practice and experience, not as residual categories full of idiosyncratic, repetitive, or imponderable miscellany, but as complex generative formations in their own right, 75 (emphasis mine).

If we take Farquhar's confession to heart, the above quote reveals her epiphany in shifting from her own intellectual concerns (her 'abstract epistemological bent') to realizing the importance of 'experience' and 'practice' in the ways that it is conceived for the practitioners: that is, relative to the millennia of medical archives against which their 'experience' and 'practice' is measured and honed as a sort of habitus or logic of practice.

However, as Hsu (1999) rightly points out, Farquhar still does not do enough in the way of altering her abstract epistemological bent. In a critique of Farquhar, Hsu notes that, "although Farquhar calls her book Knowing Practice, her model provides an idealization of the clinical encounter rather than an account of observed ways of 'knowing practice'. The model nicely reflects the claim of doctors in government-run institutions...[attributing] more authority to written texts than to fieldwork observations, anecdotes of which tend to be recorded only in footnotes." 76 Further, in a footnote, Hsu continues, "Farquhar's model strikes me as being so much in tune with the intentions of TCM textbook compilers that it would not be surprising to find it incorporated in their future teaching materials." 77 In other words, Hsu believes that the process of clinical encounter and the 'knowing' based on 'experience' and 'practice' described by Farquhar is still too abstract, intellectual, and systematic--"limited to the medicine taught and practiced in government institutions."

75 Farquhar (1996:2).
76 Hsu (1999:6).
77 Ibid (note5).
The study of Chinese medicine seems to be plagued by at least two intertwined registers of a process of reification which makes its scholarly study extremely tricky. These reifications hinge around the alleged standardization, systematization, modernization and 'scientization' in the creation of the official system of TCM. The first level of reification is the consequence of the politically motivated revamping of Chinese medical knowledge. Here it is apparent that there is an attempt to reconceptualize the nature of knowledge itself as more standardized, systematic and thus scientific. And thus it is also represented as such in its official discourse. Yet, the actual practice of physicians and the ways in which they 'know' seems to contradict this claim. The second level of reification is a consequence of scholars' attempts to delineate manageable objects of study. These instances of reification lend a coherence and clarity to the difference between pre-and post-1950's medicine by understanding it in terms of a rupture. Scheid has objected to this reification, claiming that in practice, "official" and "unofficial" methods and theories are flexibly integrated. Hsu, has similarly suggested that an anthropological study of knowledge in Chinese medicine must not simply reiterate the textual discourse of TCM, but remain truthful in representing what was experienced during fieldwork--this would produce an account of 'knowing' rather than 'knowledge'. Farquhar's work attempts to include notions of 'experience' and 'practice' (which the natives often quote) as the element of flexibility to produce an account of 'knowing' that goes beyond the systematic and textual 'knowledge.' Yet from Hsu's perspective, Farquhar's notions of 'experience' and 'practice' are simply further textual and systematic explanations to account for the flexibility and variability of TCM practice.
Both methods—between those who work with a coherent discursive entity of TCM or those who emphasize plurality—have their pros and cons. On the one hand, it is clear that Chinese medicine in its institutionalized form has indeed to a large degree changed the structure of knowledge—one that values a more transparent terminology and systematic theories. This lends accuracy to accounts such as Farquhar's which situates the importance of "practice" and "experience" within a highly textual and systematic theoretical discussion. Insofar as practitioners are textually oriented, their understanding will be relative to the importance of ancient body of cannonical texts and commentaries. On the other hand, it is also clear that despite the fact of standardization, there continues to exist variations outside of the realm of TCM, such as with laozhongyi and qigong masters. This lends credence to the approaches of those such as Hsu, and Scheid who wish to see outside the official context of TCM.
CHAPTER 6

Knowledge and Knowing:

I have thus far focused on the standardization/systematization of knowledge (in both epistemology and pedagogy), and the reification of official discourse as the crux of the lively debate concerning Chinese medicine. Hsu has suggested that despite the official discourse of systematization and standardization of knowledge, ethnographic fieldwork reveals a discrepancy between official (textual) representations of knowledge, and knowledge in practice. I now focus on her attempt to differentiate textual knowledge and a more dynamic experiential knowledge.

In analyzing the different nuances in the concept of spirit (shen) among different styles of Chinese medicine, Hsu (2000) makes a useful distinction between "knowledge" and "knowing." According to Hsu, "knowledge" consists more of "acquiring contents of knowledge," e.g. from book learning; whereas "knowing" arises out of lived experience. Here again, in critiquing Farquhar's heavily textual account of knowledge of Chinese medicine she insists that, "even in scholarly medical traditions where the literature is preeminently important for knowing practice, the meaning of specific terms is best assessed by what people do with them and not merely in an analysis of texts."

She claims she is therefore more interested in "how people know rather than what they know. Hsu refers to her multi-sited ethnographic experiences with a college of TCM, a reading group lead by a laozhongyi, and a qigong master. Each context has its own "style of knowing" as made apparent in various ways in which the word shen was given meaning. She delineates these ways as denotation, polysemy, and vagueness.

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According to Hsu, in the structured and systematic context of the TCM college knowledge is based on *denotation*: that is to say, the meaning of *shen* is straightforward and diagnostic, listed as observable symptoms which indicate a presence or lack of *shen* in the patient. In the context of the *laozhongyi* reading group, knowledge is based on *polysemy*: that is to say, *shen* was given several different interpretations depending upon the context reflecting the *laozhongyi*'s own idiosyncratic views. In the context of the *qigong* master's clinic, knowledge is based on *vagueness*: that is to say, the meaning of *shen* was vague, and the determination of whether or not the patient had improvements in his *shen* seemed more connected to the charismatic ability of the master to rally an agreement amongst those present in his clinic. Thus, Hsu attempts to rescue experiential "knowing" from the overly textual academic tendencies to represent "knowledge," (the contents of knowledge) by paying close attention to the social context within which the term is used.

Although Hsu's research is insightful in establishing the fact that the same term can have different connotations depending upon the social context, she falls short in her claims of describing the process of "knowing" *shen*. Hsu's focus is actually not so much on "how people know" as she claims, but rather *how that knowing is established in the social setting* through the use of different types of language. In other words, Hsu's analysis is really more about authority and the social construction of expert knowledge rather than *how* one actually comes to *know shen*. It seems to bracket the phenomenology of *knowing shen*, to focus on the use of language in explaining *shen*. Therefore, although seemingly 'objective' as she offers several forms of meanings of *shen*.
(denotation, polysemous, vague) in the various contexts of their usage, her observation is
trapped within the same epistemological framework as Farquhar's in so far as she does
not delve into the non-semantic possibilities of knowing shen.

Even though Hsu' uses words like polysemous and vague, they are still
conceptualized from the perspective of an epistemology in which meanings are usually
clear. Her terms polysemous and vague are spurious in that they sound value neutral.
That is to say, the polysemous or vague usages of shen are somewhat 'defective' in Hsu's
mind in so far as she is not able to understand them like they are understood by the
laozhongyi and qigong master.\textsuperscript{80} She does not entertain the possibility that the structure
of knowledge itself is not commensurate. In her ethnography, Hsu's initial apprenticeship
with the qigong master is short lived. It is discontinued and she becomes more of a fly-
on-the-wall observer. This may be evidence that the qigong master did not think that Hsu
was capable of learning how to "know" as he does, due to her intellectual and semantic
orientation towards knowledge. In order to understand the how of "knowing," the
embodied process of acquiring knowledge must be focused on more than the ways in
which it is expressed linguistically in different social settings.

\textit{Learning: tacit knowledge and orthopraxis}

Before we can delve into how one comes to know, we must clarify why there is a
problem with Hsu's 'epistemological bent'. Simply put, the problem lies in the fact that
her epistemology is positivistically biased towards the semantic "knowability" of
knowledge. This is related to the issue of the degree to which knowledge of something

\textsuperscript{80} Although not explicitly stating so, Hsu's seems to diminish laozhongyi's and qigong master's 'knowing'
as she uses words like 'idiosyncratic' and 'charismatic' to describe them.
can or cannot be articulated, and similarly the degree of clarity with which this knowledge can be communicated or transmitted as a teaching. Philosopher Michael Polanyi (1966) offers a useful critique of the positivistic account of the transmission and acquisition of knowledge in his concept of "tacit knowledge."

An instance of tacit knowledge is the ability to perform skills without being able to articulate how they are done. Polanyi points out that the intellectual knowledge of a skill, the ability to perform it, and the ability to articulate it is not necessarily one tidy bundle. For example, a newcomer to bike riding may study the physics and dynamics involved in riding a bike by reading physics books, but such knowledge would not enable him to hop onto a bike and ride it immediately. Conversely, a highly skilled rider (such as a world class downhill mountain biker) may be successful in staying atop his bike in the most extreme terrain while being unable to articulate the subtleties in the dynamics involved. What is implied by this example is that there are certain aspects of knowledge which defy clear description.

Science studies scholar H.M. Collins clarifies this point in his account of the tacit knowledge involved in even highly 'scientific' endeavors such as the process of building a TEA laser in a physics lab.

In sum, the flow of knowledge was such that, first, it traveled only where there was personal contact with an accomplished practitioner; second, its passage was invisible so that scientists did not know whether they had the relevant expertise to build a laser until they tried it; and, then, it was so capricious that similar relationships between teacher and learner might or might not result in the transfer of knowledge. These characteristics of the flow of knowledge makes sense if a crucial component in laser building ability is 'tacit knowledge.'

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81 Collins (1992:56).
Collins' distinction between an 'algorithmical model' and an 'enculturational model' of knowledge is useful in understanding tacit elements of knowledge. In an 'algorithmical model,' knowledge is conceived as "a set of formal instructions, or pieces of 'information', about what to do in a variety of circumstances. This model views knowledge as the sort of information that enables a computer to carry out its programmer's intentions"; while in the 'enculturational model, knowledge is understood "as being like, or at least based on, a set of social skills. It is what the child or the stranger must know before they understand what it means to go on in the 'same way'…"  

Collins notes that despite the detailed 'algorithmical' instructions given to the physicists, there were so many exceptions to rules that without the presence of accomplished laser builders to troubleshoot, they were somehow unable to build the seemingly straightforward piece of machinery. In addition to exceptions to rules, there were also unwritten rules that were more akin to a type of socialization--more like ways of thinking and intuiting that could not be defined as a set of formal instructions. Tacit knowledge, thus refers to a knowing how that cannot be expressed as a set of formal instructions.

This idea of tacit knowledge can be fruitfully brought to bear upon Hsu's knowledge of shen. Hsu's denotational definition of shen in the official TCM college classroom setting is comparable to Collins' 'algorithmical' model of knowledge. Here, shen is understood in terms of a set of formal instructions: "the patient has shen if the following symptoms are observable..." Hsu's polysemous definition of shen begins to approach Collins' 'enculturational' model as the laozhongyi's various definitions of shen

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82 Ibid (57). Although he posits that the 'enculturational mode' to be 'similar to or based on' social skills, I believe that he is not limiting himself to the social realm. His ethnography reveals that in the lab, what seemed most essential to tacit knowledge was not at all 'social skills' but a way of thinking, perceiving, or
depends highly upon context and reflects his seemingly idiosyncratic interpretations of the classic medical cannons. Thus, to gain the laozhongyi's context dependent understanding of shen, one must study in close contact with him, to acquire a sort of socialization that allows the disciple to think like the laozhongyi. Finally, Hsu's vague definition of shen seems to be a form of tacit knowledge as it too requires close personal contact to acquire. However, it is unclear whether the vague knowledge of shen is 'enculturational' in the same way as the polysemous definition of shen. There seems to be a fundamental difference in the type of knowledge involved with the qigong master's knowledge of shen compared to that of the laozhongyi. This difference is most likely due to the heavily embodied nature of qigong. In qigong, an understanding of concepts like qi and shen are informed by actual practice involving the coordination of mind, body, and breath. They are understood less as abstract theoretical concepts but 'directly' sensed or intuited through perceptive abilities honed by qigong practice. This difference of embodiment will be discussed in detail later.

If Hsu does not consider the possibility that there are tacit aspects of knowing shen, words such as polysemous and vague are conceptualized from the bias of a positivistic epistemology in which meanings are usually clear. That is to say, within a positivistic framework, the purpose of assigning meaning is to establish its outer contours; the idea of "meaning" itself implies clarity rather than ambiguity or vagueness. Fundamentally, it presupposes or 'prefers' clarity and completeness. Thus, from this perspective, ambiguity or vagueness are aberrant or incomplete forms of meanings. This is in stark contrast to the preference for vagueness found in much of Chinese thought,
especially Taoism. Taoism "places emphasis not so much on what entities are as how processes occur, it expresses the manner of changes, rather than the 'Being of entities,'" and thus "vagueness informs, as a kind of inchoate presupposition, the process-oriented worldview expressed in Laozi."83 Therefor, Hsu's usage of the terms polysemous and vague are spurious in that they sound value neutral, when in fact, they have a specific implication due to her particular semantic 'epistemological bent.' With this understanding we can restate Hsu's analysis as implying the following: where the knowledge of shen is more 'incomplete,' the more one has to rely on charisma or patriarchal authority to establish that one in fact 'knows' shen.

All three of Hsu's contexts are judged from this perspective which does not consider the tacit elements in 'knowing.' Thus, although words like polysemous and vague seem to objectively describe the "knowing" (as opposed to the "knowledge") of practitioners, in actuality it returns back to the realm of "knowledge" as it is an 'external' description and classification based on semantics. By 'external' I point to the fact that Hsu confesses that she never "knew" shen like these practitioners "knew" shen: "I observed people knowing shen, as a fieldworker, but I cannot claim that I know shen as they do."84 If Hsu did not learn to "know" shen as do her informants, then to be more precise, she is actually creating an 'external description' or analysis (a knowledge) of the process of knowing. Although participating in all three contexts, she is approaching "knowing" shen from the protocol of a scientist in which knowledge presupposes a split

83 See Coutinho (2002:409). "Tao" for example in Laozi's (Lao Tzu) Tao Te Ching is expressed as "the way or ways of the natural world, [and] has a strong primary sense expressing modes of action and modalities of behavior that is not captured in the conception of an underlying substance or an atemporal form." (409). Thus, understanding in this sense is spoken not as definite acquisition of clear meanings but more of grasping the underlying essence of something. To understand something is to understand its "Tao" which is never clear, as expressed in the Taoist maxim, "the Tao that can be spoken is not the true Tao."
between the observer (subject) and observed (object). It is important to point out that *polysemous* and *vague* are descriptions of how these knowledges appear to Hsu as an observer; this is not necessarily the same thing as *how* these practitioners *know*. For instance, the *qigong* master may not characterize his own "knowing" of *shen* to be vague, but rather that the skill of "knowing" *shen* is a subtle one, involving embodied abilities that can only come with experience. To reiterate, what is vital to understanding *how* one "knows" is exploring how they have *developed the skill to know*.

Here I introduce the concept of "orthopraxis", a category developed for the comparative study of religions. The term orthopraxis was introduced to distinguish between the explication of cannonical texts (orthodoxy), and "a set of experiences and techniques, conceived as a 'way' to be followed, leading one to relive the founder's path to enlightenment."\(^{85}\).

Orthopraxis is a concept not unique to religion. Any craft develops an orthopraxis, a craft "knowledge" which is learned, and indeed can only be learned, by the painstaking practical imitation and complete familiarization of exemplary masters' techniques and experiences. Most of this knowledge cannot even be set down in words; it must be learned by practicing, over and over again. Monastic education is best understood, I think, on this apprenticeship model, more like masonry or carpentry than anything in the modern academy. It is an apprenticeship to a craft which is also a way of life. It is "practice" both in the sense of being preparation" for a perfect craft mastery which can never fully be achieved, and in the sense of "working in a particular way."\(^{86}\)

This idea of orthopraxis is useful in further highlighting the problem of Hsu's semantic approach. If *shen* is a form of tacit knowledge which is only accessible through "the painstaking practical imitation and complete familiarization of exemplary masters' techniques and experiences," Hsu's attempt to provide a description of how one 'knows'

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\(^{84}\) Hsu (2000:198).
\(^{85}\) Carruthers (1999:1).
\(^{86}\) Ibid (2).
*shen* can only be successful in so far as she herself undergoes this same orthopraxis. Considering seriously this concept of orthopraxis requires us then to consider the importance of the ethnographic method of participant observation. In this respect, Hsu's efforts towards orthopraxis are commendable as she places herself as a student in each setting. Yet, despite her good intentions, there is an imbalance in her approach. While she fares well in the TCM college, and reasonably well in the reading group, her abilities as a student in the *qigong* master's setting is questionable. As the *qigong* master did not see the appropriate progress, Hsu's discipleship is short lived; it was discontinued in the early stages of training. The first two settings were much closer to her training as an academic scholar; thus she was able to do well in these settings. It should be emphasized that the 'orthopraxis' of these settings involved the reading of texts, memorizing definitions, attending classes and discussion groups, honing intellectual (and to a smaller extent) interpretive skills—all similar to the type of training she has received previously. However, the orthopraxis of *qigong* involved a heavily embodied practice which involved learning how to somatically feel *qi*, and intuitively sense *shen* among other such esoteric skills. Thus, her intellectual and semantic orientation towards knowledge combined with her insufficient embodied training of *qigong* does not provide a fair experiential footing to assess the 'knowing' of the *qigong* master. It is very likely that she did not undergo a sufficient degree of orthopraxis to be able to perceive or appreciate the tacit aspects of *shen*. 
CHAPTER 7

*Embodiment and Phenomenology*

Considering the role of orthopraxis in accessing tacit knowledge brings us to the academic literature of embodiment and the role of phenomenology in ethnography. The emphasis placed on practical knowledge—a knowing how—in the concept of orthopraxis parallels the insights of Maurice Merleau-Ponty's (1964) phenomenology expressed in his maxim: "Consciousness is in the first place not a matter of I think but of I can." For Merleau-Ponty, knowledge is not an abstract process of thinking occurring in a vacuum, but rather is contingent and intentional, taking place within the horizons opened up by the primordial act of perception. This act of perception is necessarily embodied as the perceiver is not a disconnected and pure thinker, but always already an involved body-subject like Heidegger's being-in-the-world. Although similar to the anthropological debate which points out the inherent "situatedness," or "complicity" of the ethnographic researcher in his field site, my focus grasps at a similar relation but at a more perceptual and physical level of being. On a very fundamental and pragmatic level, the type of body one has affects how one perceives. Orthopraxis as a means to cultivate tacit knowledge then, can also be understood as a bodily practice which cultivates a specific type of body which in effect fine tunes the perception of the practitioner towards specific phenomena. For an anthropologist attempting to gain an understanding of tacit elements of knowledge, the re-working of her own body through orthopraxis is a necessary process.

Laughlin et al. (1983) have proposed a similar thesis for the anthropological study of alternate phases of consciousness (or "transpersonal anthropology"). They suggest that

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88 Marcus (1997).
although western society posits only one "normal" state of consciousness and label any others as deviant or false (e.g. "psychotic" "dillusional," "unconscious," ) most human societies operate upon multiple realities--they are "polyphasic."\(^{89}\) These altered states of consciousness are often accessed through mystical and esoteric practice such as trance, meditation, dreaming, and shamanism. Laughlin et al. suggest that cultures which integrate multiple realities can only be meaningfully understood by anthropologists who are willing and able to themselves enter these altered states of consciousness. Yet, their work diverges from the current paper in that their focus is more psychologically oriented. They understand the process of entering altered states of consciousness as resulting from a "durable yet flexible ego structure"--basically a 'mind' which is at the same time open enough and capable of withstanding severe shifts in perceptual experience. Further, they seem to attribute the acquisition of knowledge to a mental 'shift' in consciousness, rather than through a fundamental change which is thoroughly embodied through orthopraxis.

In his work on shamanic healing in Nepal, Desjarlais (1992) also relates the importance of entering a trance state for himself in order to achieve a knowing from first-hand experience. However, Desjarlais critiques the previous anthropological literature on trance, doubting these authors' presumption that the ethnographer can ultimately grasp the trance experience and therefor achieve a carbon copy of the indigenous worldview. Instead, Desjarlais believes that one can only achieve a partial understanding of the natives' worldview, since entering trance will tend to reveal the ethnographer's own cultural and social conditioning. At best, the ethnographer can only approach the native experience by adopting the general bodily postures and coordination of the native body in

its daily routine. For Desjarlais, ultimately, the ethnographer achieves a knowledge that is "hybrid, caught in a no-man's-land betwixt and between cultures, learning something of a visited way of life yet relying heavily on [one's own]."90 But Desjarlais sees this as a necessary and even useful situation for anthropological knowledge:

Perhaps it is precisely this clash between world-views, in the tension between symbolic systems (how reality is defined, body held, or experience articulated), that some anthropological insights emerge...by participating in the everyday life of a society distinct from one's own, an ethnographer confronts and slowly learns (often tacitly but always partially) patterns of behavior previously unfamiliar to his or her body. In my experience, it is through this behavioral reworking that the differences characterizing two forms of life become most apparent; novel ways of moving, talking, and interacting contribute to a visceral appreciation of the forces that occasion those actions.91

Desjarlais notices what exactly he has learned through this altered use of his body, only when he is placed back within the daily life of an academic, confined to stiffly sitting at the computer and typing his book. He relates: "when I reviewed my field notes on returning to the US, I was surprised to find they did not embody the more intangible dimensions of what I had learned--the tacit "habitus" of Yolmo actions--so much as my body had noted them, viscerally, as a sponge soaks up displaced water."92 The implication here is that certain aspects of "habitus" may be best experienced and understood in ambiguous, bodily, visceral terms, rather than in explicit symbolic, intellectual terms as theorized in academia.

Phenomenological anthropologist, Michael Jackson (1989) expresses a similar view in pointing out the inappropriateness of attempting to decode bodily disciplines using linguistic and semantic models: "the subjegation of the bodily to the semantic is

empirically untenable. In the first place, (...) thinking and communicating through the body precede and to a great extent always remain beyond speech,"\textsuperscript{93} and, "insofar as the body tends to be defined as a medium of expression or communication, it is not only reduced to a status of a sign; it is also made into an object of purely mental operations, a "thing" into which social patterns are projected."\textsuperscript{94} Thus, he feels that, "the phenomenological anthropologist's goal is to avoid the tendency to always look for 'something other' in the physical practice: for instance, 'social solidarity,' 'functional equilibrium,' 'unconscious structure.'\textsuperscript{95} Although not explicitly saying so, the work of anthropologists like Desjarlais and Jackson imply that the more embodied the culture in question, the more open to (and eventually trained in) embodied experience the anthropologist must be in order to be able to 'soak up' this embodied basis of habitus. Thus, an overly cerebral anthropologist with no bodily intentions may miss important aspects of the culture being studied.

To counteract such an overly cerebral approach to anthropology, Csordas (1994) distinguishes a phenomenologically based embodied approach from earlier non-phenomenological works on the "anthropology of the body." These previous works likened the body to a text--as merely an object of culture upon which symbols could be inscribed. This symbolic understanding analyzed the body and its processes from a linguistic and semantic perspective and ignored the importance of the "lived" bodily experience. In contrast, embodiment discourse places an emphasis on "lived" somatic experience and understands the body not as a passive object of study, but as an active,

\textsuperscript{91} Ibid.
\textsuperscript{92} Ibid (29).
\textsuperscript{93} Jackson (1989:122).
\textsuperscript{94} Ibid (123).
culture-generative methodological starting point—what Csordas calls the "existential ground of culture." In his notion of "somatic modes of attention," Csordas posits a specific type of attention involving embodied feelings in his observation of spiritual healers. Somatic modes of awareness involves an attention to one's own somatic sensations—an "attending to" the body—along with an attention to the somatic feelings of others through a somatic awareness of one's own—an "attending with" the body. Thus, in the case of charismatic catholic healers, the healer's attention to his own body and the sensations throughout would alert him to the location and nature of discomfort or disease in the bodies of the parishioners.

Similarly, in his attempt to gain such a phenomenological and embodied understanding of qigong, Ots (1994) advocates the importance of "experiencing participation." He believes that having entered the qigong group as a practitioner of qigong enabled him to feel the highly embodied and emotional aspects of qigong (including the sensation of qi and its relation to repressed emotions) through his "lived-body"—what he calls "Lieb":

I argue that it is time to reconsider our epistemological tools: the Lieb cannot be thought of, it must first be experienced. This calls for an approach in Lieb research where one goes beyond participant observation—"experiencing participation" would be more to the point (...) after a short time, I tranced myself. I am convinced that experiences like these helped me to understand better the liebly basis of frequently used Chinese terms. This includes the well-

95 Ibid (127).
96 "the body is a biological, material entity, while embodiment can be understood as an indeterminate methodological field defined by perceptual experience and the mode of presence and engagement in the world. As applied to anthropology, the model of the text means that cultures can be understood, for purposes of internal and comparative analysis, to have properties similar to texts (Ricoeur 1979). In contrast, the paradigm of embodiment means not that cultures have the same structure as bodily experience, but that embodied experience is the starting point for analyzing human participation in a cultural world." (1993:135).
known symptom and feeling of *xiongmen* (thoracic depression (Ots 1990b)) which practitioners reported suffering prior to their engaging in *qigong* practice.  

Ots' embodied practice or "experiencing participation" of *qigong* allowed him to understand tacit elements of the experiences of *qigong* practitioners. Ots' method is also based on the phenomenology of Maurice Merleau-Ponty. According to Merleau-Ponty's (1962) phenomenological understanding of perception, objects are not pregiven: rather, one's 'attention' constitutes objects out of an indeterminate horizon. In other words, the act of perceiving something gives a formerly indeterminate field its countours and establishes it as an object of perception. For Merleau-ponty, the body is important as the organ of perception: insofar as the body has particular characteristics, it will have particular possibilities and tendencies of perception. In the case of Ots, his willingness to participate in the orthopraxis of *qigong* allowed him to cultivate a particular body (suited towards the practice of *qigong*) which in turn allowed him to perceive the somatic or bodily basis for "thoracic depression" (*xiongmen*).  

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CHAPTER 8

Conclusion Part II

As I have shown, an overly textual analysis misses out on much of the 'tacit' elements of understanding involved in "knowing." Knowing differs from knowledge in that it entails practical acquisition of skill. For example, for practitioners of qigong, the understanding of qi depends largely on the acquisition of somatic or embodied knowledge. This kind of knowledge goes beyond rote memorization or intellectual comprehension of theory. As it involves the acquisition of skill it is a form of praktyognosis—a knowing how—derived from orthopraxis. The more embodied a discipline is, the more embodied its knowledge will be; thus requiring the scholar to also undergo orthopraxis and achieve a certain degree of embodied experience. This is not to say that the work of previous scholars are in error; textual analysis is undoubtedly an important aspect of the academic study of Chinese medicine, especially within heavily textual schools such as TCM. These representations are accurate to the degree that there are ostensibly schools and practitioners that take a more intellectual approach to knowledge.

However, if we are to earnestly follow through on the critiques of the study of Chinese medicine to include more than just TCM and include other less- "official" or "scientific" schools and modalities, the embodied and tacit aspects of qi need further elaboration. Such an account should not only further an understanding of "knowing" in purportedly less systematic or scientific forms of Chinese medicine, but also offer a basis for comparison with TCM, and ultimately enable a framework which considers them side by side.
BIBLIOGRAPHY


Winn, M. (1999) "Are Western Body-Minds Demanding A New American Qigong?" Qi-


