Spirirtual Concepts in Therapeutic Touch

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Spiritual Concepts in Therapeutic Touch

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Abstract

This work examines the partial acceptance by the Western medical establishment of Therapeutic Touch as a form of medical treatment in Western orthodox medicine. The primary focus of this thesis is on how Dolores Krieger, founder of TT, was able to successfully introduce this healing practice into Western medical establishments such as nursing schools, medical clinics, and hospitals, despite its basis in Eastern philosophical, metaphysical, and medical concepts such as prāṇa, ch’i, chakras, and the theory of yin-yang. Therapeutic Touch emphasizes the concept of “human energy” transference, an idea borrowed from Eastern belief systems that suggest that humans are energy systems interconnected with all things in the cosmos. Within Indian cultural context, for example, the concept of “human energy” has historically been known as prāṇa. Within the cultural context of China, the term ch’i has been used to refer to human energy systems. Krieger borrows these concepts of “energy” to explain her own system of healing. By examining and comparing the work of Dolores Krieger with these Eastern concepts in their historical, philosophical and spiritual contexts, this work will illustrate how Dolores Krieger minimized, Westernized, and medicalized these concepts in order for the practice of Therapeutic Touch to gain partial acceptance in the field of Western, allopathic medicine.
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Introduction

Over the past three decades, beginning in the 1960’s, many North Americans began exploring and developing a wholistic concept of self that included physical, mental, and spiritual dimensions and which soon became linked to popular understandings of health and illness (see Frolock, 1992; Sharma, 1992; McGuire, 1991; Danforth, 1989; Fuller, 1989; Otto and Knight, 1979). With the introduction of new alternative healing methods, the physiological emphasis in health and healing in the West began to expand to include psychological and spiritual aspects (Fuller, 1989). A focus on the spiritual dimensions of health and illness by alternative healing practitioners such as acupuncturists was relatively new to the West and took the form of adopting elements from ancient Eastern thought and practice, particularly the idea that a “cosmic and spiritual energy” existed. In regard to orthodox medical thought, the idea that health had anything to do with spiritual energies had previously been excluded (Wirth, 1995; Melton, 1992; Levin and Coreil, 1986; Sobel, 1979). The origins of Western medicine within the scientific revolution and the focus on the physiological body within allopathic medicine did not allow for the unseen and unproven elements of spirituality and religion in the medical world (Otto and Knight, 1979; Van Ingen, 1949). In researching the development and history of alternative medicine, it is evident that people outside the orthodox medical field were generally the ones to bring these ideas to the attention of the public and develop them to a level that made alternative healing techniques reasonable options for the public.\(^1\) Dolores Krieger is an exception. She has a Ph.D in nursing, is a registered nurse, and a professor of nursing at New York University. She, along with
colleague Dora Kunz, developed the alternative healing system known as Therapeutic Touch (TT), describing it as a contemporary secular version of the ancient religious practice, "laying of the hands." Krieger developed the technique, which is based upon the manipulation of a universal energy she believes to underlie all life processes, utilizing concepts and terminology drawn from Buddhist, Hindu, and Chinese healing and spiritual practices (Hover-Kramer, 1996; Frohock, 1992). It has been suggested by various academic researchers (Frohock, 1992; Fuller, 1989) that her study of the healing techniques employed in Yoga and Chinese acupuncture led her to identify the subtle energy that she believes permeates the universe with what the Hindu tradition calls prāṇa. Krieger argues that "our culture does not understand energy within the same context as does the Eastern world." and goes on to explain that prāṇa is responsible for such phenomenon as regeneration and wound healing. In essence, Krieger claims that illness results when there is a deficiency or blockage of this prāṇa in some part of the body, while wellness results when the healer uses the hands to help direct the flow of this energy.

Most of the scholarly research on TT deals with proving or disproving the efficiency of Krieger's method of healing. In addition, many nursing journals include discussion of how TT is to be used in the confines of medical centers. There is a lack of research, if any, on the actual theory of TT and its relationship with Eastern methods of healing. Both academic research and Dolores Krieger's own descriptions tend to limit discussion on the topic of, prāṇa ch'i, and the chakras in relation to TT, yet it is these concepts that provide the structure and foundation of this healing method (Krieger, 1979).
Within her published works, Krieger (see for example Krieger, 1993, 1989, 1979) presents limited definitions and explanations of what these terms and concepts actually represent within the cultures from which they have been taken from. Secondary sources on Therapeutic Touch fail to discuss these various terms and concepts at length, simply using Western comparisons such as *ch'i* being equal to "vital or universal energy" (see Wuthnow, 1997; Fish, 1995; Wirth, 1995; Fuller, 1989; Knaster, 1989), with little or no further elaboration of the concepts.

The focus of this dissertation will be on the concepts of *ch'i*, *prāṇa*, *yin-yang*, and *chakras* as they are understood within their in their original cultural contexts, and on how these concepts were subsequently utilized in the work of Dolores Krieger. The dissertation will explore how the concepts were viewed philosophically, and how they relate to the Chinese and Indian medical paradigms. It should be noted that within both Chinese and Indian cultures, all of these concepts have multiple meanings, especially within the confines of the various sects of Buddhism, Taoism, Confucianism, and Hinduism (see Rainey, 1992; Kim, 1984; Ronin, 1981; Porkert, 1974; Fung, 1973, 1970; Eliade, 1969). Nonetheless, each of these concepts also have basic and accepted meanings. The concepts of *ch'i* and *yin* and *yang* for example, are most clearly relevant within the context of Chinese culture, and will be discussed as they relate to Chinese thought and medicine. *Prāṇa* and *chakras* on the other hand are more relevant within the Hindu/Indian cultural systems, and will be discussed as they relate to Indian thought and medicine. More precisely, the concept of *ch'i* will be defined and explained using the writings of Wang Ch'üng (ca.27-100 C.E.), while the concept of *yin* and *yang* will be
discussed from the perspective of Tung Chung-shu and the New Text School (ca. 206 B.C-A.D 24). The concepts of prāṇa and chakras will be discussed in relation to that of Indian Yoga which is dominated by these concepts. Both the Bhagavad-Gītā and the Yoga Upanishads will be used as basic texts. We will also examine what is known as Patañjali Yoga, which Dolores Krieger sometimes refers to in her own descriptions of Eastern concepts. All four of these concepts will be discussed in relation to how they operate within their respective health paradigms. The discussion of how these concepts relate to health and illness will be approached from an interdisciplinary perspective, using various texts and published research that show how concepts such as ch'i, prāṇa, yin-yang, and the chakras maintain important positions within the cosmological order of Chinese and Indian worldviews (for example Barnes, 1998; Stibbe, 1996; Meadow, 1993; Jingfeng, 1988; Nordstrom, 1988; Chen, 1981; Garfield, 1980; Kleinman and Sung, 1979; Zimmermann, 1978; Porkert, 1974; Risse, 1973).

Research for this dissertation has been at times difficult due to the lack of relative information on the medicalization of Eastern metaphysical concepts. For instance, there does not appear to be any particular commentary on how Krieger may have medicalized these particular concepts in her development of TT. Research in the field of medicalization is dominated by the movement of Western orthodox medicine into Eastern and traditional cultures (see for example Chi, 1994; Romanucci-Ross and Moerman, 1991; Waxler-Morrison, 1988; Low, 1987; Pearce, 1982; Kleinman and Sung, 1979; Landy, 1977). These studies demonstrate the growing assimilation of Western medicine and physiological research by Eastern healing systems in these
cultures. Research is very limited, however, in the field of medicalization as it pertains to alternative healing practices and Eastern methods of healing in the West. This may be the result of the success of the Western medical establishment in defining what is and is not "conventional" and "scientific" in a medical sense. For example, in the case of chiropractic and osteopathic medicine, these alternative healing systems were partially accepted as conventional by the Western medical establishment only when they could be adequately explained in acceptable "scientific" terminology (Fuller, 1989). This acceptance is based on the Cartesian scientific model, which in turn is based on the methods of quantitative measurement and experimentation that became very important in modern thought after the scientific revolution. This, according to sociologists Romanucci-Ross and Moerman, "not only reflects values and ideologies but affect our knowledge of disease and cure." 3 The scientific emphasis within contemporary Western models of healing and medicine results in a general public who comes to respect and rely upon the decisions of orthodox medical practitioners and researchers, giving them authority and prestige in society. Malcolm Bull, a medical sociologist, suggests that "modern medicine is primarily neither pragmatic nor rational, but based around the institutionalized epistemological charisma of the medical profession." 4 In contemporary Western society, it is still this institutionalized medical profession that structures the way health and illness are viewed and discussed.

The four Eastern concepts that Krieger suggests are fundamental to TT are not, as defined within their original Eastern culture, open to experimentation or measurement under the Cartesian scientific model. These concepts have not received much attention
under the Western physiologic system. I will argue that Krieger minimized the discussion of the Eastern concepts, eventually transforming them through a process of medicalization and Westernization so that the healing practice could be accepted by the orthodox medical profession, and the results tested under the Cartesian model. By medicalizing these concepts and explaining her method with scientific terminology, TT could be evaluated and its results measured from a scientific, Cartesian perspective.

According to sociologist Malcolm Bull, the process of medicalization involves four closely related developments that include a construction of scientific discourse of the body, bringing the discourse to the orthodox medical field, involving the discourse with unrelated phenomenon, and the acceptance of the discourse by the public. In the case of TT, there is a transformation of a healing discourse from the original that is based on spiritual and metaphysical concepts, to a more scientific one. In order for TT to be accepted by mainstream medicine, Krieger had to Westernize the metaphysical concepts of ch'i, prāna, yin-yang, and chakras, thus bringing TT as a practice, and the concepts that defined it, through the process that Bull describes as medicalization. Krieger had to establish her method so that it would be accepted by the public who were predominantly influenced by Western medical thought. To do this, Krieger used modern scientific terms such as psychoneuroimmunoendocrinology, electromagnetism, biofeedback, and metabolism to explain Chinese and Indian notions of medicine, and to develop a "scientific" discourse on a method dominated by metaphysical and philosophical concepts. Krieger then had to bring this discourse not only to the established medical community, but to a public who trusted and had faith in that medical community. Krieger
had to promote this new method of healing as a legitimate medical practice that would fit into the social perception of health and illness, as well as the perceptions of lifestyle, work and family. In her development of a scientific discourse, Krieger changed and restructured the overall metaphysical and cultural dimensions of concepts such as ch'i, prāṇa, yin-yang, and chakras, and, as a result, was partially accepted by the dominant medical profession and the public who listens to it. Krieger suggests that when several New York hospitals permitted her to set up hemoglobin and other studies, she carefully adhered to their policies and restrictions saying that “I have always thought that this was what gave me credibility in their eyes. I was willing to go at it from their perspective. Research is the thing that saved me or I never would have gotten support, validity, and acceptance.” By working within the boundaries of the medical Cartesian model, Krieger and her new method of healing began to gain ground in the world of orthodox medicine.

The acceptance and use of Eastern concepts such as ch'i, prāṇa, yin-yang, and chakras in the Western world of alternative medicine has largely been ignored in academic research. There are three main reasons for this neglect. First, when discussed at all, these concepts are frequently correlated to Western concepts such as “energy,” “quantum physics,” and “electromagnetism” (see Wisneski. 1997: Wuthnow. 1997: Frohock.1992: Salmon.1984). Fuller suggests that “the holistic healing literature generally does not distinguish among these diverse Eastern traditions and tends to assume that their primary teachings are essentially identical with the parapsychological beliefs associated with Kirlian photography or out of body experiences.” This may be due to
the fact that research in the area of alternative medicine and healing tends to focus on a combination of practices and ideas rather than focus on a single element of a certain practice such as the use of *prāṇa* in Therapeutic Touch. Eastern ideas are a large part of “New Age” religious movements and alternative healing practices, but they are rarely found operating alone within a certain alternative practice (Melton, 1992). Eastern concepts in the “New Age” context are used in conjunction with a wide range of other belief systems, social causes, and healing practices in keeping with the eclectic tendencies of “New Age” spirituality and alternative medicine (Danforth, 1989). Perhaps because of the incredible diversity and depth within these movements, to date scholars have focused on a number of alternative or comparative aspects of the “New Age” and alternative healing rather than refining and narrowing the scope of research to a single element of such diverse practices (see McGuire, 1991; Danforth, 1989; Levin and Coreil, 1986; Salmon, 1984).

Second, this area of study is relatively new. The origins of “New Age” phenomenon and the idea that mind, body, and spirit are closely related to health lay in the counterculture of the 1960’s, and it wasn’t until the 1980’s that it became important within religious, sociological, and medical research. For the most part, it is only since the 1990’s that alternative medical practices have the potential to pose any kind of challenge to the once firmly established orthodox medical practices (Sharma, 1992). Dolores Krieger claims that alternative medicine will surpass conventional medicine in terms of participation within the next five to seven years. This estimate may be somewhat inflated, but other scholars such as Sharma (1992), Sobel (1979) and Strode (1979) suggest that
alternative medicine is rapidly growing to challenge the monopoly of Western orthodox medicine in North America.

Third, it is important to note that Western scholarship on alternative healing to date has not been able to develop an adequate terminology to translate the Eastern concepts that are the focus of this dissertation. As a result, scholars limit their discussion of these concepts to simplistic comparisons and narrow definitions. In many cases, scholars blindly use modern scientific terminology to explain these concepts, which in turn, leads to the Westernization and medicalization of Eastern philosophical and metaphysical concepts. Therapeutic Touch is no exception. Although there is considerable scholarly literature on whether or not TT actually works as a form of healing (see Martsolf and Mickley, 1998; Fish, 1995; Quinn, 1989; McKee, 1988), this research adopts a strictly “scientific” approach focusing on the efficiency of TT rather than on the conceptual and ideological foundations of Krieger’s healing method. At present, there is no available in-depth analysis of Therapeutic Touch’s relationship with that of Eastern notions of healing or concepts such as ch’i and prāṇa.

There has been significant influx of various Eastern ideas and concepts into the West since the late 1800’s, but even a greater influx in the last thirty years (Frohock, 1992; Fuller, 1989). Interest in Buddhism and other Eastern philosophical and religious traditions continues to grow in the Western world. Scholarship that describes how Eastern concepts have been used in both the “New Age” movement and alternative healing practices, however, is quite limited. Academic research on the Westernization and medicalization of Eastern concepts has not been done. Demonstrating how Krieger’s
use of Eastern concepts is based on, and differs from, that of traditional Eastern notions will begin to address this lack of scholarship. First, I will show how Krieger uses, and perceives, Eastern concepts such as ch'i, prāṇa, yin-yang, and chakras in her written works. Second, I will analyze how Krieger's use of these concepts differs from usage within their traditional Chinese and Indian cultural contexts. Third, discussion of the historical usage of these concepts, and comparison to usage of these concepts in Krieger's work will illustrate how Eastern concepts such as ch'i, prāṇa, yin and yang, and chakras have become Westernized and medicalized within Therapeutic Touch. Finally, I will argue that it is through the Westernization and medicalization of these concepts that Dolores Krieger was able to bring an alternative healing practice, with its metaphysical elements partially attached, into the orthodox medical arena.

This dissertation is based on an examination of the published works of Dolores Krieger, as well as other unpublished sources from interviews. It will also analyze the implicit and explicit usage of Eastern concepts within her Therapeutic Touch system. Drawing upon interpretation, analysis, and description, I will uncover the ways that Krieger conceptualizes, integrates, and transforms the Eastern concepts of ch'i, prāṇa, yin-yang, and chakras in her work to make them compatible, in the view of the orthodox medical institution, with the Western medical system. Comparison of the contemporary literature and method of Therapeutic Touch to that of traditional and ancient Eastern descriptions of these concepts will highlight Krieger's Westernization and medicalization of these concepts. Research for this dissertation will focus on the primary texts on TT and relevant secondary sources, including available scholarship on alternative healing.
practices and medicalization. Both primary texts in translation and secondary texts will be also be used in the analysis of traditional conceptions of Eastern thought and medical practice. This thesis will describe in detail how each of the Eastern concepts are viewed historically and philosophically, as well as their significance in the understanding of health and illness in Chinese and Indian culture. Comparison of Krieger’s use of Eastern concepts to traditional Eastern use of these concepts will also be explored, demonstrating how Krieger’s work both neglects a complete description of these concepts and lacks the comprehensive analysis to show how they are understood to function in Chinese and Indian medical paradigms and worldviews. Based on this analysis, this thesis will demonstrate the importance of a comprehensive analysis and the narrowing of scope by scholars in the area of alternative healing, particularly when healing and metaphysical concepts from other cultures are being utilized in a healing practice outside of a given culture. As the characteristics of medicine and the medical needs of the public changes, the importance of focusing attention on Eastern influences will have great significance in the medical field.
Chapter One

Therapeutic Touch: Dolores Krieger's Use of Eastern Concepts

In 1971, Dolores Krieger began developing what we now know as Therapeutic Touch (TT), a healing method based on a contemporary secular version of the ancient healing practice, “Laying of the Hands.” Since that time, TT has been taught to thousands of people worldwide and introduced to many orthodox medical establishments in the United States and Canada (Knaster, 1989). After abandoning post-doctoral research on the effects of hallucinogenics on creativity, Krieger, along with colleague Dora Kunz. started to investigate and research the effects of touch on a person's 'energy field.' According to Krieger's results, “when ill people are treated with the laying-on of hands, a significant change occurs in the hemoglobin component of their red blood cells.”  

In her attempt to rule out any intervening variables such as faith, Krieger did further testing which demonstrated, she urges, that “unlike laying-on of hands, healing was not dependent on either a religious context or on the patient’s faith in the healer. In fact, it did not even require actual contact with the physical body, just with the person's energy field.”

Krieger, a registered nurse, then began to publish her research and started teaching her new technique to other nurses. To come to a full understanding of why touch was therapeutic, Krieger began researching a wide variety of healing methods, including various Eastern concepts of healing. In her first published book, The Therapeutic Touch: How To Use Your Hands To Help or To Heal (1979), Krieger writes:
I had had a very good background in the life sciences, particularly in neurophysiology, which I had taught for several years, and this was very helpful as I began to look into the health practices of yoga and at the readings in Ayurvedic medicine, Tibetan medicine, and, more recently, Chinese medicine. The alternate views these bodies of literature held from those I had learned in my formal education became understandable on my own terms only as I gave myself to in-depth explorations of the nuances and overtones with which the apparent meanings of terms or phrases used in these cultures were clothed.

Drawing upon these sources, Krieger was able to formulate a model which would allow her to define and explain the process of healing in TT. Psychologist Linda Barnes suggests that “when groups within one culture voluntarily adopt the concepts and practices of another tradition, it is often because they believe the foreign tradition will address questions being raised on native soil. This has been the case with the indigenizing of Chinese healing practices in the American context.” Krieger’s explanatory model was based on the concept of the transfer of human energy, and the texts of Indian and Chinese medicine gave her the terms and the concepts needed to explain her own contemporary Western form of healing through energy transfer using the hands. According to Krieger, the therapeutic use of the human energy field is what TT is all about, suggesting that “we are an open system of human energies in constant flow, the transfer of energy between persons is a natural, continuous event…what we call “illness” is an imbalance of energies; the objective of healing is to rebalance those energies.” In essence, the technique was based upon the belief in the existence of a universal energy that was a part of all life processes. According to sociologist Robert Fuller, Krieger was “promulgating a new world view in which the physical is understood to be enveloped by
a metaphysical agent undetected by the senses.” In her book, *The Therapeutic Touch: How to Use Your Hands to Help or to Heal* (1979), Krieger explains the process by which healing can be performed and initiated, introduces the Eastern concepts that are at the center of the healing practice of TT, and gives a short history on how TT was developed.

*The Therapeutic Touch: How to Use Your Hands to Help or to Heal*

Dolores Krieger’s first major publication, *The Therapeutic Touch: How to Use Your Hands to Help or to Heal* (1979), introduced the Western world to the technique of Therapeutic Touch. This book was a step by step description, complete with diagrams, of how to use TT for healing purposes. In addition, Krieger introduces the reader to various Eastern concepts and terms that are to be employed in this healing process. These concepts include *prāṇa, chī, yin-yang*, and *chakras*, borrowed from Hindu and Buddhist religious traditions. It is these elements that Krieger believes to be at the center of the healing process, especially in light of her convictions that humans are open systems of unseen energy forces. But Krieger also argues that there is no adequate translation for these terms in English, suggesting that “our culture does not understand energy within the same context as does the Eastern world.” This sentiment has been echoed by other scholars such as Barnes (1998), Wisneski (1997), Wuthnow (1997), Stibbe (1996), Wolpe (1985), and Yew Chow (1979). They argue that adequate translation of Eastern metaphysical concepts into English equivalents, particularly in the field of health and
healing systems, has yet to be accomplished. There has been a lack of research and scholarship within this area, especially in light of how the use of Eastern concepts have become quite popular in Western alternative healing techniques since the 1970's (Melton, 1992). Krieger's work does not initially help ameliorate this lack of research. In reading Krieger's work (initially intended for professionals in the health field), the author gives minimal theoretical explanations and translations for the concepts of prāṇa, ch'i, yin-yang, and chakras. The reasons and the effects of this minimization will be discussed in detail in the following chapters. In this section, focus will be placed on Krieger's explanation of these Eastern concepts as given in her first publication, as well as later books such as Living the Therapeutic Touch: Healing as a Lifestyle (1987), and Accepting Your Power to Heal: The Personal Practice of Therapeutic Touch (1993). The strongest emphasis will be placed on Krieger's first publication, The Therapeutic Touch: How to Use Your Hands to Help or to Heal (1979), due to the fact that this book was the initial introduction of Therapeutic Touch to the Western world. For the most part, Krieger's later publications were merely repetitions and extensions of her earlier work.

While researching the phenomenon of "laying of the hands" with her colleague, Dora Kunz, in the early 1970's, Dolores Krieger concluded that literature from the West did not point to the "modus operandi" of the healing practice. As a result, she turned to the study of Eastern literature in search of this operative force which might lay behind this method of healing. In one of her early articles written for the American Journal of Nursing in 1975, Krieger states that.
I have a considerable background in the study of comparative religions, particularly the Eastern religions, so I reread material I had come upon several years ago for clues that might guide my search. The East holds different assumptions about man and a different view of the dynamics of human relationships than the West, especially about the personal interaction that occurs during the laying-on of hands. The basis for this interaction between healer and subject is thought to be a state of matter for which we in the West have neither a word nor a concept. In Sanskrit it is called prana. 

It is prāṇa that Krieger suggests lies at the base of the exchange of human energy in the healing process. Krieger’s explanation of the Hindu concept of prāṇa takes precedence over her explanations of other Eastern concepts in her book The Therapeutic Touch. It is within this concept that the author embeds her explanation of the connection between human energy and healing through touch. The author translates the Sanskrit term prāṇa as vigor or vitality, but goes on to say that:

an analysis of the literature indicates that the term really pertains to the organizing factors that underlie what we call the life processes. Prana, therefore, is responsible for such phenomena as regeneration and wound healing. Further, one begins to find out that prana is related to the element Vāyu (Sanskrit), which is concerned with air but, more importantly, also with motion. It is thus that one begins to see that prana is not related to the respiratory act in a simple breathing-in and breathing-out fashion, but that it is a principle underlying the rhythmic movement that makes breathing imperative, whether it is the breathing that occurs in the lungs or the chemical reciprocity that goes on at a molecular level in the rhythmic interchange of oxygen and carbon dioxide during the respiratory process at the cellular level while the organism is alive.

As Krieger proceeds with the discussion of prāṇa, she constantly compares various elements and functions of prāṇa to Western medical and physiological theories. From a
physiological perspective, she makes comparisons between excess *prāṇa* and bodily chemicals such as fluid and electrolytes that can repattern themselves to rebuild damaged tissues. A lack of *prāṇa*, according to Krieger, can be compared to the failure of body chemistry in the maintenance of health in an individual. The transference of *prāṇa* from one individual to another can be compared to what we know as charisma in the West, which according to Krieger, "may not be so readily apparent to us unless we have gotten into the practice and literature of hatha yoga, tantric yoga, or the martial arts of the Orient." ¹⁰ According to this theory of TT, a healer with an abundance of *prāṇa* and the commitment to transfer that "vital energy" has the potential to heal another person who lacks in *prāṇa*. The healer's level of *prāṇa* is not affected in the exchange of energy.

The exchange of energy that promotes healing has four phases according to Krieger:

1. Centering oneself physically and psychologically; that is, finding within oneself an inner reference of stability.
2. Exercising the natural sensitivity of the hand to assess the energy field of the healee for cues to differences in the quality of energy flow.
3. Mobilizing areas in the healee's energy field that the healer may perceive as being non-flowing; that is, sluggish, congested, or static.
4. The conscious direction by the healer of his or her excess body energies to assist the healee to repattern his or her own energies. ¹¹

Krieger describes TT and these four phases as a "healing meditation," where the healer must relax and "center themselves" in order to direct the flow of *prāṇa*. It is interesting to note that in discussion of these four phases, Krieger suggests that her explanation of these four phases "may seem strangely worded to the reader unaccustomed to thinking in terms
of bioenergetics and psychoenergetics.” Rather than suggest to her readers that a familiarity with the Eastern concept of prāna is necessary for an easy understanding of the process of TT, Krieger places great emphasis instead on the very Western and quasi-medical sounding terms of bioenergetics and psychoenergetics. Krieger does not elaborate on these terms, nor does she explain the full significance of why familiarity with them would help clarify the process of healing meditation. Since the author herself is familiar with these terms (perhaps borrowing them from Peper (1974) and Benson (1975)), she uses them as self-evident explanations of the process of human energy transfer. Whereas previously the author suggested that without a background in Eastern literature and practices, this transference of human energy would not be so readily comprehensible, here she suggests a “scientific” framework for understanding TT. It is evident from this that Krieger is attempting to build a bridge between Eastern concepts and Western models of physiological functions to explain her healing practice. This attempt to bridge the East and West in Krieger’s work will be discussed in depth in chapter 3.

Krieger’s Perspective on Hindu Prāna

The remainder of Dolores Krieger’s first publication focuses on technique and instruction, and the term prāna is replaced with the term “energy” or “energy flow” after its initial introduction. Readers of Krieger’s first book are never given a compound description of the Indian concept of prāna, its history, its significance in the Indian worldview, or its philosophical and religious background. In a later publications such as
Living the Therapeutic Touch: Healing as a Lifestyle (1987), and Accepting Your Power to Heal: The Personal Practice of Therapeutic Touch (1993). Krieger does venture somewhat further in her discussion of prāṇa and other Eastern concepts, yet her descriptions of these concepts remain quite limited in scope. This limited discussion of prāṇa and other Eastern concepts in Krieger’s work is significant given her own assertion (1979:10) that only “in-depth explorations of the nuances and overtones” of these concepts make a full understanding of their implications for the process of TT possible. Krieger does suggest in her later works that there is increasing evidence to support the integration of Eastern metaphysical concepts with Western science. For example, she writes:

during the subsequent ten years, 1975 to 1985, the impetus toward a new understanding of the potentialities of human consciousness, which had been initiated by the psychotechnologies, found unexpected support and supplementation from science...the clarification and generalization of the new physics led to the recognition of significant correlation’s between theoretical implications of the new physics. and the teaching of ancient oriental philosophies. However, despite this insistence that a correlation between oriental philosophies and Western science is possible, an in-depth exploration of Eastern philosophical concepts such as prāṇa is absent in her work. Within Krieger’s discussion of prāṇa a number of issues become relevant, such as her attempt to define and explain Eastern concepts using Western terminology. In her later works, this translation process progresses to the use of concepts drawn from the field of new physics to explain TT, subsequently giving the notion of “human energy” a more Western outline and description. Krieger’s discussion of prāṇa is consequently consistently linked to the discussion of Western scientific and
quasi-scientific concepts. It is in her elaboration of Western concepts drawn from biomedicine and physics that her minimization of Eastern concepts can be placed.

One of the key Western frameworks within which Krieger contextualizes her discussion of prāṇa is that of biofeedback. Biofeedback has been used both in evaluating the effects of TT and to explain TT in a significant number of TT reports. Biofeedback, according to TT practitioners, makes it possible to measure internal bodily changes and physiologic responses that may result from Therapeutic Touch and other medical practices (Quinn, 1988). In discussing prāṇa in 1987, Krieger states that humans are very sensitive to wave phenomenon (a biofeedback term), relating and comparing the transfer of energy to the Western notion of “electron transfer resonance” (1987). Within the context of this biofeedback framework, Krieger provides a more detailed explanation of prāṇa than previously given to the reader. In conjunction with the idea that TT is a “healing meditation” (1979), Krieger (1987) expands on the concept of prāṇa through a discussion of the practice and philosophy of Indian yoga, suggesting that both are “an experience in interiority” and based on self discipline. After a brief introduction to the history of Indian yoga, Krieger writes that.

the grounds for the outworkings of human energy are foci in the human energy field, itself a complex of many interpenetrating fields whose properties dynamically interrelate in a pattern we recognize as human nature. This field functions like a transformer. These foci convert energy systems, or prāṇa, into the kind of energies that make our psychophysiological being what it is. The foci or transformers are called chakras. Their primary functions are to collect, change, and distribute the prāṇa to the organs of our physical body. These foci form the matrix of the chemophysical field and the psychodynamic field... 15
For the first time in Krieger's work, the term prāṇa is used in conjunction with the concept of chakras, which will be discussed later in this chapter. Simultaneously, Krieger attempts to associate the word "prāṇa" with Western terms such as "psychophysiological," "transformer," "chemicophysical," and "psychodynamic." Chakras are referred to as "transformers" which affect a human's chemicophysical field. In Krieger's first published written work, there is a brief mention of chakras, but the actual term prāṇa is replaced with "energies" in her brief discussion. In Hinduism, the concept of prāṇa is essential in understanding the concept of chakras. Krieger simply replaces the term prāṇa with what she believes to be a Western equivalent, minimizing the term to "energy." Indian literature states that prāṇa comes from the sun, which Krieger (1979) refers to as being "intrinsic" to what is known in the West as the oxygen molecule. Krieger argues that the flow of this "energy" can be channeled in a process she calls electron transfer resonance. Krieger states that,

I realized that my basic assumption was that human beings are open systems, that they appear indeed to be a nexus for all fields of which life partakes—inorganic, organic, psychic, and conceptual, the electrodynamica being only one part of the whole—as such they are exquisitely sensitive to wave phenomenon, i.e., energy. 16

Krieger translates the term prāṇa to mean energy, then compares "energy" to wave phenomenon. Both wave phenomenon and electron transfer can be measured through biofeedback, using instrumentation that monitors and records physiologic functioning. This instrumentation can record activity in the autonomic or involuntary nervous system, as well as measure heart rate, blood pressure, metabolism and muscular activity (Benson, 1975). With the development of biofeedback, the effects of TT on the physical body
could now be measured. Subsequently, Krieger associates the concepts of *prāṇa* and *chakras* to terms and functions that are more familiar in the West and more closely related to research in the orthodox medical field.

Krieger discusses *prāṇa* and *prāṇic* flow as it is associated with Indian philosophy and Patañjali yoga, the latter being the first systematic description of yoga in India. Krieger (1987) attempts to bring new insight into the practice of TT by comparing the system of yoga to the practice of TT, suggesting that both possess the common goal of self-mastery in all of life experiences, especially the experience of identifying *prāṇic* or "energy flow. This self-mastery in TT becomes ultimately beneficial to the healer and his or her comprehension of the healee's condition. According to Krieger, the healer should be not only able to assess the patient's condition, but should also possess the ability to shape their own energies in a fashion that "emulates or identifies" with the healee's energies or *prāṇic* flow. Krieger suggests that "the medium in which both yogi and healer operate is the incessant upwelling of *prāṇic* flow which is individually tailored to each person through his or her *chakras*."  

To come to a deeper understanding of how the system of TT operates, this description of *prāṇic* flow is quite valuable and insightful. But the fact remains that Krieger neglected to include it in her earlier publications, which meant that both healers and healees who practiced TT may not have had a complete philosophical understanding of how this borrowed healing practice worked in the healing process. As we will see in the following chapter, the concept of *prāṇa* has an extensive background and is part of a large philosophical and religious system. Krieger, in her work, fails to give it the attention that is required to fully explain this concept and or to
give readers a deeper understanding of how prāṇa is suggested to work in conjunction with medicine and health, particularly from the Eastern, religious perspective. Instead, Krieger prefers to contextualize her discussion of prāṇa within the Western frameworks of medicine, biomedicine, and physics. Krieger does not fully elaborate on how the concept of prāṇa works in her own system of healing, despite her suggestion that her system of healing, Therapeutic Touch, is based on this particular concept. The reasons why she may have neglected this elaboration will be discussed later.

Dolores Krieger's approach to the other Eastern concepts, ch'i, chakras, and yin-yang, is not much different than her approach to the concept of prāṇa. If anything, her descriptions of these concepts are minimized more so than her description of prāṇa, despite her insistence that all of these concepts lie at the center of her own approach to healing. As with her discussion of prāṇa, these concepts are also consistently compared to various Western physiological theories and Western scientific data. In her first major publication, The Therapeutic Touch: How to Use Your Hands to Help or to Heal, Krieger mentions the concept of ch'i briefly, giving it the same definition that was given to the term prāṇa, that of "vital energy." This leaves the author open to use the terms interchangeably. In the chapter titled "Unruffling the Field," Krieger discusses the idea of "congestion" or blockage in the flow of energy, and suggest that:

perhaps the best description might be the word congestion. as that word is used in the literature on acupuncture to indicate a blockage in the meridians through which the ch'i, or vital energy, flows through the body. It is said that illness is caused by this congestion... . 18
This is the extent of the description of *ch'i* in her earlier writing. This concept then, from
the reader’s perspective, can only be understood to be the same as that of *prāṇa*. In later
writings, Krieger lists other terms, like *prāṇa*, that can be found in various cultures that
are associated with the idea of energy including *ka* in Egypt, *shen* in Tibet, and *mana* in
Hawaii. Krieger conlates all of these diverse concepts with the concept of “vital energy.”
And yet each of these concepts is unique in its own cultural context. Associated with the
concept of *ch'i*, for example, is the Chinese concept of *yin* and *yang*. Krieger mentions
*yin* and *yang* briefly in her writings, but fails to theoretically associate it with *ch'i*. The
theory behind the concept of *yin-yang* is quite complex, yet Krieger passes it over very
quickly suggesting that illness may be due to an imbalance between the *yin* and *yang*
factors of an individual. Even though TT takes some of its theoretical framework from
Chinese medicine, an explanation of this concept is completely neglected throughout the
body of literature by Dolores Krieger. If, as Krieger suggests, these concepts are central
in the development of Therapeutic Touch, then the question has to be asked, “Why does
she avoid more elaborate explanation of these concepts to give her readers a better
understanding of the healing process?” Krieger’s focus is on a Western explanation of
“human energy transfer” and she therefore neglects a more complete discussion of the
Eastern origins and meanings of central metaphysical concepts. As we will see,
knowledge and understanding of the concept of *ch'i* in Chinese culture, for example, is
essential in understanding the concept of *yin-yang*. Although Krieger claims that it is her
in-depth knowledge of these concepts and cultures that allowed her to elaborate her
system of healing, she fails to demonstrate specifically how her knowledge of these
concepts led her to develop TT, neglects to explain these concepts in a way that would give readers a much clearer comprehension of how “human energy transfer” works in the healing process, and fails to give readers any type of elaboration on how these concepts work in conjunction with healing in Eastern cultures such as India and China. The philosophical and spiritual elements of these concepts are not discussed at all by Krieger.

One of the Eastern concepts that Krieger does discuss in some detail throughout her years of writing on the practice of TT is the concept of chakras. This concept is very important to TT since it is through the chakras that prāṇa flows. According to the theory behind TT, prāṇa that is blocked is related to illness, while freeflowing prāṇa is related to health. Writing in 1979, Krieger states that:

The Ayurvedic literature describes these chakras as agents for the transforming of universal energies, as they become available to our bodies, to levels which can be used by human beings. Within this paradigm, the energies enter through some counterpart of the spleen which Western science has not yet recognized...I often have cause to recognize that the reality of the East, although built upon subjective experience rather than upon the objective evidence considered the basis of reality in the West, has as much reliability in its own right...  

The comparison of Eastern medical systems to that of Western medical systems is evident in the above statement by Krieger. She maintains a constant referral to both, actually including a diagram in her first publication that shows the system of seven chakras in juxtaposition to the human nervous system. The description of the chakra system is very brief in her first publication. It was not until the late 1980’s that Krieger began to discuss in detail TT’s relationship with the concept of chakras, giving broader definitions and demonstrating the importance of the concept of prana in relation to that of chakras.
Krieger’s perspective on the concept of the *chakras* is discussed using a combination of literary sources, but the primary focus is on the writings of Swami Ajaya, who developed a psychotherapeutic model based on the teachings of yoga and extended the ideas of psychologist C.G. Jung in the area of *chakras* and yoga (Krieger, 1987). Krieger does give the locations of the seven major *chakras* (*muladhara*, *svadhisthana*, *manipura*, *ajna*, *anahata*, *vishuddha*, *sahasrara*) and describes what their respective functions are in relation to the body and health in general. Each of these chakras, according to Krieger, corresponds to parts of the body: *muladhara*—spinal cord, *manipura*—upper spinal, *anahata*—heart, *vishuddha*—throat, *ajna*—head, *sahasrara*—crown, and the *svadhisthana*—spleen. The underlying theme in the author’s discussion is based on Swami Ajaya’s classification system of the *chakras* in cross-reference to archetypal themes, which suggests that “emotional conflicts are due to identification and absorption in the emotional dynamism of a particular *chakra*. These conflicts can be transcended...if the therapist helps the client to evolve to the consciousness of a higher *chakra* (of finer energy).” 20 Each of the *chakras* are assigned an “archetypal” theme based on Jung’s and Swami Ajaya’s work. For example, the *muladhara chakra*, at the base of the spine, is suggested to be involved with the struggle for survival, therefore it is given the “archetypal” theme of “The Victim.” The *manipura chakra* is related to that of domination and competition, and is given an “archetypal” theme called “The hero.” 21 This paradigm suggests that the more one becomes aware of energy vibration and the functioning of the *chakras*, there can be better control of the higher *chakras*. Ajaya, based on Jung, stated that these archetypes represented innate predisposition’s in human
behavior. According to Krieger, the higher chakras cross over the spinal cord near the head, while the lower chakras can be found in the lower body. In addition, as the chakras ascend from to the top of the spinal cord, there is an increasing “differentiation in the vibratory rate” (Krieger, 1987) and a more complex mode of consciousness. When control of these chakras is mastered, a healer should also be able to “feel” and identify the emotional state of a patient during assessment. Krieger states that,

For a sensitive healer, as for a committed yogi, these energy foci can become conscious functional centers of awareness, sometimes at very subtle levels. I have found a pragmatic use for this sensitivity, somewhat analogous to Swami Ajaya’s psychotherapeutic ploy of first determining the chakra level where the client is presently in conflict, and then helping the client to evolve to the consciousness of a higher chakra from which she/he can achieve a different worldview and so transcend the conflict...then I try to maintain this level of conscious communication between our chakras during the healing act. 22

These new discussions on the concept of chakras demonstrates the complexity of the growing theoretical framework behind Therapeutic Touch, as well as the importance of obtaining a deeper knowledge of the concepts on which TT was developed. But these ideas surrounding the psychotherapeutic approach of präna and chakras were not associated with TT until the late 1980’s. Even though Carl Jung’s psychological commentary on Kûndalinî yoga was written in the 1970’s, Krieger did not include it in the initial introduction to TT. Swami Ajaya’s Psychotherapy East and West: A Unifying Paradigm was not published until 1983, and it was not until 1987 that Krieger borrowed these ideas and used them to expand upon the original concept of Therapeutic Touch. Krieger, in her development of TT, brought together various ideas so that the concept of
prāṇa could be used as a base concept in the discussion of TT. She includes the concept of prāṇa in her early work but does not elaborate. From a medical and scientific perspective, there was no theory to explain the non-Western concept. As a result, the practice of TT that was being taught around the world, and the model that was being used to introduce the practice to the Western orthodox medical establishment during the 1980's, were based on the early literature of Dolores Krieger that excluded in-depth discussions on prāṇa and chakras. As noted above, the Eastern concepts of ch'i and yin and yang received even less attention from Krieger in the discussion of the underlying “energy” principles and philosophical concepts that TT was based.

Dolores Krieger and the Personal “Energy” Field

The concept of “human energy” was a relatively new concept in the West when Krieger introduced TT. In addition, the West lacked any kind of theory to explain the concept of prāṇa. In response, Krieger overlooks any attempt to develop and explain the concept, and tries to instill in her readers a sense of how to discover this “human energy” through practice and various personal exercises. This reflects Krieger’s attempt to Westernize the concept of prāṇa to make it accessible for her Western readers who, for the most part, lacked the background in Eastern concepts such as prāṇa and ch'i. As a result, Krieger does not emphasize an importance for practitioners and patients to gain insight into the various Eastern concepts, but describes the concepts in a way that she thinks people in the West will understand. Krieger focuses on personal practices and
exercises that she argues will help people understand energy flow, in addition to assisting practitioners in using “energy” transference in the healing process. With the lack of theoretical discussion on Eastern concepts such as prāṇa and ch’i, these concepts are removed from their cultural and original contexts. This would be the beginning of the Westernization of various Eastern concepts by Krieger in developing TT, giving her more flexibility in bringing this healing practice into the orthodox medical field. There are a number of personal and group exercises illustrated in Krieger’s introduction of TT that are designed to introduce the student of TT to the “human energy field.” These exercises are called “Therapeutic Touch Self-Knowledge Tests.” According to Krieger, these exercises should expose the student to a “sizable range of energetics similar to those you will experience during the process of Therapeutic Touch.” These tests include holding your hands apart from various distances to feel your own energy, directing energy to a person sitting close to you, practicing TT on a piece of cotton and then passing it on to another person so they can record the sensations that they may feel from it, and using two pieces of a clothes hanger to see if they cross while moving them over another person. Krieger believes that these tests will give a person knowledge that there is something in the “empty” space between people. that there is something “out there,” and that a person doesn’t “stop at their skin.” These tests are designed to build confidence within the healer and to teach of the “natural extension” of oneself that Krieger believes can be learned if people are willing to tap into their personal potential. This personal potential in TT can be discovered and explored through the process of centering oneself “physically” and “psychodynamically.” “Centering,” as Krieger calls it, brings a healer deeper in to
their own consciousness which is believed to have many levels, and this can be accomplished through meditation, prayer, or the repeating of a mantra which can be a "meaningless word." Up to this point in Kreiger's introduction, there has only been a brief mention of Eastern concepts, so these tests are not established as methods for understanding the concepts of prāṇa or chakras.

In discussing what Kreiger calls the "Assessment" of a patient, she states that:

**Therapeutic Touch** uses information available from the personal field of an individual. I am not using the term "field" in a mysterious way; I am talking about a human field as a biophysical fact. By this I refer to the common knowledge that the human body's functions, such as locomotion, occur via the electrical conductance that occurs throughout the neuromuscular system, and that one of the basic principles in biophysics recognizes that in all cases of electrical conductance, there must be a field to carry the charge.

The focus of Therapeutic Touch is not on the physical body itself, but the area surrounding a person. The description of these fields characteristics, according to Kreiger, are limited in any culture. She adds that healers say they feel "heat," "cold," "tingling," "pressure," "electric shocks," or "pulsation's" when assessing the human energy field, suggesting that "these terms indicate a common experience for which we do not as yet have an adequately expressive language." For Kreiger, she accepts the term "temperature differential" as adequate in describing the so-called "field" of a person since it is temperature that a healer usually feels during assessment. This "temperature differential" can be explored through another "Self-Knowledge Test" which is designed so the healer can feel the sensations as they move their hands over another person's body. Kreiger includes more tests that can be practiced such as locating the hand chakra.
directing energy, experiencing color as modulation of energy, and "thinking love." Through practice of these tests and experience of healing, Krieger believes that there will be a progression in the ability to heal, as well as in the ability to reach deeper levels of consciousness, which in turn, can increase latent abilities such as "telepathy." The author suggests that the interaction between healer and healee can result in the development of these latent abilities, comparing it to what she calls the "yoga of healing" in that "as in yoga, the expert practice of Therapeutic Touch demands concentration and a deep sense of commitment to lifting a little the veil of suffering of living beings." 28 In a later publication (1987), she would add other latent abilities to this list such as psychokinesis, clairvoyance, clairaudience, and precognition, adding that "the literature states that these non-ordinary states of consciousness arise quite naturally out of such practiced use of the chakras as occurs in the mature and conscious use of healing techniques such as Therapeutic Touch." 29 As we can see, Dolores Krieger views TT as more than a healing practice, but a practice in which one can develop a deeper insight to oneself and develop hidden latent abilities through practice and deep concentration. The important point here is that Krieger places great emphasis on the role of yoga, chakras and prāṇa for example, yet refrains from elaborating on the important points, especially in relation to that of achieving personal benefits and overall health. Within the Hindu context, it is suggested by scholars such as Eliade (1969) for example, that the practice of yoga can lead to the development of certain latent abilities, but this can only be attained through extensive yogic practice and extensive knowledge of how prāṇa and prāṇāyāma function and flow.
within the body. Krieger, in her earlier work, does not discuss this belief or relate it to how the practice of TT can develop particular latent abilities.

Krieger, as we have discussed, attempts to explain her method of TT using many comparisons to Western ideas and concepts. I will argue that Krieger attempts to develop new "explanatory models" (a concept developed by medical sociologist Arthur Kleinman) of health and illness in order to introduce TT and its use of Eastern concepts into the Western medical system.

Krieger and Therapeutic Touch

In this section of the dissertation, I have attempted to illustrate a number of ideas. First, I have attempted to introduce the healing practice of Therapeutic Touch as it was described by its founder, Dolores Krieger, in 1979. The historical, philosophical, and medical foundations of Krieger's TT have been discussed. Second, I have introduced and discussed the elements that are stated by Krieger to be at the base of this practice. These elements include the Eastern concepts of "human energy," prāṇa, ch'i, and chakras. Third, I have discussed in detail Krieger's use of Eastern concepts, particularly the concepts of prāṇa and chakras, which the founder of TT suggests are very important in the understanding of the healing practice. Overall, this section is intended to demonstrate what TT is as a practice, and what the healer should have knowledge of, in order to practice TT. Therapeutic Touch is a healing practice that involves the transference of
energy between individuals, the practitioner and the patient. The practitioner of TT must have knowledge of their own energy so that they can feel the energy of others in order to manipulate it to provide healing. The concept of this energy as discussed in TT is taken from the Indian concept of prāṇa, but as we can see, the author avoids explaining this form of energy as it is perceived within the original Indian literary and cultural contexts. It should be noted that the practice of TT as first introduced to Western, orthodox medical establishments was based on the description of TT found in Krieger's initial introduction, The Therapeutic Touch: How to Use Your Hands to Help or to Heal, written in 1979 (Fish, 1995; Knaster, 1989; Borelli, 1981; Heidt, 1981). The model of Therapeutic Touch first introduced to the biomedical establishment therefore was a model in which Eastern concepts were very poorly elaborated and consistently contextualized within Western, scientific, and medical frameworks. The introduction of TT into the Western, orthodox paradigm will be discussed in a later section. The next chapter of this dissertation will focus on the Eastern concepts such as prāṇa, chakras, ch’i, and yin-yang, and how they are perceived within their own cultures from a spiritual, philosophical, and medical perspective.
Chapter Two

Eastern Concepts: Historical and Cultural Perspectives

The concepts of prāṇa, chakras, ch'i, and yin and yang are multi-faceted, each having a long history of use and interpretation. There are also numerous interpretations for these concepts within their respective cultures as we will see in this chapter. For example, with the concept of ch'i. Chinese studies scholar Yung Sik Kim (1984) suggests that "being something that constitutes every object and underlies every phenomenon in the world, ch'i possesses a wide variety of characteristics and thus resists an unequivocal definition. There is no single term in Western language that would cover all of the facets and shades of what ch'i meant to the traditional Chinese mind, as the existence of many translations for it, including the mere transliteration ch'i, indicates."

The concepts of prāṇa, chakras, and yin-yang are equally complex and difficult to define, as becomes evident when reviewing the broad scope of literature surrounding these ideas and concepts. Of these four concepts, Dolores Krieger herself focuses mainly on the concepts of prāṇa and chakras in her explanation of the healing process through Therapeutic Touch. As a result, this chapter will focus primarily on these two Hindu concepts. Krieger often links her discussion of prāṇa and chakras to her understanding of Indian yoga, particularly Pāntaṅjali yoga, which will consequently be discussed in this section.

The discussion of all of these Eastern concepts will be divided into two categories: cultural and historical perspectives; and medical perspective. An overview of these concepts will give us a better understanding of what they have meant culturally, historically, metaphysically, and medically within their original cultural contexts.
The concept of *prāṇa* dominates the ancient texts of the Hindu tradition. These texts make up a “canon,” called the *Vedas*, which has four sections: the *Rig-Veda* (Veda of hymns), *Sama-Veda* (Veda of chants), *Yajur-Veda* (Veda of sacrifice), and the *Atharva-Veda* (Veda of Atharvan). The *Rig-Veda* consists of 1028 hymns, as well as prayers that are used during sacrificial rituals. Two other dominant texts used within the Hindu tradition are the *Upanishads*, and the *Bhagavad-Gītā*. The *Upanishads* are part of the *Vedas* itself, giving philosophical speculations on the prayers and rituals of the *Rig-Veda* (O’Flaherty, 1988). The *Bhagavad-Gītā* is not considered part of the Hindu canon but it is “held to rank equally with it in authority” (Zachner, 1966: p.1). This text takes the form of a conversation between a hero known as Arjuna and the God Krishna on the eve of a great war. Throughout the English translations of these ancient texts, as well as their respective commentaries (Goodall. 1996; Deussen, 1980; Chatterji, 1960; Eliade, 1958; Mueller, 1900), the word “breath,” as well as word phrases such as “life breath,” “life force,” “vital breath,” and “vital energy” are used in translation for the Sanskrit word “*prāṇa*.” The term *prāṇa* appears in the *Rig-Veda* (1500-1200 B.C.E). For example,

When he goes on the path that leads away from vital breath [ ], then he will be led by the will of the Gods. May your eye go to the sun, your vital breath [ ] to the wind. Go to the sky or to earth, as is your nature; or go to the waters, if that is your fate. (*Rig-Veda* 10.16.1, tr. Wendy O’Flaherty: 1981)

The creation myths in the *Rig-Veda* show the importance of *prāṇa*: “Indra and Agni came from his mouth, and from his vital breath [ ] the wind was born” (10.90.9). Within the
Arhun, a-Vda IIMMO B.C.E., there is a great deal of emphasis on the concept of prāṇa or “breath of life,” as can be seen in the following lengthy passage:

1. Homage to the Breath of Life, for this whole universe obeys it, which has become the Lord of all, on which things are based.
2. Homage to thee, O Breath of Life, [homage] to thy crashing: Homage to thee, the thunder: Homage to thee, the lightening: Homage to thee, O Breath of Life, when thou pourest rain.
3. When upon the plants the Breath of Life in thunder roars. They conceive and form the embryo: Then manifold they are born.
4. When upon the plants the Breath of Life, the season come, roars loud, all things soever upon earth rejoice with great rejoicing.
5. When the Breath of Life [this] mighty earth with rain bedews. Then do the cattle rejoice: ‘Great strength will be our portion.’
6. Rained upon by the Breath of Life, the plants gave voice: ‘Thou hast prolonged us our life; fragrance hast though given.’
7. Homage to thee, O Breath of Life, when thou comest, when thou goest: Homage to thee when standing still: homage to thee when sitting!
8. Homage to thee, O Breath of Life, when breathing in. Homage when Breathing out: Homage to thee when thou turnest aside, homage to thou facest us! To all of thesis this [our] homage due.
9. O Breath of Life, that form of thine so dear [to us], O Breath of Life, that [form] which is yet dearer. And then that healing which is thine. Place it in us that we may live.
10. The breath of Life takes creatures as its garment. As father [takes] his beloved son. The Breath of Life is the Lord of all, of whatever breathes and what does not.

(Artha-Veda 11.4.1-10 tr. Wendy O’Flaherty: 1981)

This hymn, consisting of an additional sixteen verses, demonstrates the importance of prāṇa within the religion, philosophy, and cosmology of Hinduism. The concept can be
found throughout the *Rig-Veda* and is further developed in the later Hindu texts of the *Upanishads* and the *Bhagavad-Gítá* (tr. Mohini Chatterji: 1960). In the *Mundaka Upanishad* (800-400 B.C.E.), prāṇa is shown to be important to all living beings both universally and individually.

He is the life (prāṇa) that shimmers throughout all contingent beings: Who knows and understands Him. Boasts not about Him, nor chatters overmuch. Whose sport is Self, whose joy is Self, a man of works. Of all who Brahman know is the most highly to be prized.

(*Mundaka Upanishad* 3.1.4 tr. Paul Deussen, 1980)

He is the subtle Self, to be known in meditation: Into Him Life (prāṇa) entered, divided into five: On [these five] senses (prāṇa) all the thought of living things is woven: Once this is purified, this Self shines through.

(*Mundaka Upanishad* 3.1.9)

Within the *Kausitaki Upanishad* (800-400 B.C.E.), the concept of prāṇa is divided into five “ramifications.”

Then all those divinities recognized the supremacy of Prāṇa and when they became participants of Prāṇa, of the intelligence-self, they pulled those (ramifications of Prāṇa: prāṇa, apāṇa, vyāna, samāna, udāna) out of the body and when they entered into the wind, they became ether and attained to heaven.


These terms have become known as the five “breaths” within commentaries on Hindu texts (Deussen, 1980: p.87; Eliade, 1958: p.384). Scholars such as Eliade (1958: p.384) and Varrenne (1989: p.159) explain that these five breaths are connected with certain functions and distributed over certain regions of the body, such as prāṇa being associated with the upper part of the body, apāṇa with the lower part, and vyāna with the middle
part. Within the *Yoga Darśāna Upaniṣhad* (500-200 B.C.E.), the names of “ten vital breaths” are given and explained:

There are ten vital breaths, to which yogis give these names: 
prāṇa, apāṇa, vyāna, samāna, udāna, nāga, kurma, krikara, devadatta, dhūnamjaya.

Of these ten, five are important: prāṇa, apāṇa, vyāna, udāna, samāna; but again, of these five two are foremost: prāṇa and apāṇa, to which worship is accorded by the great yogis; but prāṇa remains the first of them all.

Prāṇa is omnipresent: in the throat, in the nose, in the navel, in the heart, there it resides permanently:

Apāṇa, for its part, inhabits the anus, the thighs and the knees, the lower part of the body up to the navel:

Vyāna is in the head, the ears, the neck, down to the level of the shoulders:

Udāna inhibits the limbs and samāna the whole body; the five other vital breaths [ ] reside in the skin, the bones, and the flesh.

The role of prāṇa is to regulate breathing and coughing; that of apāṇa the excretions, vyāna produces sounds; samāna gathers together, and udāna enables the body to rise: that is the teaching.

(Yoga Darśāna Upaniṣhad 4.20-30 tr. Mircea Eliade:1969)

The connection between these five concepts to that of yoga is very important. The connection between prāṇa and Indian yoga will be discussed later in this section, but this segment from the *Yoga Darśāna Upaniṣhad* demonstrates how the concept of prāṇa maintained its dominance throughout the growth of Hindu literature. Throughout the *Upaniṣhads*, the concept of prāṇa maintains its close connection to the creation of all life, as well as to the Hindu concept of Brahman, “the basic foundation of all knowledge” (*Mūndaka Upaniṣhad* 1.1.1) and the place of origination of “breath, the mind, and all the senses” (2.1.3). The *Kausitaki Upaniṣhad* (2.1-2) tells us that “the prāṇa is the Brahman,” while the *Prāśna Upaniṣhad* (2.13: 500-200 B.C.E) tells us that “this
universe is under the power of, prāṇa.” This Upanishad is in part a hymn to the concept of prāṇa, with many of the verses starting with “O Prāṇa.” These selections from various Hindu texts are merely examples of the attention that the term or concept of prāṇa receives in the three main religious texts of the Hindu tradition. The concept of prāṇa dominates the literature and is used in conjunction with other concepts while at the same time constantly developed as an individual idea. As we have seen in the selected verses from Hindu scriptures, the concept of prāṇa underlies all things in the universe. It is a part of all things. Therefore, the concept reappears frequently in association with other Hindu concepts and practices such Brahman, yoga, manas (the senses), dharma (the law), and vāyu (cosmic wind) to name a few.

In order to get a better understanding of how the concept of prāṇa progressed through various Hindu texts and eventually became an important part of the Indian approach to medicine, we must at least briefly explore the systems of yoga associated with Indian religion and culture. The idea of yoga (union, to bind together, to bring under the yoke) was introduced in the Vedas (see Eliade, 1969: p.4), and it was subsequently discussed in the Upanishads and other sacred Hindu texts such as the Yoga Sūtras, believed to be written by Pantañjali (c.a. 2 B.C.E). The concepts and theories in this discussion will be based primarily on how they are perceived historically within Pantañjali’s system of yoga. This system is used by Dolores Krieger as a base for some of her own conclusions. Yoga as it is first mentioned in the Katha Upanishad (1400-900 B.C.E) is defined as “the steady control of the senses, which, along with the cessation of mental activity, leads to a supreme state.” Mircea Eliade suggests that “no one knows
of a single Indian spiritual movement that is not dependent on one of the numerous forms of yoga. For yoga is a specific dimension of the Indian mind. In the final analysis, a major part of the history of India is in fact constituted by the history of the multiple forms and aspects of what is called yogic practice. The concepts of prāṇa and prāṇayama (control of breath) are very closely linked to these systems of yoga (Feuerstein and Miller, 1972; Eliade, 1958). In Patañjali’s system of Indian yoga, the concepts of prāṇa and prāṇayama are utilized as two of the dominating features of its philosophy. Yoga is considered to be one of the six darsānas, or one of the six Indian “orthodox” systems of philosophy. Scholar Gavin Flood suggests that.

Alongside concepts of world renunciation, transmigration, karma, and liberation are ideas about the ways or paths to liberation— the methods or technologies which can lead out of the world of suffering. There are a number of responses to the question of how liberation can be attained in Hindu traditions. On the one hand, theistic traditions maintain that liberation occurs through the grace of a benign deity to whom one is devoted, on the other, non-theistic traditions maintain that liberation occurs through the sustained effort of detaching the self from the sensory world through asceticism and meditation, which leads to a state of gnosis (jñāna). Both responses can be combined when devotion is seen as a form of knowledge and grace as a compliment to each other. The term yoga, derived from the Sanskrit root yuj, to control, to yoke, to unite, refers to these technologies or disciplines of asceticism and meditation which are thought to lead to spiritual experience and profound understanding or insight into the nature of existence. Yoga is the means whereby the mind and senses can be restrained, the limited, the empirical self or ego (ahumkāra) can be transcended and the self’s true identity eventually experienced....while the development of yoga, and the idea of spiritual salvation (mokṣa) to which it leads, must be understood historically in context of traditions of renunciation, which we have seen, form an ideological and social complex developing in the new suburban areas of
ancient India, yoga becomes detached from the institution of renunciation and becomes adapted to the householder’s life. 5

Throughout this and similar commentaries (i.e. Flood, 1996; Feuerstein and Miller, 1972; Eliade, 1958), each individual system of yoga is depicted as a means to bring about a transformation of consciousness and a control of the self. Yogic philosophy also includes the attainment of moksa as a goal which in most Hindu traditions means the achieving of freedom from the cycle of reincarnation (samsara) (Flood, 1996). It is through the practice of yoga and meditation that this freedom can be obtained. In addition, one of the objectives of yoga is to reach the stage of samadhi, where the individual is no longer conscious of the body or human constraints. At the center of this philosophy of transformation, self-control, and liberation are the concepts of prāna and prānayama, which are depicted as being vital to the understanding of yoga and the culture from which it was formulated. In their discussion of the Yoga-Vasistha (100 B.C.E-400 C.E) (which consists of twenty-four thousand stanzas). Feuerstein and Miller suggest the following description of prāna and prānayama as it pertains to yoga and sacred Hindu scripture.

The word vāyu being a synonym of prāna is defined as “that which vibrates” (spandate yat sa tad). Prāna is spanda-sakti or the subtle ‘vibratory power’ penetrating the whole cosmos and every living being and even able to exercise influence on the mind (citta). In fact, the relation between prāna and citta life, energy and mind, is a very intimate one... prāna is the cosmic breath, the rhythmic oscillation effective on all levels of conditioned existence. Man, in the course of his evolution, has moved away from this original rhythm of the universe and became “out of tune”. The cosmicisation or imitation of the cosmos...is nowhere more distinguishable than in the technique of prānayama which endeavors to restore the primeval rhythm and cosmic harmony as manifested in man, the microcosm. The rhythmisation of breath (which in the end, is also a unification) is considered to be the most
effective method of inducing the re-establishment of the harmony of the microcosm as an exact replica of the all-harmonious macrocosm. *prānyāma* is performed with supreme attention which, in itself, leads to the focusing of awareness (*ekāgrata*) aimed by the yogin.  

The Sanskrit word *prānyāma* is usually translated to mean “control of breath” in the West. The *Yoga Sūtras* (2.49, c.a 200 B.C.E) describes it as the cessation and mastery of the inhaling and exhaling movements, and it is achieved after *asāna* (*yoga posture*) has been mastered. In the *Brhat-Samnyasa Upanishad* (2.272, 500-200 B.C.E: tr. Paul Deussen, 1980), it says that “the control of breathing is prescribed as the staff of the mind.” In practice, both *prāna* and *prānyāma* take on a vital role. Jean Varenne (1989) notes that in Hindu culture, it is well understood that physical air does not penetrate any further than the lungs and that,

It is only when the inhaled and held breath has reached the selected areas that the *yogi* acquires the intuitive knowledge of the power (or deity) that he wishes to use for his spiritual progress. We are now at the heart of the *yoga* doctrine: if everything is directed toward the practice of *prānyāma* (breath control), it is because the breath (*prāna*) is the motive force of spiritual progress, the catalyst that triggers the alchemical process by which the profane aspirant is transmuted into a true *yogi*. one who has “seen” the latent powers and therefore realized them within himself.  

The breath that reaches selected areas in the body will be further explored in the discussion on the concept of *chakras*, which is closely associated with the practice of *yoga* and Indian meditation. The first objective of *prānyāma* is to make the respiratory rhythm as slow as possible, with the final goal being to access a certain state of consciousness that cannot be accessed in a waking state (Eliade, 1969: p.55). The final goal is to be able to attain direct knowledge of one’s own life, which can be done
according to yoga philosophy when the individual has obtained a mastery over prāṇāyama, which includes inhalation (pūrakā), exhalation (reka), and the retention of inhaled air (kumbhaka). The control of breath in yoga is also associated with mantras, particularly the mantra that uses the OM sound which first appeared in the Atharva Veda Samhitā (10.8.29) (see Flood, 1996: p.222). The vocal sound of OM is associated with “absolute reality” (Brahman) (Taittiriya Upanishad 1.8. 800-500 B.C.E.), the structure of the cosmos, and is considered to be the most sacred sound in the Veda (Flood, 1996: p.222). Within the Maitri Upanishad (6.25. 800-500 B.C.E: tr. Mircea Eliade, 1958), it is written that.

Whereas one [the yogin] thus joins breath [prāna] and the syllable OM
And all the manifold world....
Therefore it has been declared to be Yoga.

Within the Bhagavad-Gītā (8.13: tr. Mohini Chatterji, 1960), OM is declared a supreme spirit, and says that by “repeating the one, exhaustless OM, whoever departs, abandoning the body, goes to the supreme goal” (8.13). In the practice of yoga, this mantra is said audibly, in a low voice, or even silently, and are counted on the fingers or with beads (Sundararajan and Mukerji. 1997). It is also used as a measurement of respiration (matratvamāna), where one “progressively retards each moment of respiration until beginning with one mantra, one reaches twenty-four.” ⁹ The system of yoga is therefore extremely detailed and complex, containing many sacred and philosophical concepts. Each of these elements combine to form the overall system of yoga, and each are integral to the overall practice as a whole. From this brief discussion on the syllable OM, for example, as only one small part of the practice of yoga, it is evident that it must be used
in accordance with the many other sacred concepts in the practice of yoga to achieve the
goals that yoga, in the classical sense, has to offer. As we have seen, these goals include
the attainment of personal knowledge, spiritual knowledge, salvation, liberation, and
eventual freedom from this earthly life. Breath control alone, without spiritual goals, does
not equal yoga. The syllable OM, without the abandonment of earthly ties, does not equal
yoga. Only when practice unites with philosophy and spiritual pursuits can the practice of
yoga be complete and goals attained.

Another important concept that is closely related to the concepts of prāṇa and
yoga is that of chakras or cakras. The chakras are the center points within the body
through which “vital breath” or prāṇa must flow to reach the various parts of the body.
The concept of chakras became more fully developed as the various systems of yoga
were expanded and developed in ancient Indian culture. The explanation of this system of
chakras became extensive and quite detailed. Although an extensive analysis of this
concept is beyond the current scope of this chapter, a brief examination of the particular
elements and philosophy associated with this Hindu concept will reveal its complex
philosophical nature of how it is connected to the concept of prāṇa and the practice of
yoga. One commentary on the system of yoga suggests that the inner circulation of breath
passes through:

A vast number of nādis (rivers, channels) forming a complex
network—also comprises a series of geometrical figures,
seven in number, spaced out along a vertical axis running
from the base of the trunk up to the top of the head. These
figures are usually called chakras, a Sanskrit word that has
the primary meaning of ‘wheel’ (of a chariot) but can be used
more broadly to denote any circular object.....the universe
itself, for instance, is an immense chakra (the cosmic wheel)
that revolves eternally around a hub (brahman). All the chakras within the subtle body are therefore primary circles. Moreover, these centers are also referred to as lotuses (padma), and it must be remembered that all stylized representatives of the lotus in Indian iconography are based on the circle (surrounded by a variable number of petals). 10

The nādis are the conductors of prāna through the body itself, while the chakras are the energy centers located along the body’s center axis. The nādis, sometimes referred to as “mystical veins” (Eliade, 1958: p.134), are made up of the sushumna11, the ida (masculine), and the pingala (feminine). In various sections of the Nādahindu Upanishad (500-200 B.C.E), all three of these nādis, as well as the chakras or centers are discussed.

There are seven chakras: muladhara, located at the base of the trunk, the svadhisthana, located at the level of the sexual organs, the manipura, located on the latitude of the navel, the anahata, located at the level of the heart, the vishuddha, located at the level of the throat, the ajna, located at the level of the forehead, and the sahasrara, which exist at the top of the head. It must be remembered that according to classic Hindu texts such as the Upanishads and the Yoga Sutras, the chakras are located in what is referred to as the “subtle” body, rather than the physical body; they should not be thought of therefore as “coincident with any gross part of the body...(they indicate) confluent points of particular vital forces, the activity of which sets the forces of the gross body in motion (they subsist after death and contribute to the animation of the fetus at the moment of reincarnation in another body, in accordance with the laws of transmigration.” 12 Frequently, however, particularly in Western texts, chakras are depicted as being a part of the physical body (for example, D. Krieger, 1979). This represents a major departure in the understanding
of *chakras* from the original Hindu and yogic context where they were believed to function primarily within the “subtle body.”

Another important element that is vital to the understanding of the combined concepts of *prāṇa, prāṇayama, yoga, meditation,* and the *chakras* is called the “Awakening of the *Kuṇḍalini*,” the ultimate goal of certain forms of yoga and meditation. Within the Hindu tradition, “*kuṇḍalini*” takes on many symbolic different forms such as a snake, a goddess, and an “energy,” possessing all of the attributes of all the gods and goddesses which has to be awakened within the individual through the practice of yoga using the sacred syllable *OM.* To reach this point and gain the knowledge necessary to reach this level, it is believed that a master is needed to teach and guide the student of yoga (Kakar, 1982: p.124; Varrenne, 1989: pp.62-63; Eliade, 1969: p.10). The individual has to learn how to direct *prāṇa* through the various centers and channels of the “subtle” body to eventually reach the center where *kuṇḍalini* is said to exist. Feuerstein and Miller describe the “awakening of the *kuṇḍalini*” in the following way:

Starting from the physical basis, by means of regulation, control and restraint (*avāma*) of *prāṇa,* the *yogin* first gains mastery over the *prāṇa* currents, then over his body, arouses the *kuṇḍalini* or “serpent fire” and, by directing its course, activates its vital centers (*cakras*) and finally forces the *kuṇḍalini* to the crown center, the abode of the Absolute....the science of *prāṇayama* is most intimately connected with the secret of *kuṇḍalini,* hence with the “inner heat,” and it seems very likely that the term *tapas* (flame-power, psychic heat) covered, in *Rigvedic* times, aspects of this science.15

Once again, this concept has its basis in Vedic texts, both the *Yoga Kuṇḍalini Upanishad* (500-200 B.C.E) and the *Amritanada Upanishad* (500-200 B.C.E) contain verses about
the occurrence of the waking the "serpent." The *Yoga Kūḍalini Upanishad* 1.82 (tr. Mircea Eliade, 1958) says that.

> The divine power, the *kūḍalini*, shines like the stem of a young lotus: like a snake, coiled around upon herself, she holds her tail in her mouth and lies resting half asleep at the base of the body.

In the *Amritananda Upanishad* 1.19 (tr. Paul Deussen, 1980), it is written that.

> The yogi conveys the d *prāṇa* own into the *mūladhara*: the air thus drawn in awakens the fire-below that lay sleeping. Meditating on the *prāṇava* that is *brahman*, concentrating his thought, he causes the breath to rise mingled with the fire-below as far as the navel and beyond within the subtle body.

The awakening of the *kūḍalini* is complex and intricate, with the end result being a new understanding of the Absolute and "cosmic power" as understood within Indian culture.

As *prāṇa*, or "vital breath" [ ] is directed through the "subtle" body by the process of *pranayama*, *prana* flows through the systems of chakras and "nadis" which include the "ida" and the "pingala," finally arriving at the location of the *kūḍalini*. This intricate system, according to Hindu philosophy, is managed by the act of meditation. The ultimate goal of yoga is to awaken the *kūḍalini*. Without this awakening, the pursuit of personal liberation and inner knowledge would be pointless. Any attempt to tap into *Kūḍalini* energy without full and elaborate practice and understanding of yoga is pointless, for only in proper practice of yoga, under the guidance of a leader, can *kūḍalini* be awakened. Individual knowledge of all yogic concepts, as well as devoting time, practice, and learning are essential in understanding not only the act of reaching the *kūḍalini*, but the entire system of yoga with all of the elements that make up a great deal of Hindu tradition, philosophy, and culture. Each concept has its own individual role
within Hindu philosophy and cosmology, but each concept also influences and effects the others as they are used in the creation of both an ancient and modern worldview and religion. Each of these concepts have their own distinct complexities and elaboration's, not only as individual concepts, but as a part of an elaborate philosophical system as well. A full understanding of yoga and its benefits could only be understood after extensive knowledge has been gained of each concept that has been mentioned.

Chinese thought: Ch'i and yin-yang

In addition to the Indian concepts of prāṇa and chakras discussed above, the Chinese concepts of ch'i and yin-yang are also central to this discussion. In her development of TT, Krieger discusses both ch'i and yin-yang to explain why her healing process works, often linking them to the Hindu concept of prāṇa because of their similarity in philosophical and cosmological explanations. Both the Hindu concept of prāṇa and the Chinese concept of ch'i are often translated in the West to mean the same thing (vital air). Subsequently, Krieger tends to use these terms interchangeably without exploring their distinct and diverse nature. As mentioned earlier, ch'i is one of the more difficult terms in traditional Chinese thought (Kim, 1984), especially when looking at it from a Western perspective. In the West, this term has been translated as air, vital air, energy, vital force, vital breath, and cosmic breath (Wuthnow, 1997; Fish, 1995; Wirth, 1995; Fuller, 1989; Knaster, 1989; Pockert, 1974). The description of ch'i and the philosophy surrounding it initially appears to be similar to that of Indian prāṇa, but as this discussion will demonstrate, there are distinct differences between these two Asian
concepts. It should be noted that within Chinese culture, the concept of ch'i is open to multiple interpretations, given the varying influences of Buddhism, Taoism, and Confucianism on Chinese history and philosophy (see Rainey, 1992; Kim, 1984; Porkert, 1974; Fung, 1973). Chinese studies scholar Fung Yu-Lan says that.

In the Chinese language the term ch'i is one with an exceptional variety of meanings. Thus a man may have a ch'i of pleasure or a ch'i of anger, referring to the appearance of the man. There is the 'proper ch'i', or the 'basic ch'i', i.e. the healthy element in any thing or state of affairs, and even for the heavens and the earth there is this ch'i... In Chinese philosophy also the term has an exceptionally varied number of meanings. There is the Yin ch'i and Yang ch'i, and the ch'i of social order. Tung Chung-shu also speaks of 'the ch'i of heaven and earth making a unity, which divides into Yin and Yang, splits up into the four seasons, makes a series of Five Hsing (Forces)...the tendency in ancient times with regard to any thing or any force which was invisible and intangible was to describe it as ch'i...the “ch'i of heaven and earth”, may be paraphrased as the basic force of the physical universe. The Five Forces were sometimes called five kinds of ch'i. 14

In order to keep within the scope of this section, the concept of ch'i will be defined and explained here by using the writings of Confucian philosopher Wang Ch'ung (ca.27-100 C.E), as well as a small portion of later writings by Neo-Confucian philosopher Chu Hsi (1130-1200). By doing so, we can get a clearer understanding of how this concept was perceived in traditional Chinese thought and spiritual practice. According to Religious Studies scholar Lee Rainey, Wang Ch'ung was “unique in bringing together many earlier uses of ch'i and presenting them in a coherent system...if we follow Wang Ch'ung's understanding of ch'i, we can see how it works and how it fits into several broad categories.” 15
According to Wang Ch’ung, everything in the universe, including human beings, is made of ch’i. This interpretation corresponds to the ancient writings of the Taoist philosopher Chuang-tzu (c.a. 300 B.C.E):

There is life and it followed by death: death is the beginning of life, but who knows their times? Human life is due to ch’i coming together and when ch’i is dispersed, there is death. If death and life follow one another, why should I think either of them evil? Therefore it is said, “In all that is below heaven, there is one ch’i.” Therefore the sages valued this oneness.16

In traditional Chinese thought, ch’i is necessary for life, and without it, there would be death. This notion is quite old, dating back to the pre-Ch’ in and Han thinkers (Rainey, 1992: p.264). This idea corresponds with the common Indian notion that without prāṇa, there is death. In both cultures, something intangible and physically hidden makes up all things and life, and this intangible element existed with the origin of life and the cosmos.

It must be noted that ancient Taoist philosophy perceived ch’i as “neither thinkable or expressible” and that it “transcended shapes and features” (Fung, 1970: p.47). Despite this, it is possible to break down Wang Ch’ung’s understanding of ch’i into systematic points, for he united many disparate ideas in a single coherent system. It has already been noted that Wang Ch’ung believed that everything in the universe is made of ch’i and that ch’i is necessary for life. Following Rainey (1992), his other ideas can be summarized as follows:

Basic ch’i is a unity. The lighter side of ch’i became the heavens, the heavier ch’i became the earth. It is basic to the cosmos and all things in it.

Ch’i, which makes up all things and is a unity, acts in a natural and spontaneous way. It has no intention when it
forms and disperses: there is no significance to be found in the natural actions of *ch'i*.

*Ch'i* cannot be intentionally manipulated to produce human beings.

The universe comes to be through the interaction of the *yin* and *yang* *ch'i* moves in and out of physical form through a constant process of change.

When referring to human beings, *ch'i* means the basis or essence of a thing. The essential *ch'i* is called *ching*, which is necessary for life and disappears at death, separating itself from the body. The *ching-ch'i* depends on the blood in particular and the body in general.

The essential *ch'i* comes together with a body to provide consciousness: *ch'i* itself is an animating spirit, but requires a body to animate, just as the body requires *ch'i* to be alive and conscious.

The *ching*, or essential *ch'i*, works through our senses and produces sensation and intelligence. *Ch'i* must be present for the physical parts of the eye and so on to produce sensation. *Ch'i* "provides" consciousness only through our bodily senses.

*Ch'i* is the essential animating spirit that works in, and through, the constitution and nature of a creature to produce different results.

It is from original *ch'i* (*yuan*) that our destinies are shaped. We cannot change what *ch'i* we have because it is our bodies and our animation. When one has a strong nature, then the *ch'i* is strong and forceful, and the body is strong. If the body is strong, then life is destined to be long...those with weak natures have a *ch'i* that is small and bodies that are thin and weak.

These intersecting ideas are based on early understandings of the concept of *ch'i*, but Wang Ch’ung, bringing them together under one system, certainly gives a clearer picture of what *ch'i* is from a philosophical perspective. The one distinct feature that is noticeable in this system is that *ch'i* is the source and basis for all things, especially for life itself. *Ch'i*, according to this system, is a natural phenomenon in traditional Chinese thought and acts in a spontaneous manner. Since Wang Ch’ung brought this system
together based on older uses and early meanings of this concept, it can be said that these ideas reflect some of the original conceptions of ch'i in early philosophical development. Wang Ch'ung also responds to other Confucian notions of ch'i, particularly the notion that ch'i can be "intentionally manipulated" (Rainey, 1992: p.269). Through his writings, Wang Ch'ung divides ch'i into different categories or types: original (yuan) ch'i in which everything is formed; essential (ching) ch'i which is the basis for the blood's ch'i and functions through the senses producing sensation, intelligence and consciousness; yin ch'i produces physical elements of the body while yang ch'i produces the ching-ch'i. For Wang Ch'ung, all of these types of ch'i are part of the one, single ch'i that is the basis for all of the universe. To get a better understanding of ch'i and its complex nature, we should look briefly at how the concept of ch'i is related to the Chinese concept of yin-yang, as well as to the theory of the five phases (wu hsing) because of their important historical and philosophical associations with the concept of ch'i in Chinese culture.

Moving away from the philosophy of Wang-Ch'ung and his perspective on the concept of ch'i, the ideas of Confucian scholar Tung Chung-Shu and the New Text School which was dominant throughout the Hans dynasty (206 B.C.-A.D.24) also contributed to the broader understanding of ch'i in the Chinese cultural context. Once again, because of the varying philosophical perspectives around the yin-yang theory, as well as the theory of the five phases, focusing on the thought of Tung Chung-shu allows for a clear and more distinct picture of what these concepts and theories may have stood for in traditional Chinese thought. According to Tung Chung-Shu, all things within the universe have a connection to the great beginning or yuan (origin), and it this yuan
existed before heaven and earth (Fung, 1973). From this yüan came the heaven, earth, yin and yang, wood, fire, earth, metal, water, and human beings. In regard to the five phases (wu hsing), (wood, fire, earth, metal, water), the Confucian scholar suggests that.

Each of the five elements (phases) circulates according to its sequence: each of them exercises its own capacities in the performance of its official duties. Thus wood occupies the eastern quarter, where it rules over the forces (ch'i) of spring; the fire occupies the southern quarter, where it rules over the forces of summer; metal occupies the western quarter, where it rules over the forces of autumn; water occupies the northern quarter, where it rules over the forces of winter; earth occupies the center, and is called the heavenly fructifier (ti'en jun)...coined together, the ethers (ch'i) of the universe constitute a unity: divided, they constitute the yin and yang: quartered, they constitute the four seasons: (still further) sundered, they constitute the Five Elements. These elements (hsing) represent movement (hsing). 18

All things within the universe are connected, according to this philosophy, through the yüan (where all things have their origin) and the ethers (ch'i). In addition, everything is composed of ch'i, while all of the elements affect each other and have their own individual capacity as active moving forces within the universe. The yin and yang, even though they are considered two ethers or fluids, are not really considered physical material. Tung Chung-shu says that.

Within the universe exist the ethers (ch'i) of the yin and yang. Men are constantly immersed in them, just as fish are constantly immersed in water. The difference between them and water is that the turbulence of the later is visible, whereas the former is invisible. Man's existence in the universe, however, is like a fish's attachment to water. Everywhere these ethers are to be found, but they are less viscid than water...thus in the universe there seems to be a nothingness and yet there is substance. Men are constantly immersed in this eddying mass, with which, whether
themselves orderly or disorderly, they are carried along in a common current.  

Here we actually see a similar view to that held by Wang Ch’ung. Both philosophers see ch’i as having different categories (yin and yang), but also see ch’i as unity. But Tung Chung-shu develops the concept of yin and yang much further than does Wang Ch’ung. The forces of yin and yang are opposing forces and have their own distinct positions. In relation to the seasons, the ether of yin moves northward and assumes that position, bringing with it cold, while the ether of yang takes its place in the southern quarter, bringing with it heat. This works in a revolving, circular motion, and “their places of emerging and retiring are always directly opposite to one another, but there is always a mutual concord in the equable blending of their larger or smaller quantities.” From this perspective, the ether of yin retires as the ether of yang rises and takes on greater power over the retiring force. Yin and yang become complementary principles and forces, with the yang representing masculinity, activity, and light, while the yin represents femininity, passivity, and darkness. The balance and “interplay” between the two create all natural phenomenon in the universe. The concept of yin-yang in relation to the changing seasons, as well as to that of movement and interplay, has an extensive background and has been the source of many debates by Chinese scholars and philosophers (Fung. 1973: Needham. 1956), therefore a larger analysis lies outside of the scope of this section. More importantly, it is the relationship between humans and the forces of yin and yang that deserves our attention here.

Tung Chung-shu argued that the most noble of creatures that was conceived from ching or the essence of ch’i was “man” himself (Fung. 1973: pp.121-122), for human
kind received the decree \textit{(ming)} of heaven and unlike any other creature, could practice love. The Confucian scholar equates the \textit{yin} and \textit{yang} with “man’s” nature \textit{(hsing)} and “man’s” emotions or feelings \textit{(ch’ing)}. He writes,

The human body has within it the nature \textit{(hsing)} and the feelings \textit{(ch’ing)}, just as Heaven has the \textit{yin} and \textit{yang}. To speak of man’s “basic stuff” and exclude this from his feelings, is like speaking of Heaven’s \textit{yang} while excluding its \textit{yin}...truly, there exists in man (both) love and covetousness, each of which lies within his body. What is thus called the body is received from Heaven. Heaven has its dual manifestations of \textit{yin} and \textit{yang}, and the body likewise has the dual qualities of covetousness and love.  

Tung Chung-shu argues that the forces of \textit{yin} and \textit{yang} are connected to both man’s nature, and to man’s emotions. Within man’s nature, “he” has the potential for both love and covetousness, just as Heaven has \textit{yin} and \textit{yang}. According to Tung’s philosophy, man must continue Heaven’s work here on earth, which in turn places man in the higher spheres of the cosmos. While man is here on earth, he must deal with both good and evil which is a part of man’s nature. Tung Chung-shu believed, “that which confines the multitude of evil things, within, and prevents them from appearing externally, is the mind. Therefore the mind is known as the confiner...Heaven has its restraints over the \textit{yin} and \textit{yang}, and the individual has his confiner of the feelings and desires: in this way he is at one with the course of Heaven.”

In essence, the basic nature of man has the “beginnings of goodness” but it should not mean that this nature itself is good, and man must work to be of good nature. In regards to ethics and morality, relationships, derived from the principle’s of \textit{yin} and \textit{yang} (Fung. 1973: pp. 123-124), should also be judged by \textit{yin} and \textit{yang}, meaning that the ruler, such as a father, is \textit{yang}, and the subject, such as the
son, is *yin*. Here we see an example of how a philosophical and metaphysical concept, such as *yin-yang*, is used and incorporated into the social structure of everyday life. In context, these concepts are inseparable from social, political, philosophical, and spiritual frameworks. Within Chinese belief systems, *chi* is the source and basis for all things, including life. The balanced forces of *yin-yang* affect all aspects of life including social and familial relationships. Together, the concepts of *chi* and *yin-yang* are integral to, and inseparable from one another. The individual elements of each are also integral to, and inseparable from one another, existing within social relations, human nature, and the cosmos.

The concepts of *prāṇa* and *chakras* in Indian culture should be viewed in the same regard. These concepts, along with the Chinese concepts of *chi* and *yin and yang*, have complex meanings and backgrounds. To recap some of the more important ideas, the concept of *prāṇa* underlies all things in the universe according to Indian philosophy and religion. It is closely intertwined with other Hindu concepts and practices such as *prāṇāyāma*, *chakras*, *Brahman*, *yoga*, *manas*, *dharma*, and *vāyu* to name a few. The term is closely associated with the word “breath” or “vital breath” that all humans possess. *Chakras*, located in what the Hindu’s refer to as the “subtle” body, are understood to be the center points within the body in which “vital breath” or *prāṇa* must flow through to reach the various parts of the body. The practice of yoga and meditation is used in Indian culture as a means to control this breath (*prāṇāyāma*) and distribute it throughout the body. The concept of *chi* in Chinese culture has been described using a number of sources, including the writings of Wang Ch'ung who suggested that *chi* was a part of
everything in the universe and was necessary for life. Without ch'i, there would be death according to Wang Ch'ung. Ch'i is divided into different categories which include original ch'i in which everything is formed, essential ch'i, yin ch'i and yang ch'i which produces the ching-ch'i. For Wang Ch'ung, all of these types of ch'i are part of the one, single ch'i that is the basis for all of the universe. The concept of yin and yang, closely related to the five phases theory discussed earlier, also has multiple meanings and interpretations. According to Tung Chung-shu, all things within the universe are connected through the yuan and the ch'i. In addition, everything is composed of ch'i, while all of the elements affect each other. The yin and yang, even though they are considered two material ethers or fluids, are not really considered to be of a physical nature. We will now turn to look at how the concepts of prāṇa, chakras, ch'i, and yin-yang are incorporated into the systems of medicine in India and China.

**Systems of Medicine: Indian and Chinese**

The science of medicine in India is known as *ayurveda*, and its origins date back over 2000 years (Tabor, 1981: p.439). It is based on promoting health and longevity (*ayur*), and has religious overtones because of its association with the *vedas*, the sacred books of Hinduism. The hymns of the *Atharva Veda* in particular have many references to suggest that demons were the cause of disease and sickness. The Indian medical system of *ayurveda* developed out of the belief that illness is not predetermined and that life can be lengthened by human effort. Anthropologist Charles Leslie suggests that
"Indian medicine was a system of so managing the whole life as to prolong it, and to
preserve health and vitality as far as possible. The life and health of man were controlled
partly by his karma, the effect of good and evil deeds done in former lives or in this life,
or also by his efforts and conduct in this life." 21 This idea of health and illness has a
background in the metaphysical, especially with its connection to the Vedas, and
traditionally it was believed that religious devotion (bhakti) and yoga would make the
body strong against illness, adding to the years of one's life. The science of ayurveda also
has a well developed physiological component, especially in the works of Caraka, which
can be found in the oldest known manuscript of Indian medicine called the Caraka
Samhita. The development of this ayurvedic science was first based on five factors, or
proto-elements: earth, water, fire, air, and prāṇa. These elements "create the universe,
they also create the body, and they form the diet; a relationship is thus established
between macrocosm and microcosm. In other words, whatever is in the body (pinga) is in
the universe (Brahmanda)..." 22 In traditional Indian thought, all things have life and
everything is connected with the universe. This is known as the pancha-bhuta theory in
Ayurvedic medicine. According to this teaching, there is mutual interaction and mutual
interdependence between all things of the universe. Associated with this philosophy is the
idea that if the proto-elements of air (vāta), fire (pitta), and water (kapha) are in balance
with each other, the health of the body is maintained. Subsequently, if there is a
disturbance in this equilibrium, the result is disorder or illness within the physical body.
Ayurvedic medicine places great emphasis on the equilibrium of the three humors
(tridoshā): wind, bile, and phlegm. In ayurvedic medicine, the element of wind or vāyu is
considered a humor, the element of fire appears as bile, and the element of water appears as phlegm. Sudhir Kakar suggests that.

Of the three humors, wind occupies a prominent position. Food is said to be moved into the stomach and blood circulated through all parts of the body by the power of the prāṇa kind of wind. The apāna wind in the anus region acts downward to expel flatus, urine, feces, semen and fetuses. The samāna wind, located in the region of the navel, helps in the digestion of food and transforms it into blood, semen, feces and so forth. The udāna wind in the throat, acting upwards, produces speech and song (as well as belches) while the vyāna wind, pervading all parts of the body, circulates the nourishing sap. Bile and phlegm too are each of five kinds. Illness occurs when any one of the three humors becomes excessively “agituated” and increases disproportionately in relation to others. The restoration of the bodily elements and thus of health rest on the consumption of environmental matter in the right form, proportion, combination and at the right time. After ascertaining the nature of the imbalance in the body, the doctor identifies a substance (or combination of substances) in nature—drug or diet—which, when transformed within the body, will correct the humoral disequilibrium. That is why “there is nothing in nature without relevance for medicine.”

These “Five Breaths” or winds, described in the Upanishads, were mentioned previously in the discussion of Indian prāṇa, prāṇayama, and yoga. Here we can see how they are utilized in relation to health and illness. The function of these breaths are taken into account when the ayurvedic doctor or vaidya assesses and treats their patients. In addition, the assessment involves understanding the human being as a whole. Ayurvedic medicine, in other words, has always been what we now would consider “holistic.” The body and mind are seen as both separate and connected. Because an individual is a part of nature, the environment, and the cosmos, which function in relation to each other, many factors have to be considered in the assessment and treatment of illness. These factors
include anatomy, physiology, daily lifestyle, the season, diet, and both personal and social hygiene. The system of ayurveda medicine has an extensive commentary on each of these categories, particularly on the types of food that are considered healthy or unhealthy. It is also believed that every individual must be treated differently because each individual not only lives various lifestyles, but each individual also has an excess of one of the three proto-elements. For example, a person can have a water or fire constitution, or there can be a combination of two or three elements combining for an air-water constitution. As a result, each individual must be treated with this in mind by the vaidya who are considered to have great insight into humanity, society, and the effects of environment on health and illness (Thakkur, 1979: p. 477).

Disease in Indian thought and culture involves both the body and the mind. In other words, the body and "consciousness" are regarded as places where disease and health are maintained. The aim of yoga is union with higher self, but it is believed in Indian culture that you can unite with your higher self only when you have a healthy body, healthy mind and healthy consciousness (Varenne, 1989). So Ayurveda and Yoga are considered to be the foundations of a healthy life, particularly in Hindu thought. Ayurvedic theory states that all disease begins with an imbalance or stress in the individual's consciousness. Ayurvedic medicine therefore involves treating the whole person with diet, yoga and meditation and a blending of body, mind and spirit. The subtle alignment of mind, body and spirit produces health. As the medical practice of ayurveda developed and expanded, so did the concept of Indian yoga (particularly kundalini) and meditation as it pertained to health and illness. As mentioned earlier, the ultimate
individual goal of yoga and meditation is reaching and awakening the kundalini through the directing of prana and apana. Within yogic philosophy, it is believed that the control of breath influences all of the life rhythms, thus giving the bodily functions organization and regularity. Without the practice of controlling the breath and guiding prana through the chakras, blockages of prana can result, leading to illness. The chakras, in traditional Hindu thought, are believed to be associated with specific physiological and mental processes. If a chakra does not function correctly, the result is a physiological or psychological disturbance. For example, a disfunctioning manipura chakra, located at the level of the navel, is believed to cause eye problems, swelling, and anger (Kakar, 1982: p.88). The law of karma is believed to be one of the underlying causes of chakra disfunction. As mentioned briefly earlier, within the Indian cultural context there are two significant conceptions of the body. the “gross” body which is overtly accessible to our senses, and the “subtle” body which is considered to be visible only to the advanced spiritual person, and to be superior to that of the “gross” body (Varenne, 1973: pp.154-155). These two “bodies” are nonetheless connected. If the flow of prana through the chakras within the subtle body is blocked, real physiological symptoms of illness can result in the gross physical body. The “subtle” body is the focus of yoga, meditation, and the practice of mantras with the goal, within Ayurvedic medicine, to balance the humors and “heal” the gross physical body. In addition, the “gross” body is used as an analogue of the “subtle” body, acting on various levels. Jean Varenne suggests that:

Just as the gross body is analogous to the subtle body, so the latter in its turn is analogous to the universe. We must understand clearly that the subtle body is the perfect microcosm (of which the gross body is an imperfect
representation), but that this microcosm is in its turn made in
the image of the macrocosm. We ought therefore to find in
the human body (subtle and gross) the selfsame elements that
constitute the universe, not only earth, water, fire, etc., but
also the stars, the sun, the planets, and even its rivers, seas,
etc....each of these cosmic components has its precise place
in the mandala and, in consequence, in some particular part
of the gross body. So when we read, for example, that the
"sun, the moon, and fire are present in man's heart," we are
to understand by this that the organ in question is situated
within the gross body in that place where, in the subtle body,
one finds the "center" corresponding to the position of those
celestial bodies in the cosmic wheel. 26

In traditional Hindu thought, the human body is perceived as having more than
physiological characteristics. The body is viewed as having a central place within the
cosmological structure of life, possessing the same elements that make up the entire
universe. In Hindu thought, the gross body is used as a analogue for the "subtle" body,
meaning that the gross body is derived from the model of the "subtle" body. The "subtle"
body informs the gross body. As well, there is a belief that the imperfection in the "gross"
body may be a result of bad deeds in this life or of a past one in accordance with the law
of karma. On the other hand, the "subtle" body is without imperfection, with all of
humanity sharing an identical structure. This "subtle" body, in theory, houses the nadiś,
chakras, prāṇa, and the kūndaliṇī. Since the chakras and nadiś are a part of this "subtle"
body, it means that they operate "without imperfection." Imperfection is found only
within the gross body, particularly if the breath is not guided inside the body to a specific
area. The chakras are located at the same latitude as certain parts of the body, but also
indicate the "confluent points of vital forces, the activity of which sets the forces of the
gross body in motion, but which remain distinct from them." 27 If prāṇa does not reach
these areas, then a malfunction results within the gross body. The practice of yoga reveals the "subtle" body, which allows the practitioner to access the highest power and energy within. This ultimate energy is *kundalini*. On a higher mental and spiritual level, the attainment of *moksha* eliminates the relation between suffering and the Self, where pain and emotion, for example, are no longer a part of the individual (Eliade, 1969: p.33). This perfection can only be attained through the union and harmony of all things spiritual, physiological, and mental. In Ayurvedic medicine, the goal is to heal the gross body, but only in connection to ultimate spiritual pursuits. Within this system, knowledge and belief of the interconnectedness of all things in the universe is essential.

Traditional Chinese medicine is another Asian medical system with an extensive history and background. The theoretical framework of Chinese medicine was established more than two millennia ago. A great deal of ancient medical knowledge is preserved in the pre-Ch'in (221-207 B.C.E) *Inner Cannon* (*Nei Ching Su Wen*), a comprehensive record of Chinese medical theories belonging to the *Yin-Yang* School. The Han dynasty (206 B.C.E-220 C.E.) produced an authoritative and valuable practical guide regarding the treatment of illness called the "Treatise on Diseases Caused by Cold Factors" (*Shang Han Lun*) by Chang Chung-ching. One of the best-known Chinese medical works is the *Materia Medica* (*Pen Tspao Kang Mu*), compiled in the Ming dynasty (1368-1644 A.D.) by Li Shih-chen (Schiffeler, 1978; Leslie, 1976; Porkert, 1974; Needham, 1956). This traditional system of medicine with its ancient practices still flourishes in modern day China, and in other parts of the world (Porkert, 1974). The system of health in Chinese culture has historically been based on principles of universal life energies, *ch'i*, and *yin*
and *yang* in particular. Harmony and balance were the key elements in restoring health and managing illness. In addition, the flow of energy, and the nature of human beings themselves, as well as the very balance of nature and human society, were understood to be dominated by the elements of *yin* and *yang*. An imbalance of these forces could bring famine, disease, and chaos. According to the *Nei Ching Su Wen* (Inner Classic of the Yellow Sovereign), an ancient Chinese text that contains one of the first systematic descriptions of the system of correspondences in Chinese medicine, if *yin* and *yang* are not in harmony.

> It is as though there were no autumn opposite the spring, no winter opposite the summer. When *Yin* and *Yang* part from each other, the strength of life wilts and the breath of life extinguished. If such a body is exposed to the dew and the wind, then cold and fever sets in....If *Yang* is predominant, then the body will grow hot; the pores close and the patient begins to breathe heavily and gasp for breath. Fever will arise; the palate will become dry; the person becomes tense and irritable...  

In theory, the Chinese doctor can locate the imbalance between the two forces, one of which is dominating and the other waning. According to Effie Poy Yew Chew, the doctor is able to perceive this imbalance by:

> studied and experienced knowledge and a finely tuned sensitivity to the characteristics exhibited by predominant *yin* or predominant *yang*. Specific human body parts—indeed all physical entities—are considered to be more *yin* or more *yang* by nature, according to the appearance, function, and character of a particular entity, as empirically observed, and its similarities to the essential qualities of either the *yin* or the *yang* force. No entity, however, is solely *yin* or *yang*, but merely is characterized by one force to a greater degree than the other. Even the *yin* and *yang* forces themselves are not totally without the essence of the other. 28
To have a better idea of how yin and yang were and are understood and perceived by doctors and the lay patient, we must look at the closely related theory of wu-hsing, or the five phases theory, as formulated through the development of Chinese medicine and philosophy.

The theory of “five phases,” with its many symbolization’s, was used to explain the “observable changes in nature” (Schiffeler, 1978: p.29). The interplay of the five elements is based on regeneration and consumption. For example, wood gives way to fire, earth gives way to metal, and water gives way to wood. On the other hand, wood consumes earth, earth consumes water, and water consumes fire. In addition, each season in nature gives way to the next. The other attributes associated with this theory include the “five cardinal directions” (wu-fang), the “five sacrificial beasts” (wu-sheng), and the “five atmos” (wu-ch’i). The “five viscera” (wu-tsang) are fundamentally more closely related to Chinese medicine (Schiffeler, 1978: p.30). These “five viscera” are made up of the heart—mind (hsin), kidneys (shen), liver (kan), lungs (jei), and the spleen (p’i). These in turn are related to the “five bodily constituents” or wu-t’i which are the muscles (chin), vessels (mai), flesh (ju), bones (ku), and skin and hair (p’i-mao). The “five phases” and their correspondences work in relation to each other, combining to make an elaborate system for the physician to use in identifying the relationship of ch’i, the yin and yang, and the physiological body. In terms of the macrocosm and the microcosm in traditional Chinese thought (humans as the microscopic counterpart of the macroscopic universe), the assessment of health and illness would involve the following elaborate criteria. In terms of the macrocosm, the relationship between the five elements, the
seasons, five taste qualities (wu-wei), five colors, five atmospheric influences (for example, wind and heat), and the five stages of development would have to be assessed. In terms of the microcosm, the relationship between the five elements, five sense organs, five structural elements (wu-t’i), five fus (digestive liquids and digestive organs), five tsangs or viscera, and the five emotions would also have to be assessed since all of these elements affect humans during the course of a year (Schiffeler, 1978: p.30). Besides the assessment of these interconnecting elements, one of the main diagnostic methods used in traditional Chinese medical practice is the taking of the pulse (Veith, 1973; Unschuld, 1985). It is believed that there are six pulses on each wrist, with each pulse connected to a specific organ in the body. The reading of the pulse would allow the physician to judge the "site and stage" of a disease, as well as its cause. According to the Nei Ching Su Wen.

The way of medical treatment is to be consistent. It should be executed at dawn when the breath of yin has not yet begun to stir and when the breath of yang has not yet begun to diffuse; when food and drink have not yet been taken....when vigor and energy are not yet disturbed—at that particular time one should examine what has happened to the pulse. If it were not for the excellent technique and the subtlety of the pulse one would not be able to examine it. But examination should be done according to plan and the system of Yin and Yang serves as the basis for examination. When this basis is established, one can investigate the twelve main vessels and the five elements that generate life. Life itself follows a pattern that was set by the four seasons.

For our purposes here, the relationship of the concept of yin and yang to that of illness and assessment is very important. Both yin and yang serve as a major part of what is believed to cause illness when there is an imbalance of the two, and they also serve a major role in the assessment of what the sickness is, where it is located, and how it can be
treated. The ultimate goal then is to restore the balance between these two forces within the physical body. From a much larger perspective, Joseph Needham suggests that the "synchronistic alteration of Five Phases (i.e., all phenomenon) by the dualistic forces of the yin and yang principles throughout the infinite cosmos reflects the overall aspects of Chinese world concept.  

In other words, the historical process and cultural perception of the yin ch'i and the yang ch'i reflect the world view of the Chinese people, and part of this world view includes the belief that the yin and yang principle is of great importance within the realm of health and illness. Scholar John William Schifferler (1978; p.32) suggests that this holism reflected by the forces of yin and yang is "symbolized by the word Tao" which symbolizes harmony within the universe. The harmony has been internalized into the body from a physiological standpoint. In traditional Chinese thought, humans are considered the microscopic counterpart of a macroscopic universe functioning in harmony. In the field of traditional Chinese medicine, good health then can be interpreted as.

The harmonious integration of the person within himself and with his society, nature, and the cosmos. Illness and suffering are indications that this harmony has been disrupted, a disruption for which the patient himself is considered partly responsible – that is, he has fallen ill because he has in some way transgressed the laws of nature [and] society....therefore he must actively participate in the healing process. The task of the healer is to restore the disrupted harmony by activities which involve participation of persons close to the patient as well as spiritual exercise.  

In a culture where the perception of health and illness are based on experience and spiritual convictions, medical practitioners (chun-i) must have great knowledge in not only physical medicine, but that of philosophy, including cosmological and spiritual
explanations of the universe. Various forms of Chinese medical treatments have continued since ancient times, practices such as massage, meditation, acupuncture, the use of herbs, and physical and respiratory exercise, all of which function to restore balance and harmony to the individual, and by extension to society and the cosmos. Within traditional Chinese thought, the maintaining of balance between yin and yang is part of everyday life, deeply rooted within the culture as a whole. This perception of health and illness extends far beyond the physical nature of human beings, and cannot be reduced to a simple physiological emphasis with regards to either illness or cure.

In describing the concepts that are relevant to medical understanding within both Indian and Chinese culture, I have meant to provide only an overview. The scope of this work does not allow for a more comprehensive analysis. Instead, my intent is to show, in general, how these concepts were, and are, perceived in traditional Indian and Chinese thought. This section should at least provide the reader with the necessary information and insight that will show, by contrast, how Dolores Krieger's Western view of these concepts in Therapeutic Touch differs from that of traditional Indian and Chinese thought. In addition, this section should provide an overview of the complexities and extensive elaboration's involved with the Eastern concepts of ch'i, prāna, chakras, yin-yang, and yoga. The next section of this work will focus on how Krieger Westernized and medicalized many of the Eastern concepts that have been discussed here.
Chapter Three

Eastern Concepts In Dolores Krieger’s Work: How They Differ From Their Original Source

In the two previous chapters, this thesis has explored the ways in which Dolores Krieger uses various Eastern concepts in her explanation of Therapeutic Touch, and how the same Eastern concepts are viewed in their original cultural contexts. In this chapter, the thesis will analyze the differences between these two perspectives. The focus here will be on how Krieger, in her attempt to establish Therapeutic Touch as an acceptable form of medical treatment in the West, compares Eastern notions of the body and healing to that of Western ideas of physiology, bio-medicine, and health in general. I will argue that it is here that Dolores Krieger minimizes, Westernizes, and medicalizes the Eastern concepts of *prāṇa*, *ch’i*, *chakras*, and *yin* and *yang* that have already been discussed. Ironically, it will be suggested, Krieger may well have failed in her explicitly Western medical agenda in successfully diagnosing and curing patients.

Medical sociologist Arthur Kleinman (1978) suggests that medical systems are both social and cultural systems. Kleinman says that:

The health care system articulates illness as a cultural idiom, linking beliefs about disease causation, the experience of symptoms, specific patterns of illness behavior, decisions concerning treatment alternatives, actual therapeutic practices, and evaluations of therapeutic outcomes. Health belief and behaviors, illness beliefs and behavior, and health care activities are governed by the same set of socially sanctioned rules. To examine one in isolation from the others distorts our knowledge of the nature of each and how they function in the context of specific health care systems; it also leads to errors in cross-cultural comparisons.
According to Kleinman, "explanatory models" (EMs) of illness are elicited from patients and practitioners during times of sickness. These models are based in an individual's own views of healing and sickness, as influenced by personal, familial, social, and cultural factors. Kleinman also suggests that healing can be evaluated as successful if the illness and the treatment have received "meaningful" explanations. Conflict and discrepancies can result between lay people and practitioners when each holds a different explanatory model of health and sickness. This in turn can have an effect on the efficacy of health care systems. Kleinman suggests that:

Not infrequently, EM's conflict. When they do, recent evidence suggests that these conflicts impede health care. Here communication has been shown to be a major determinant of patient compliance, satisfaction, and appropriate use of health care facilities, while cultural influences on clinical communication, when unappreciated and not responded to, have been shown to lead to substantial problems in patient care.²

This model proposed by Kleinman is useful in the analysis of Krieger's work in two ways. First, it can help explain why Krieger attempts to Westernize Eastern concepts, particularly that of prāṇa and the concept of "energy," since that concept is used as a basis for her healing method. Krieger tries to minimize discrepancies between her patients explanatory models, and the explanatory models of Western biomedical practitioners shaped predominantly as they are by Western biomedicine, and those models borrowed from Eastern sources. Despite this attempt to minimize discrepancies between very different explanatory models, however, there remains a potential for errors in the understanding and comprehension of illness and its treatment when concepts are
carried across cultural lines. In regard to the development of Therapeutic Touch, Krieger attempts to bring Eastern attitudes and constructs of health and illness into a Western approach to healing. To do this, and to minimize the potentially damaging conflicts between Eastern and Western explanatory models, Krieger Westernizes various Eastern concepts such as prāṇa and ch'i, along with their specific explanations. According to linguistics scholar Arran Stibbe, for example, there are considerable metaphorical incompatibilities between contemporary Western medicine (CWM) and traditional Chinese medicine (TCM) and in order for a healing system such as TT to be both accepted and successful in the West, such ‘incompatibilities’ need to be overcome. The table below illustrates some of these incompatibilities:

<table>
<thead>
<tr>
<th>CWM</th>
<th>TCM</th>
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<tbody>
<tr>
<td>• Illness is an invader</td>
<td>• Illness is an imbalance</td>
</tr>
<tr>
<td>• Curing illness is fight</td>
<td>• Curing illness is redressing balance</td>
</tr>
<tr>
<td>• The body is a machine</td>
<td>• The body is an energetic system</td>
</tr>
<tr>
<td>• Illness is a mechanical</td>
<td>• Illness is a blockage of energy</td>
</tr>
<tr>
<td>breakdown</td>
<td>• Curing illness is releasing energy</td>
</tr>
<tr>
<td>• Curing illness is a mechanical</td>
<td></td>
</tr>
<tr>
<td>repair</td>
<td></td>
</tr>
</tbody>
</table>

Similarly, there are very real differences between the Indian Ayurvedic model of health and illness, and the Western biomedical model. One significant difference between both Eastern healing systems and that of the West is that in the West, the body is seen as a machine, while in the East, the body is often viewed as an “energetic” system. Since illness and health are closely related to the concepts of “energy” in the East, explanatory models of healing in these contexts are strongly shaped by personal, social and cultural interpretations of the predominantly metaphysical concepts of prāṇa, ch'i, yin-yang and
other cosmological factors. In her attempt to establish TT as an accepted practice in the West, where the body is viewed in more mechanistic terms, Krieger neglects to develop the explanatory models of healing associated with Eastern cultural perceptions of health, illness, and the body. To do so would have undermined her goal to make TT acceptable within the biomedical establishment, by introducing and defending a fundamentally incompatible model of health and illness into the biomedical establishment. Second, Kleinman’s model can help illustrate the problematic nature of Krieger’s attempt to minimize and Westernize Eastern concepts. As we have seen in Kleinman’s argument, “communication” is the key to successful healthcare practice. Krieger omits, obscures, and minimizes elements of Eastern healing systems, elements considered integral within their own cultural context, in order to correlate Eastern concepts more easily to readily understood Western counterparts. However, in doing so, she fails to communicate potentially necessary details about her healing system, and if Kleinman is correct, therefore undermines its very chance at success.

After discussing Eastern concepts associated with healing, as well as Western medicine in chapters 1 and 2, it is clear that specific Eastern explanatory models of health and illness differ significantly than those of the West. For example, in traditional Chinese and Indian medicine, metaphors are used frequently for explaining illness, along with concepts such as *prāṇa*, *ch’i*, and *yin* and *yang*. The four main metaphors in Chinese medicine are the balance of *yin* and *yang*, composition of elements, energy channels, and the weather system (Stibbe, 1996: p.179). The concept of *yin-yang*, for example, is not only discussed in terms of balance within the body bringing health and illness, but also in
respect to the related elements of fire, metal, water, wood, and earth. As a result, the metaphors and symbolism of Eastern models of healing are fundamentally wholistic, relating the health and illness of the patient not simply to imbalances within the body, but to the greater physical, social, and cosmological environment within which the individual functions. These metaphors consequently provide a way for people to handle and explain illness that links them to their wider social and cultural contexts. Krieger does not discuss such metaphors or symbols in her construction of TT. Instead, she takes individual concepts out of their original contexts without relevant discussion of how they help in those contexts to explain health and illness. In doing so, Krieger attempts to make TT more acceptable in the West, but she also neglects to communicate the very explanatory model of health and illness that underlies TT, an explanatory model that she turned to the East to find.

According to medical anthropologist Emily Ahern, common language, metaphors and idioms are necessary for understanding and conceptualizing cause and cures for illness. After researching medical disorders in Taiwan, Ahern suggests that:

> Whether the sick person himself acts or whether action is taken on his behalf, one of the most important effects of seeking a cure is that the patient and those around him are given a language with which to describe and understand the illness. Whether or not the treatment succeeds in curing the illness itself, it will have succeeded for a time in affecting people’s experience of the illness, a result scarcely less vital than achieving a final bodily cure. 4

Drawing on the theoretical framework of Kleinman and Ahern, this chapter will explore Krieger’s explanations and perceptions of prāṇa, chakras, ch’i, and yin and yang as they
are given in her selected works. By comparing Krieger's discussion of these Eastern
corporations to their original philosophical and metaphysical understanding, this section will
demonstrate how Krieger reformulated and fundamentally changed the nature of how
these concepts are to be understood from the way they were, and are, understood in their
original cultural contexts. This section will highlight some of the areas where Krieger
omitted ideas, concepts, and cultural/personal explanatory models associated with
Eastern ideas of health and illness in her attempt to translate these ideas to the West.

The description of Therapeutic Touch in the early works of Dolores Krieger
(1979) focuses on what she calls "human energy," which for Krieger is at the center of
the healing act. This idea of "human energy" in Therapeutic Touch is derived from the
Hindu concept of *prāṇa* according to Krieger (1979), who says "my research had led me
to believe [prāṇa] to be at the base of the human energy transfer in the healing act." 5
Without going into the history or its origins of *prāṇa* found within the Hindu Vedas or
other Hindu sacred texts such as the *Bhagavad-Gītā*, Krieger, as quoted earlier in chapter
1, gives the following analysis:

*prāṇa* is not related to the respiratory act in a simple
breathing-in and breathing-out fashion, but that it is a
principle underlying the rhythmic movement that makes
breathing imperative, whether it is breathing that occurs in
the lungs or the chemical reciprocity that goes on at a
molecular level in the rhythmical interchange of oxygen and
carbon dioxide during the respiratory process at the cellular
level while the organism is alive....one finds that the
literature of these ancient people makes statements that be in
consonance with some of the most contemporary theory of
the West. The literature of the East, for instance, says that
*prāṇa* derives from the sun. This statement is not at all at
variance with our current recognition that the crucial
chemical base of the life process in man is dependent upon
sunlight, for the photons coming from the sun set off the process of photosynthesis, which is the driving force for the primary synthesis of organic matter. When one considers that the process begins with inorganic matter, the statement sounds more like a miracle than do the ancient texts of the east.  

This is Krieger’s first and most detailed description of prāṇa given in The Therapeutic Touch: How to Use Your Hands to Help or to Heal. Noticeably, the description is very limited and neglects to give the reader the important philosophical and metaphysical background to the concept of prāṇa in the Indian context, even though she does state that the term lacks a proper English translation and that culture in the West does not understand “energy” in the same way as Eastern cultures. Krieger does suggest that prāṇa underlies all life processes, but does not at any time give reasons for this claim. The idea that prāṇa underlies all life processes is valid within the context of the Hindu understanding of this concept. The sacred Hindu text of the Rig-Veda (6.4.1-10: 1500-1200 B.C.E. tr. Paul Deussen, 1980) demonstrates the great importance of prāṇa, where it originated, how one should be devoted to it and pay homage, and how all things are derived from it. For example, it is written in the Rig-Veda (6.4.1-10), “Homage to the breath of Life, for this whole universe obeys it, which has become the Lord of all, on which all things are based” and “plant it in us so that we may live.” Prāṇa, according to the Rig-Veda, is consequently much more than the simple translation “energy” would imply; it is essential for life and fundamental to the worldview of Indian thought. There are hundreds of additional references to prāṇa or “breath of life” within the fundamental Hindu religious texts. Taken together, these references provide an in-depth exploration of this concept, and reveal what it may mean to the Hindu mind, where it stands in the
sacred order of the cosmos, and its importance in relation to explanatory models of healing. In its original context, prāṇa is shown to be important to all living beings both universally and individually, with all things in the universe being under its power. Krieger does not find it necessary to relate any of these examples in her description of prāṇa however. She omits the universal emphasis of prāṇa that is maintained in the East, focusing instead primarily on the flow of “energy” within individual bodies. According to Hindu scriptures, this bodily emphasis is important, but does not stand independent of wider cosmological implications. Within this system, prāṇa is broken down into the five ramifications or breaths: prāṇa, apāna, vyāna, samāna, udāna. These five breaths are associated with various bodily functions which correspond with various regions of the body in which prāṇa or “life-breath” flows. Because of its central importance in Indian thought and the fact that prāṇa is seen to involve all of the universe, the concepts of prāṇa and the five breaths play an important role in expressions of health and illness in the Indian cultural context. The balance and flow of prāṇa in the body is vital for health according to Indian thought, and the practice of yoga and meditation is the ultimate way to control the flow of prāṇa into and within the body. The practice of yoga brings the individual together with the universal nature of “life-breath” or prāṇa, learning to control the flow while establishing a connection with the entire cosmos. Within the practice of yoga, chakras play an important role in distributing prāṇa throughout the body. When the flow of “energy” between the chakras is controlled, health can be maintained. The system of chakras is quite elaborate, and a full understanding of how they function is essential to the process of yoga and prāṇayama (control of breath). Prāṇa, prāṇayama.
yoga, and chakras form an integral system within the Indian Ayurvedic system. No single element can be fully understood without references to the others, and healing is a matter of the full realization and utilization of all of these elements.

Krieger does express the view in her written works on Therapeutic Touch that prāṇa underlies all life processes and that knowledge of how it flows is important. She does not attempt to communicate this knowledge, however, to her Western audience. The integral relationship between prāṇa and its associated concepts is not related by Krieger. Students of TT are introduced to a system of healing that is subsequently only partially explained. Krieger avoids detailed information about the spiritual, philosophical, or medical elements associated with the concepts that she uses for developing the theory behind Therapeutic Touch. Although she informs her readers that the East holds the answers as how to and why laying of the hands is an effective form of healing, those answers are embedded in a metaphysical system of thought which is incompatible with the Western model of health and illness that Krieger is attempting to infiltrate. As a result, she does not communicate those answers to her audience, choosing instead to provide minimal explorations for complex Eastern concepts. In doing so, Krieger attempts to further her agenda of gaining acceptance by the Western biomedical establishment. However, in doing so, she may equally have undermined the therapeutic goal, for as Kleinman and Ahern argue, only when one explanatory model is adequately explained in the context of another can communication be effective, and only through effective communication can healing take place.
Another concept closely linked to that of prāṇa in the Ayurvedic system is that of vāyu. There is a brief mention by Krieger of the term Vāyu, which she suggests is related to air, but more specifically to motion. However, once again the founder of TT limits her discussion of this term, while it receives considerable attention in commentaries on Hinduism such as Goodall (1996), Deussen (1980), Chattopadhyaya (1977), Chatterji (1960), Eliade (1958) and Mueller (1900). Krieger uses this term to simply state that prāṇa is concerned with more than just breathing in and out, but also with motion and movement that makes breathing “imperative,” thus relating the concept to physiological understandings of the West which include chemical reciprocity, molecular changes, and cellular chemistry. Krieger does not explore in-depth Hindu conceptions of vāyu, especially as it pertains to the concept of prāṇa. For example, Vāyu is depicted as a God in the Kena Upanishad (1.14-23, 800-500 B.C.E.), and in the Aitareya Upanishad (1.4, 800-500 B.C.E.), it says “out of Prāṇa, came Vāyu,” which is part of the creation story in the Upanishads. The Brhadaranyaka Upanishad (3.7-24, 800-500 B.C.E) tr. Paul Deussen, 1980) reflects how the principle of Vāyu corresponds on the cosmic level to that of prāṇa. Another important text, the Caraka-samhita (1300-1000 B.C.E), discussed in a previous chapter relating to Hindu conceptions of disease, states that.

The Wind or Vāyu is the upholder of both structure and function in the body. It is the very soul of the five forms of wind in the body, namely prāṇa, udāna, samāna, vyāna, and apāna. It is the impeller of upward and downward movements, the controller and conductor of the mind; the inspirer of all the senses, the conveyer of the sense-stimuli, the marshallers of the body elements...Wind is the sustaining principle of all life. All these are functions of the peaceful condition of Wind in the body....He (Wind) is God, the
creator, the everlasting one, the Maker and Unmaker of all creatures.

It is quite evident that the principle or concept of Vāyu is very important in the context of Ayurvedic thought, especially in relation to that of prāṇa since both are considered to have great cosmological significance. Often times, the term vāyu is considered to be a synonym of prāṇa (Feuerstein and Miller, 1971: p.26). According to Mircea Eliade (1969), the association between prāṇa and vāyu in the practice of yoga is also quite important, where it is believed that “the body can be kept alive indefinitely if one learns to control the breath (vāyu, lit. “vital wind”).”

Krieger, however, strictly limits her discussion of this concept and its connection to the concept of prāṇa, and as a result, knowledge of vāyu, as well as prāṇa, is left very vague. This is likely the result of the fact that the concept of vāyu is closely related to idea that prāṇa is a universal force, and is contained in all parts of the cosmos. Without knowledge of vāyu, the concept of prāṇa loses this cosmological and vital part of its overall meaning. Krieger attempts to minimize explanatory model discrepancies between East and West by omitting this fundamental aspect of the Eastern healing system. The fact that Krieger does mention the concept reveals her familiarity with it, and establishes the point that she does incorporate some part of the Eastern metaphysical worldview into her healing philosophy. Without the details, however, lay people and practitioners are left with the simple assertion that Eastern concepts underlie the effectiveness of TT as a healing system but are left without any clear understanding of how these concepts explain the efficacy of “laying on of hands.”
The next step that Krieger takes in her introduction is to discuss excess prāṇa or deficient prāṇa. This is an important part of Therapeutic Touch, because it is the flow of prāṇa that the healer must learn to locate if they want to be successful in healing through TT. They must learn, according to Dolores Krieger, how to locate in the body the points at which there is a lack of prāṇa or what she calls “vital energy.” In addition to this, TT involves the transference of the healer’s prāṇa to that of the healee. It is here that Krieger begins a comparison between Eastern approaches to healing and that of the Western biomedical approach. She compares Eastern ideas based on philosophical and metaphysical perspectives to that of Western insight into chemistry, biology, medicine, bio-medicine, and psychology. For example, Krieger states that Eastern literature describes prāṇa as deriving from the sun. This is only partially true, mainly because both are considered life givers. In essence, both the sun and prāṇa in Hindu literature are derived from the same source, Brahma, “the basic foundation of all knowledge” (Mundaka Upanishad 1.1.1) and the place and origination of “breath, the mind, and all of the senses (2.2). The Prāśna Upanishad (2.1-2. 1000-500 B.C.E) tell us that all of the universe is under the power of prāṇa, which would include the sun. Many times in Hindu literature, prāṇa is symbolized by the sun (Yoga Darshana Upanishad 4.39-46). According to Dolores Krieger, the statement that prāṇa is derived from the sun.

Is not at all in variance with our current recognition that the crucial chemical base of the life process in man is dependent upon sunlight, for the photons coming from the sun set off the process of photosynthesis, which is the driving force for the primary synthesis of organic matter.
Krieger’s main point here is to establish the fact that there are proven processes in life that begin with inorganic matter, but on the other hand, Krieger uses Western chemistry to compare and explain the origin of prāṇa. She continues on with this idea as she discusses the fact that healthy people are believed to have an excess of prāṇa:

The Eastern literature also says that normally healthy people have an excess of prāṇa. Again, I find their statement acceptable, for the best of our Western texts on physiology tells us that there is a great deal of redundancy in the human body. If the body is damaged in any way—let us take the instance of a heart attack—many compensatory body mechanisms come into play: Within thirty seconds autonomic circulatory reflexes begin to compensate for the failure of the heart muscle to function properly; concomitantly, the body chemistry begins a holistic adjustment of fluids and electrolytes directed by the adrenals as well as other endocrine glands, and structural changes occur in the blood components. stimulated and being stimulated by principles of repatterning as a new collateral blood supply starts to position itself into the space of the damaged tissues (another “miracle” for which we in the West do not give ourselves credit). To go a bit further: In the East they say that persons who are ill have a deficit of this energy, prāṇa: and the lassitude that accompanies illness would seem to give evidence to support this. 

The idea of individuals having an excess or deficit of prāṇa is based on the development of various Indian yoga practices, as well as Indian medicine, particularly that of Ayurvedic medical practices. According to Indian thought, prāṇa is the subtle “vibratory power” which penetrates the whole cosmos and every living being. It is the “cosmic breath” that is part of the original rhythm of the universe with which humans have become “out of tune” (Feuerstein and Miller, 1971: p.26). The practice of prāṇayāma and various types of meditation endeavors to restore the this rhythm and re-establish the cosmic harmony that manifests in mankind. The subtle body can have excess prāṇa, a
deficit in prāṇa, or one can learn to control prāṇa within the subtle body which in turn helps to establish and maintain health. There is no suggestion in Indian literature, particularly in yoga texts such as the Yoga-sūtras, to suggest that excess or deficient prāṇa can be manipulated by the autonomic nervous system. Krieger’s agenda to Westernize this concept so that discrepancies in explanatory models maybe minimized changes the fundamental meaning of excess or deficient prāṇa. Traditionally, the various traditions of yoga point out that there are five kinds of prāṇa in the body: prāṇa, apāna, samāna, udāna and vyāna. The cosmic, universal prāṇa is the source of these five prāṇas, each having their own specific functions, and are confined to the body which is considered to be a “microcosm” of the universe. In yoga, there is a concern with the balancing of the flow of these vital forces, and directing them (performed by the individual) inward to the chakra system. Illness results when the quality and density of prāṇa within the body is reduced. For example, a lack of prāṇa within the body can be expressed as a feeling of being stuck or restricted while the body can witness physical ailments when prāṇa is lacking. On the other hand, it is believed that the more balanced excess prāṇa is in the body, the less the prāṇa is dispersed outside of the body. If all the prāṇa is “within” the body and flowing properly, then health will be maintained. In other words, there is a belief in various Indian traditions that illness results either when too much prāṇa has escaped the body due to misuse or that prāṇa between the chakras is not flowing properly. If this is the case, it is up to the individual to bring back the quantity and flow of prāṇa to the body. This is done through the practice of yoga by realigning the individual to the rhythm of the cosmos as a whole. In the Indian yoga tradition, the flow
and balance of prāṇa can only be regulated by the focused intent of the individual (Varenne, 1989). Krieger does imply that excess prāṇa is good for the body (i.e. redundancy), but in Hindu and yoga literature, importance is placed on how excess prāṇa should be controlled and balanced within the body for cosmic harmony and health maintenance. The excess prāṇa within the body must be maintained and distributed through the chakras and nādis by way of meditation and concentration, thus nourishing and replenishing both the “subtle” and “gross” bodies. Excess prāṇa within an individual reflects the Hindu notion that he or she is “in tune” with the cosmos and the Brahman.

Another way Krieger changes the fundamental meaning of prāṇa in her translation of it is in her insistence that prāṇa energy can be transferred from the healer to the patient. According to Krieger, “prana can be activated by will and can be transferred to another person if one has the intent to do so.”  It should be noted that the transference of “energy” is more commonly associated with healing practices in Chinese medicine and particularly with the concept of ch’i more-so than with the concept of prāṇa and Indian healing practices. As discussed above, within the Indian context the rebalancing of prāṇa is a matter of the individual’s relationship to the cosmos rather than a matter of one individual’s influence on another. That Krieger conflates these two concepts reveals her tendency to combine the background and explanation of various Eastern concepts so as to pursue her own healing agendas and search for legitimacy. The end result of Krieger’s combination of these items in her work is the fundamental change in meaning of both concepts from that in their original contexts.
In her insistence that the Hindu tradition supports the idea of the transfer of prāṇa from one individual to another, Krieger suggests that the basis for this teaching can be found within hatha and tantric yoga:

*prāṇa* can be transferred from one individual to another, may not be so readily apparent to us unless we have gotten into the practice and literature of *hatha yoga*, *tantric yoga*, or the martial arts of the Orient. We can, however, in these days of potent theatrical and television personalities, recognize this phenomenon as charisma and give it credence in that guise...conceive of the healer as an individual whose health gives him access to an overabundance of *prāṇa* and whose strong sense of commitment and intention to help ill people gives him or her a certain control over the projection of this vital energy. The act of healing, then, would entail the channeling of this energy flow by the healer for the well-being of the sick individual.  

Without knowledge of these yogic systems, she admits, the Western mind may not be able to comprehend the process of *prāṇa* transfer. These claims raise two interesting points. First, even though the author suggests that knowledge of *hatha* and tantric yoga is necessary to comprehend *prāṇa* transfer, she fails to give examples from such practices that would give the student of TT insight into the Eastern theory of "energy" transference. Second, the philosophical and metaphysical frameworks of *hatha* and tantric yoga do not necessarily support Krieger’s contention that *prāṇa* can be transferred from one individual to another. In traditional Hindu thought, *prāṇa* is believed to be *Brahman* (the basic foundation of all knowledge), and the universe is thought to be under the power of *Brahman*. *Brahman* is believed to be the "place of origination" of mind, life, breath, and the senses, and necessary for all beings and all of creation. The process of *prāṇayama* (individual control of *prāṇa* or "vital breath") is central to tantric and
hatha yoga practices, and involves the restoration of “cosmic harmony” between the individual and Brahman. The practice of hatha yoga appeared around the twelfth century, and focused primarily on the employment of physical energy to “purify” both the “subtle” and physical bodies and the mastery of yogic postures. As with other yogic practices, both hatha and tantric yoga utilize prāṇayama in the process “awakening the kundalini.” Within both practices, the flow of prāṇa to the chakras through the nadis has to be mastered by the individual. Tantric yoga, strongly influenced by Buddhist yogic practices, was based on the conception that “sanctity” could only be realized in a “divine body.” Tantric yoga is sometimes associated with masculine-feminine dualism and sexual practices. Hindu scholar Jean Varenne states that Tantrism,

Places sexual appetite at the center of personality and sees gluttony, craving for wealth, and aggression as derivative forms of the central appetite....that is what Tantrism does: taking the old adage that sin itself is a path to salvation, it pushes it to the furthest extremes by teaching that the yogi should eat meat, drink alcohol, and make love to prostitutes. All things forbidden by dharma to high-caste Hindus and viewed by yoga as sins automatically canceling any spiritual progress made. Of course, such practices have no value unless they are directed toward a higher good (salvation, liberation); otherwise they remain sins and certainly serve no purpose. Moreover, the yogi is not permitted to indulge in them until he has undergone his novitiate and reached the stage of sense withdrawal (pratyahara) and perfect concentration (dharana). In other words, these practices are intended to act as aids in the awakening of the kundalini, in a sense, a form of transcendent meditation (dhyāna). 13

This description of tantric yoga does not refer to transference of energy between individuals. What is evident here, is the fact that women are seen to be the “supreme” temptation and a hindrance to the male’s spiritual quest which has to be overcome. Varenne suggests that “the very thing that puts man in danger of falling should be used
to help him rise in the spiritual hierarchy. Thus the provocative girl who maddens the senses and the mind is the very instrument that must be used if a man wishes to transcend existential temptation." 14 The focus in these traditions is on individual efforts in achieving salvation and liberation. The emphasis on sexual union was based on the idea that the ascent of the kundalini could be quickened by specific sexual postures, and that simultaneous immobility of breath, thought, and semen could be achieved through sexual union.

Krieger compares her understanding of the transference of prāna to that of what we know in the West as "charisma," suggesting that a person with strong charisma can transfer it to another if an individual intends to do so. This comparison by Krieger is somewhat obscure within the accepted definitions of charisma in the West. Charisma is conventionally defined as divinely-given talent to inspire or attract followers. Although this definition does include the influence of one over another individual, it does not conventionally involve the transfer of energy from one another. Also, the term charisma in the West maintains a theological implication (Greek charisma = the gift of God's grace), an implication that is antithetical to Krieger's own agenda. In this case, Krieger's attempt to Westernize a multi-faceted Eastern idea, results in the simplification of two diverse concepts by comparing prāna to the Western idea of charisma. By doing so, Krieger both introduces an idiosyncratic interpretation of charisma, and avoids necessary explanations of the multi-faceted concept of prāṇa which links the entire cosmos with the spiritual existence of all beings. Krieger excludes discussion of the diverse spiritual elements of charisma and prāna, even though she bases the foundations of TT on what
are unavoidably and fundamentally spiritual concepts. If we look at the concept of prāṇa as it is conceived in Eastern thought, the comparison between having the ability to transfer prāṇa and having charisma is not valid. Krieger suggests that a person with “charisma” has an abundance of “energy” or “prāṇa,” and that such abundance is all that is needed to transfer that energy to someone who is ill or lacking in prāṇa. In Indian thought, however, each individual receives his or her “vital breath” or prāṇa at birth, and traditional descriptions suggest that prāṇa can only be restored by each individual for themselves through the various forms of yoga and meditation, and through spiritual awareness and awakening. Concomitantly, conventional Western definitions of charisma require that such “energy” be given by God to an individual, not that it be given or transferred from one individual to another. As with Krieger’s attempt to conflate prāṇa with ch’i, her attempt to compare prāṇa with charisma results in fundamentally changed definitions of both terms.

According to Jean Varenne (1989: pp.109-111), the complex concept of prāṇa involves the function of respiration as related to the circulation of prāṇa through the body. This emphasis on respiration and circulation, however, is far from a simple biological emphasis. As Varenne points out,

The air we inhale is rather to be thought of as a stimulant, or a vehicle, and the prāṇa is compared to a fire being fanned into new life by every inhalation: the flame burns higher, devours the fuel brought in from outside by air and food, then expels the waste (the “ashes”) in the forms of exhaled air and bodily excretions (sweat, urine, feces).

Clearly, we are a long way here from a simple theory of oxidization: particularly if we are to believe the texts when they claim that respiration acts above all on our psychic life...the basic verbal root involved was āṅ (to blow), and the
names for the other forms of breathing were constructed on this model, such as \textit{apāna} (exhaled breath), \textit{vyāna} (diffused breath), \textit{samāna} (collected breath), \textit{udāna} (ascending breath). Ultimately, though...the essential point being that the doctrine rests on unity (the fullness) of the vital breath, analogous in its own domain to the atman (soul) is at the center of the human composite envisaged in its metaphysical totality...it must be remembered that \textit{yamas}, \textit{niyamas}, and \textit{prātyahāra} all have in common the fact that they are violent exercises with the sole purpose of disciplining the body (instincts, bodily agitation, breathing) in order to render it serene, calm, motionless, and collected. Only then will it be able to make use to the highest possible degree of the mental energy that will now have to be “dissolved” in its turn in order to achieve \textit{samādhi}. 15

Even though this commentary is based on yogic philosophy, it does demonstrate the depth of the concept of \textit{prāṇa}, its connection to other aspects of sacred Hindu life, and the responsibility of individuals to control \textit{prāṇa} in the body. The practice of controlling \textit{prāṇa} is a part of a wholistic, universal, and spiritual system in which health is not the primary goal, but merely a by-product in the process of achieving spiritual release (\textit{moksha}). The initial act of inhaling air serves as one small step in a complex physiological, spiritual, and metaphysical process.

The literature of yoga and \textit{chakras} and how they are associated with the concept of \textit{prāṇa} in Indian culture is extensive. If we relate these ideas back to Kleinman’s explanatory model, we can get a sense of how individuals in this culture explain and perceive illness and health. Health and illness involve perceptions of the cosmos, the universe, and spiritual concepts such as \textit{prāṇa}, \textit{prāṇayama}, \textit{vāyu}, and \textit{Brahman}. Health is associated with excess \textit{prāṇa}, while illness is associated with a lack of \textit{prāṇa}. Their explanatory model not only differs from Western explanatory models of health and
illness, but is also multi-faceted with various concepts used in conjunction with each other to explain, evaluate, and assess health and illness. As we have seen in the previous chapter, the philosophical and metaphysical background on the concept of prāṇa is also quite elaborate. This explanatory model clearly differs from the Western medical model. The Eastern Indian/Hindu model of health and illness emphasizes a wholistic and universal approach in the healing process, whereas the Western model emphasizes an individualistic approach. In the Hindu system, the physical body is viewed as part of a larger spiritual and philosophical system, whereas in the West, the body is viewed as a machine. In order for the Western mind to gain insight into Eastern concepts such as these, the sources from which they originate must be more fully explored. Students of TTV would have benefited from more elaborate descriptions and discussions of each concept, and how these concepts fit into the spiritual and medical systems of the culture from which they originate. Krieger's description of these concepts is minimal at best. Because it is the spiritual and metaphysical components of Eastern concepts that Krieger neglects. I suggest that Krieger was attempting to give her healing method a Western, more medicalized outline so that it would be more acceptable as an explanatory model for illness and healing for both patients and practitioners, and for the biomedical establishment as a whole. By omitting more detailed discussion of these concepts, Krieger could suggest apparently scientific and biomedical parallels to borrowed Eastern concepts, and could provide a more medicalized profile for her alternative healing system. If Krieger had given a more full, accurate description of these concepts as they are understood in their original contexts, including how they are believed to influence
healing, and how they fit into specific cultural explanatory models of health and illness, it is possible that both Western and Eastern medicine could have benefited from such a discussion, especially with her background and experience in both (see endnote 3 in Ch.2). But, it is possible that the Western medical establishment would have rejected this system because of its reliance upon metaphysical and spiritual concepts which did not fit into the Cartesian model of medicine. Similarly, patients and practitioners themselves may have difficulty accepting Therapeutic Touch as a therapeutic system because of its evident elements of difference with the biomedical system which had shaped their primary explanatory models of health and illness. Because Krieger’s goal is apparently to gain acceptance for TT by the biomedical establishment, rather than facilitate dialogue between Eastern and Western medical systems, she opts to minimize the metaphysical components of the Eastern concepts on which she bases TT. In order to gain acceptance for TT, Krieger develops a system of healing that reduces the importance of the philosophical and spiritual dimensions of such concepts as prāṇa and prāṇayama, and that focuses instead on more Westernized ideas and parallels.
Therapeutic Touch as a “Healing Meditation”

Dolores Krieger describes Therapeutic Touch as a “healing meditation” in which the “primary act is to center oneself in a natural, tension-free manner and to maintain that center throughout the entirety of the Therapeutic Touch process.” 10 She goes on to add that there are four phases involved with TT that have been discussed in a previous section: centering, assessing, mobilizing, and transferring. 17 These four phases according Krieger (1979: pp.36-37) are what she calls an “effortless effort” in that “centering” is a “conscious direction of attention inwards.” For Krieger, TT is not just a “healing meditation,” but a “yoga of healing” especially when one considers the act of centering oneself to find inner stability. The author’s foundation of this idea is partially based on bio-feedback research done by Peper and Pollini (1976) on TT. Krieger states that,

Peper, after studying the writer while she was doing Therapeutic Touch to ill persons and then replicating that study with other persons who also played a role of healer at a later date, calls Therapeutic Touch “a healing meditation”. This description was based on physiological data recorded via electroencephalography, electromyography, and electrocorticography during Therapeutic Touch and then compared to similar data derived from research on the meditative process. It would seem that this similarity could be based on the centrality of centering to the helping or healing act in Therapeutic Touch.... as one learns to maintain this state centeredness for a few consecutive minutes, a concomitant feeling of confidence encourages the individual to begin to explore this personal space. The experience brings to cognition facets of oneself that have previously lain latent—facets that, as one repeats the experience, becomes increasingly actualized...concomitant with this process.
therefore, an insight into one’s self might arise to consciousness. 18

Up to this point in Krieger’s introduction of TT, there has not been any discussion of Indian meditation, more specifically that of the practice of yoga. Krieger attempts to give her own explanation of how to center oneself through meditation and concentration, omitting any discussion of the foundation and structure of Indian meditative practices that are so closely tied to the concept of prāṇa that she uses as the basis for her healing practice. Krieger explains how she approaches the act of “centering” herself, which includes sitting in the half-lotus position, relaxing her body through “rhythmic synchronization” of her breathing while being aware of energy flowing between her shoulders and neck. One of the goals of this exercise for Krieger is to establish a deeper sense of consciousness while using this process to center herself both “physically” and “psychodynamically.” Krieger goes on to add that:

This is an elementary method for experiencing the act of centering one’s consciousness. There are many methods of centering that are taught as part of meditative practices, as methods of awareness, or in prayer. Whichever method one feels most at ease with will invariably work well with Therapeutic Touch.

Some people use the recollection of a personal image or a symbol to help them center. Others use repetitive sound, such as the intoning of a mantra—that is, a word of power...from my own experience, I find that it is useful to teach in the most simple way, not necessarily to make the task easy, but because there is frequently a certain elegance in the simple way that can carry a pithy and sometimes profound message. 19

The author admits that her description of centering oneself is an “elementary method,” but if ones looks closely, it is evident that Krieger’s method is based on various aspects
of Eastern forms of meditation, particularly that of Indian yoga. For example, Hindu scholar Gavin Flood suggests that “yoga is a state of concentration in which the wandering mind, fed by sense impressions and memories, is controlled and made to be one—pointed (ekāgrata).” The Yoga Sutra states there are eight aspects or “limbs” involved with developing mental control: ethics or restraint, personal discipline, posture, breath-control, sense-withdrawal, concentration, meditation, and absorbed concentration. Within yoga, according to Flood (1996: p.97), there is a “clear connection” between consciousness, breath and body, as the body is stilled through posture, the breath through prāṇāyama, and the mind through concentration. These elements of yoga can be easily detected within Dolores Krieger’s explanation of “centering oneself,” yet she does not attribute her description as having its origins in the practice of yoga. It is not until later in her introduction to TT (How To Use Your Hands To Help or Heal: 1979) that Krieger mentions her interest in the system of Patañjali yoga. In the above comment by Krieger, she suggests the use of mantras as a possible method for “centering,” which has very strong ties to yoga and other forms of Eastern meditation (Flood, 1996, Feuerstein and Miller, 1972; Eliade, 1969). The author simply states that it is a “word of power” and quotes a relaxation response study by Herbert Benson (1975) stating that this “word of power” can be meaningless. But in the practice of yoga, the use of mantras are very important in the process of concentration, considered as having sacred value, and therefore they cannot be meaningless. The mantra of OM is considered to be a mystical syllable in Hinduism and yoga according to Mircea Eliade (1969). Eliade states that the syllable of OM, as described in the Māndukya Upanishad, “is the whole:”
This whole, which is the *brahman*, which is the *ātman*, has four quarters...four elements can be likewise distinguished in the mystical syllable: the letters A, U, M, and the final synthesis, the sound *OM*. This fourfold division opens the way to a daring homology: the four states of consciousness are related to the four ‘quarters’ of the *ātman-brahman*, the four elements of *OM*... 

Eliade, one of the best known scholars on the practice of Indian yoga, demonstrates the sacred value of this ancient mantra. If we look at the *Maitri Upanishad* (6.25: see Eliade, 1969), we can find the historical and metaphysical importance of the syllable of *OM*:

*Whereas one [the yogin] thus joins breath [praṇa]*
  And the syllable of *OM*
  And all the manifold world...
  Therefore it has been declared to be *Yoga*.

As we can see, the practice of mantras in Indian meditation is valued highly and considered to be an important part of the process of achieving the goals associated with the practice of yoga. It also has a strong connection to the concepts of *praṇa* and *Brahman*. Krieger, in her attempt to develop a new explanatory model, uses the research by Herbert Benton to imply that the repetition of a word such as “Coca-Cola” can be effective in centering oneself if one is in the right frame of mind. Again, Krieger’s discussion neglects and omits the key spiritual and metaphysical elements that assume such a vital role in Indian thought. The association between humans and the cosmos and the search for individual salvation and liberation for example, is either oversimplified or completely neglected. In introducing the practice of *Therapeutic Touch* to her readers, Dolores Krieger designs and explains her own subjective approach of learning the appropriate skills that she believes are needed to heal while using her method. When
there is a comparison of her approach to meditation and centering oneself both physically and psychologically to that of Eastern techniques such as yoga, which she will eventually explain more fully in later commentaries on TT. There is clear evidence of deliberate oversimplification and minimization. As a result, the original meaning and importance of these various concepts is lost.

Assessment in Therapeutic Touch

One of the more important aspects of Therapeutic Touch is learning to assess the condition of the patient. According to Dolores Krieger, assessing a patient's condition is done through observation, and by utilizing information available from the "personal field" of the individual. Krieger states that,

I am not using the term "field" in a mysterious way; I am talking about a human field as a biophysical fact. By this I refer to the common knowledge that the human body's functions, such as locomotion, occur via the electrical conductance that occurs throughout the neuromuscular system, and that one of the basic principles in biophysics recognizes that in all cases of electrical conductance, there must be a field to carry the charge. 32

Krieger uses the term "L-fields" or "life-fields" coined by Harold Saxon Burr (1973) when referring to the "personal field." Burr argued that this "personal field" could be assessed to provide confident diagnoses of various disorders. Krieger added that by investigating healers from all over the world and the words they use to describe the experience of assessing the "personal field," it becomes clear that they are talking about
the same phenomenon based on descriptions such as heat, cold, tingling, and pulsation's to describe the experience. From this, the author argues that irregularities in bodily health can be discovered via the “temperature differential” of an individual. This idea leads Krieger into a brief discussion of the Eastern concept of chakras, suggesting that several cultures recognize energy centers in the body, two of which are located in the hand. Krieger says that,

From my reading of Ayurvedic medicine of India, it seems to me that it is these chakras, one in each hand, that are the functional agents in all therapeutic uses of the hands. These, however, are only secondary chakras. The primary ones relate to the endocrine glands as physical loci. The Ayurvedic literature describes these chakras as agents for the transforming of universal energies, as they become available to our bodies, to levels which can be used by human beings. Within this paradigm, the energies enter through some counterpart of the spleen which Western science has not yet recognized. From the spleenic area, the energies disperse in five major streams to energize the various critical parts of the body in different combinations of the five streams.

Krieger’s association with Eastern thought is evident, but once again, both the terminology and the concepts borrowed from Eastern thought have been minimized and Westernized. The term prāṇa, inextricably linked to chakras in the Ayurvedic context, is replaced here by the Western translation, “universal energies,” indicating Krieger’s reluctance to establish the term prāṇa itself as part of the fundamental terminology underlying TT. By using the term “universal energies,” Krieger generalizes about the basis of her healing method, thus allowing herself the freedom, for example, to use the Hindu concept of prāṇa and the Chinese concept of ch'i interchangeably. Her discussion on the system of chakras in this context is very limited in scope.

Krieger,
as we have discussed, attempts to explain her healing method, based on Eastern concepts, using comparisons to Western ideas and concepts rather than contextualizing her discussion of *chakras* within the metaphysical context from which it was drawn. Krieger's approach seems one of simplicity and minimization, an attempt to establish the legitimacy and reality of her healing system for an audience unfamiliar with Eastern literature and Eastern metaphysical concepts. Krieger, in other words, was developing new explanatory models for health and sickness appropriate for the Western-informed audience, and only loosely related to the Eastern explanatory models of health and sickness from which her fundamental concepts were drawn. One example of this change in emphasis within her explanatory model of healing can be seen in her inclusion of a diagram taken from a Theosophical Society publication, showing the system of *chakras* in juxtaposition to the human nervous system.  

- This juxtaposition of the *chakra* system with the nervous system is very much in keeping with Krieger's biophysical, rather than metaphysical agenda, and lends credence to her claim that TT is a scientific rather than religious system of healing. By overlaying the *chakra* system on the biomedical model of the human nervous system, Krieger fundamentally reinterprets the meaning of the *chakra* system for her audience. Within the Hindu system, as discussed previously, no one-on-one direct correlation between *chakras* and the physical body exist. Instead, *chakra* are located in what is referred to as the "subtle" body. Consequently, they are not "coincident with any gross part of the body."  

- Within the context of traditional Hindu thought, *chakras* operate within this subtle body, and the subtle body is linked to the whole of the universe itself, conceptualized in an "immense"
chakra revolving around the Brahman (Varenne, 1989: p.166). It is, in other words, part of a vast metaphysical rather than physical system. Each chakra is believed to be situated at the same latitude as certain parts of the body but are not identical or coincident with the physical body. Krieger, in using this diagram, shows a relationship between the system of chakras and the nervous system that is not supported in the Hindu context. In later work, Krieger adds the suggestion that the physiological system most sensitive to TT is the autonomic nervous system. The concept of the “subtle body” is not mentioned by Krieger, leaving her audience with a clear biological rather than metaphysical interpretation of the chakra system.

As we have seen in the previous section of this work, the system of chakras in Hindu thought is quite structured and complex. The Patañjali system of yoga, for example, describes the existence of a “subtle” body that contain “centers” or chakras which are located along the body’s central axis. Prāṇa flows through channels or nādis, connecting the chakras, which in turn animates the body (Flood, 1996). A yogin, or one who practices yoga, can learn to control the flow of prāṇa through the system of chakras by learning to control his physical body, but the control of one is not equivalent to the control of the other. Furthermore, the goal of such control is not mastery of the physical body (not even with healing as a result) but rather a spiritual mastery. As Indian philosophers Feuerstein and Miller state,

Starting from the physical basis, by means of regulation, control and restraint (avāma) of prāṇa, the yogin first gains mastery over the prāṇa currents, then over his body, arouses the kundalini or serpent fire and, by directing its course, activates the various vital centers (cakras) and finally forces the kundalini to the crown center, the abode of the Absolute.
As in any other form of Yoga, the whole process ends with the realization of the Self, the union of the transcendent, Siva, and its power aspect, sakti. 27

This system, in contrast to Krieger's biomedical emphasis, stresses how prāṇa flows throughout the subtle body to the chakras via the nadiṣ, and more importantly, how this process must be "mastered" by the individual towards a spiritual goal. Krieger does not discuss the importance of mastering such a technique, and avoids any mention of a purpose behind such mastery more complex than simple physical health. While the author does mention the Yoga Śūtras of Patañjali, she merely states that many of the concepts found within the writings of Patañjali are "still relevant today" (Krieger, 1979: p.47). The "realization of the Self" which Feuerstein and Miller mention above as central in the Indian context is reflected to some extent in the sentiments of Krieger when she discusses the potential to discover new aspects about oneself through "centering" and meditation, but for Krieger, this process of "centering" and self-discovery is discussed more from a psychological perspective than a spiritual one revealing yet one more way in which she Westernizes and transforms these Eastern concepts. For Krieger, the process of self-discovery reads more like an "individualistic" and "part-time" process than the long, involved spiritual process it is within the sacred worldview and cosmos of Indian culture and religion.

Although the system of chakras and the flow of prāṇa are primarily conceived within the context of Hindu philosophy as tools for spiritual growth rather than physical health, within the system of Ayurvedic medicine these two goals do combine. With regard to Ayurvedic medicine, Krieger says that she has learned a great deal from its teachings.
yet she does not expand on what specific teachings that might have been learned.

Ayurvedic literature provides a key for combining the concept of chakras with healthcare and assessment. Western-trained Indian scholar Sudhir Kakar for example, points out that.

The knowledge of the **nadi** is said to be as much a spiritual (adhyatmic) science as a material one—an adept needing to be both a yogi and a clinician. With the proper spiritual imagination, developed through the use of an inner ascetic-vision rather on the ordinary eye-vision (netra-chaksu) alone, the adept can ‘see’ the state of a person’s five bhutas, three humors, and the three mental qualities through the examination of a single nadi.

The metaphysical factor is also represented in a whole class of *unmāda* which is said to be due to possession by the gods, ancestral spirits and various heavenly and demonic beings.28

From the **Ayurvedic** medical perspective, therefore assessment of a patient is both spiritual and physical, and a healer must have deep knowledge of both aspects in assessing and diagnosing a patient’s condition. There is also a close relationship between the body (*pinda*) and the universe (*Brahmānanda*) in Ayurvedic medicine which must be taken into account by the healer. Within this perspective, “whatever is in the body is in the universe.” 29 Additionally, the five proto-elements must be considered as well: earth, water, fire, air, and ether, which in Hindu thought, make up the universe. When these elements are in equilibrium, particularly air, fire, and water, there is good health according to Ayurvedic philosophy (Thakkur, 1979). Krieger does not adopt the Ayurvedic approach for combining physical diagnosis and treatment of a patient with metaphysical conceptions of **nadi**, **prāṇa**, and **chakra**. A “deep knowledge” of both spiritual and physical aspects of healing does not seem important for Krieger in her
development of TT, or in her demonstration of patient assessment. Almost all reference to universal elements is excluded by Krieger. By excluding these details, Krieger develops a system of healing that does not connect the body to the universe or nature, but instead focuses primarily on the physical body. The author clearly bases her own assessment of a patient on "energy flow," taking her cues from Eastern literature, but she does not communicate this debt to systems of Eastern metaphysical thought to her audience. Krieger gives the reader "exercises" to help the student find the chakras within the hands and to practice the assessment of energy flow, without providing her readers with any in-depth explanation of what the concept of chakras is considered to be philosophically, metaphysically, and medically in its original context. As we have seen, the concept of prāṇa, its various spiritual elements, and the process of prāṇayama is closely tied to the workings of the cosmos and the universe. In Indian thought, the body is never disassociated from nature or the structure of the universe. Krieger, by contrast, deliberately divorces the body from a broader universal context by excluding the discussion of the ties which unite an individual to the broader metaphysical structure of the universe. As a result, she leaves her readers with the impression that these concepts borrowed from the East, particularly that of chakras, are exclusively physiological in emphasis. In neglecting a discussion of the yogic emphasis on chakras as a means to a spiritual end, and in omitting a discussion of chakras from an Ayurvedic perspective as a means to heal the body through deep analysis of metaphysical ties. Krieger fundamentally reinterpretsthe chakra system for her readers.
Krieger’s reinterpretation of key Eastern concepts is linked to her desire to gain biomedical acceptance for her system of healing. Krieger suggests that TT can provide a complimentary system of healing that supplements, rather than competes or supplants, that of biomedicine. Because the biomedical system of healthcare is established, in order to gain acceptance for TT, Krieger must present it as a system of healing that ties into the framework of the biomedical system (that does not fundamentally challenge key healthcare assumptions) while providing a service or technique to add to the repertoire of the modern health care provider. To this end, Krieger points out that the main focus of patient assessment in TT is the search for “differences” in energy flow, adding that “every facet of Therapeutic Touch is concerned with energy flow, as a matter of fact, from this point of view, one can therefore see that a medical diagnosis would be highly inappropriate...” 30 In this statement, Krieger is not disassociating herself with Western medical practices. Instead, she is positioning TT to provide a service that to date, the Western medical establishment cannot provide; namely, to assess this form of “energy” flow. In this respect, Krieger argues that TT can be, and should be, accepted by the Western medical establishment even though the two systems are fundamentally different. Krieger’s construction of TT as a complementary system of healthcare makes it compatible with, and adjunct to biomedicine, but has its own importance due to the differences in approach and focus. In stating that “every facet of TT is concerned with energy flow,” Krieger reveals the importance of the reinterpreted and redefined concepts of prāṇa, chakras, etc. borrowed from the Indian context. The process of medicalization and Westernization to which she has subjected these concepts is an attempt to bring the
practice of Therapeutic Touch and its interpretation of health and illness that borrows from the East into the Western medical establishment. As we have already discussed, Krieger attempts to develop an explanatory model of health and illness so that patients can understand and discuss their health and illness from a new perspective. Her Westernization of these concepts, however, minimizes the possibility of conflict between the new explanatory model, and the "old" model of the traditional Western allopathic medical system. The practice of Therapeutic Touch is significantly different from the practice of Western biomedicine, but Krieger's model endeavors to smooth over the differences by adopting a biophysical emphasis appropriate to biomedicine, and by drawing on concepts and terms drawn from the West to reinterpret the Eastern concepts that underlie her system of healing. Even though she bases her technique on Eastern concepts, therefore, she maintains a closer connection to Western perceptions of health and healing.

Conflicting Views: Patient Assessment and "Energy"

In assessing a patient in TT, Dolores Krieger suggests that sometimes there may be a sensation of pressure when working with a patient. She calls this sensation of pressure "congestion," stating that this word is "used in the literature on acupuncture to indicate a blockage in the meridians through which ch'i, or vital energy, flows through the body." Krieger adds that a consensus can be found in reading "literature of the
world" on why a person can become ill. This consensus is frequently stated in terms of an “imbalance of energies.”

Some say that the ill person is in disharmony with the universe or with a God or gods; others say there is a disequilibrium between the yin and the yang factors in the individual, and so on. My next step is to accept these statements as valid, both on the basis of general concurrence of opinion and because these same reasons have been stated by many people of authority who come from far-flung corners of the Earth. 32

The same translation given to prāna is also given to ch'i: namely, “vital energy.” Krieger does not distinguish between these two concepts, but does use the word “meridians” instead of chakras in regard to the blockage of “vital energy” in her discussion of ch'i. She also incorporates the concept of yin-yang into her discussion and explanation of energy that is blocked, although she does not give the reader the necessary background to understand this ancient, fundamental Chinese concept. As we have seen, the concept of ch'i is diverse and complex, as are the dual concepts of yin and yang. Everything in the universe is made of ch'i according to traditional Chinese thought, and is necessary for life. The universe is made from yin ch'i and yang ch'i, and this ch'i is viewed as the “essence” of all beings. The body, according to traditional Chinese thought, requires ch'i for life and consciousness. The concept of ch'i is closely associated with nature and the universe, just as we have seen with the concept of Indian prāna. Ch'i connects all beings to the cosmos on a spiritual level. All beings have a responsibility to maintain the ch'i energy in their body to maintain health and their connection to the universe. In traditional Chinese medicine, ch'i in the body can be manipulated by the individual or by someone else when there is a lack of ch'i or a blockage of ch'i in the flow through the meridians in
the physical body. Both *yin* *ch'i* and *yang* *ch'i* serve as a major part of the conception of what is believed to cause illness (such as an imbalance of the two), and play a major role in the healer's assessment of what sickness is, where it is located, and how it can be treated. The ultimate goal within traditional Chinese medicine is to restore the balance between these two forces within the physical body. Within traditional Chinese thought, the maintaining of balance and harmony between *yin* and *yang* is part of everyday life, part of Chinese worldview, and deeply rooted within the culture as a whole. For the most part, Krieger omits any detailed discussion of the concepts of *ch'i* and *yin* and *yang*, and focuses primarily on *ch'i* flow in the body and the importance of balancing the amount of "energy" an individual has in his or her body. By doing so, Krieger chooses not to communicate to her audience the knowledge of the role of *ch'i* and the balance of *yin* and *yang* in understanding health and illness within the Chinese cultural context. By minimizing these concepts and separating them from the spiritual worldview within which they are embedded, Krieger does not provide her readers with more than a cursory glimpse into the theory that underlies the practice of Therapeutic touch. Besides interchanging the concepts of *ch'i* and *prāṇa* at will, she approaches the topic of "vital energy" in general terms as if the two concepts were of the same nature. Krieger does not acknowledge nor address the differences between *prāṇa* and *ch'i*, despite the fact that these concepts are significantly different from each other in background and development. Even though both concepts are viewed within their own cultures to be essential for life and associated with breath, each concept is based on very different philosophical interpretations. The origin of the concept of *prāṇa* can be traced back to
Vedic literature, while the concept of ch'i has its own foundations in the early literature of classical Chinese philosophy. The concept of prāṇa in Hinduism is closely associated with concepts such as prāṇayama, vāyu, and apāna for example, while the concept of ch'i in Chinese culture is closely related to yin and yang. It is here that the main difference between the concepts of prāṇa and ch'i can be found. In Hinduism, the concept of prāṇa is broken down into ten "breaths," with five considered very important. Each of the ten "breaths" function in a certain location within both the "subtle" and physical bodies. For example, prāṇa is believed to function in the area of the nose, throat, and heart, while apāna functions in the anus, thighs and the knees. In comparison, the concept of ch'i in Chinese culture is broken down into divisions but quite differently than that of prāṇa in Indian culture. It is believed that there is only "one" ch'i from which all things are formed. In Chinese culture, there is "essential" ch'i (ching) which is necessary for life, works through the senses, provides consciousness, and moves throughout the entire body. The ch'i that an individual receives at birth remains within the individual until death, and cannot be changed. A individual has to work with the ch'i that they have received. Within Hindu thought, an individual can receive more prāṇa through yoga, meditation, and personal focus. There is only one ch'i within the body, as opposed to various divisions of prāṇa that have specific functions within the body. Ching originated from "original" ch'i (yuan) from which everything was formed. The fundamental difference between the concepts of ch'i and prāṇa lies in the influence of the Chinese concept of yin and yang on ch'i. Even though they are a part of the same ch'i, yin ch'i produces physical elements of the body while yang ch'i produces the ching ch'i. The
balance and interplay between *yin* ch'i and *yang* ch'i create all natural phenomenon in the universe, and effect both social and familial relationships. With regards to health, both *yin* ch'i and *yang* ch'i have to be balanced to maintain optimum health. One cannot dominate the other. For example, if *yang* ch'i is predominant, the body will overheat causing illness. Body parts are considered to be either *yin* or *yang* in nature. Yet no entity is considered to be solely *yin* or *yang*. The *yin* and *yang* elements of ch'i have to be balanced for ch'i to flow properly in the body. The concept of *prāṇa*, even though it has many subdivisions, is not heavily influenced by any other concept. In Chinese culture, both the concepts of ch'i and yin/yang are considered to be a fundamental and natural part of existence. On the other hand, the concept of *prāṇa* in Indian culture has its foundations in the sacred texts of the Vedas and Upanishads, and is believed to be a part of the “sacred” Brahman which created the universe and all life within the cosmos. *Prāṇa* not only has to be balanced within the body and with the cosmos, but it is also essential for spiritual liberation and “awakening the kundalini.” Although the concepts of ch'i, yin and yang, and *prāṇa* are discussed slightly more in later publications, Krieger’s early writings hardly give them the attention that they require, and her later elaboration’s on these concepts still does not fully communicate the complexity of these Eastern concepts to her Western readership.

Krieger’s later publications, particularly Living the Therapeutic Touch: Healing as a Lifestyle (1987), and Accepting Your Power to Heal: The Personal Practice of Therapeutic Touch (1993) are not much more than extended repetitions of her first publication in 1979. These publications include the practice exercises given by Krieger in
1979, and do include more emphasis on the philosophical and metaphysical background of the Eastern concepts mentioned above than found in her earlier work. However, it must be remembered that her publication in 1987 came almost nine years after the original introduction of Therapeutic Touch. By 1987, the practice of Therapeutic Touch had been partially accepted as a form of healing in orthodox hospitals and educational institutions for a number of years (Hover-Kramer, 1995; Fish, 1993; Knaster, 1989; Krieger, 1987). Dolores Krieger, in other words, had successfully managed to introduce a system of healing based on Eastern spiritual concepts into the Western, orthodox medical establishment, largely by minimizing the very "spiritual" components of the concepts on which she based Therapeutic Touch. According to medical sociologist Linda Barnes, "when groups within one culture voluntarily adopt the concepts and practices of another tradition, it is often because they believe the foreign tradition will address questions being raised on native soil." With regards to the partial acceptance of Eastern medical practices in the West, the questions being raised by the public had to do with the role of mind in healing the body, and the question of a wholistic, rather than mechanistic, conception of the body. These questions, according to Linda Barnes (1998: pp.413-414), developed at least in part from positive media attention towards the successful procedure of acupuncture. As more information became available and more acupuncturists opened clinics in the West, the public began questioning the role of the mind, emotions, and spiritual elements in respect to health and healing. Since traditional acupuncture was based on ch’i, “energy” flow, and emotions, a portion of the general public also began exploring the nature of Chinese healing practices and wondering if they could offer
something that Western medicine could not. It was at this time, when acupuncture was gaining wide acceptance in the West, that Dolores Krieger began investigating and developing TT. At this time, around the mid-1970's, the emphasis on health and illness as it relates to mind, body, and spirit began to grow. To answer some of the questions being raised with regard to traditional Western approaches to medicine and possible alternate models of health and illness, Krieger turned toward Eastern spiritual, cultural, and metaphysical systems. Instead of going into in-depth analysis and commentary on the Eastern concepts that were adopted and placed at the core of Therapeutic Touch, however. Krieger generalized and minimized these concepts to make the answers to these questions relevant on "native soil." Krieger clearly reveals, with this approach, her conviction that in order to be fully relevant to a Western audience, Eastern concepts must be first "translated" in such a way as to be more compatible with the Western medical model. In contrast, Chinese medical scholar Manfred Porkert argues that "the goal of understanding the essence of Chinese thought about nature in the light of modern science can only be attained if on the one hand we abstain from substituting analytical Western equivalents for Chinese synthetic terms (which would destroy their integral significance), and if on the other hand we define and circumscribe these same Chinese terms analytically." 34 If we compare this idea to Krieger's approach, her ideological agenda becomes apparent. Krieger is much less interested in communicating Eastern philosophical and medical systems to her audience, even though she admits they underlie her own system of healing, than she is in gaining acceptance for that system within the orthodox medical establishment. There are many examples in which Krieger states that
knowledge of certain literature or other cultural practices would be needed to understand fully many of the concepts that she mentions in her introduction of TT. However, she shapes her description of these concepts so that the Western reader need not go searching for “other” cultural theories or practices. Krieger clearly intends to give her readers all the information she feels is necessary for an adequate understanding of TT, and this information includes only minimized and piecemeal approach to her borrowed Eastern concepts. Chinese medical scholar Manfred Porkert, however, suggests that.

To start with, no single skill or separate discipline of Chinese medicine can be correctly assessed if divorced from the context of the complete theoretical system of that medicine. Couched differently, anyone attempting to bear judgement upon or to improve any single detail of Chinese medicine can succeed only if he has become familiar at least with the most general criteria of Chinese science. 35

Krieger, in contrast, repeatedly isolates individual elements of Eastern medical systems, and consistently attempts to establish Western equivalencies for them without relaying what scholars such as Porkert suggest are fundamental criteria for true understanding. In correlating “prāṇa” and “ch’i” to “unseen energy forces,” for example, Krieger develops a concept of “energy” that allows her to emphasize research and the role of bio-feedback and bio-physics, rather than spirituality, to explain “universal energies” and the “human energy field.” Her aim is clearly not, therefore, to teach her readers about the complete theoretical frameworks underlying Eastern systems of healing, but instead to close the gap between Western biology and Eastern understandings of energy. It is here that Krieger begins the process of Westernization and medicalization of Eastern concepts such as prāṇa, chakras, ch’i, and yin-yang that forms the basis of her work. It must be
remembered that Krieger has left the religious overtones of "energy" out of the picture in developing TT, stressing at times (Knaster, 1989: p.56) that "religious faith" is not associated with the practice of TT in any way.

**Western Medicine and Therapeutic Touch**

When Dolores Krieger began developing the practice of Therapeutic Touch, one of the major problems she would encounter would be to somehow prove that her system of healing actually worked. Much of her own writing is based upon subjective experience and the reports from other people based on results of Therapeutic Touch from both the healer and heelee's perspective. If Krieger was going to incorporate her method into Western medicine, something other than anecdotal evidence was necessary. Krieger, having an extensive background in nursing, science, and neurophysiology, understood the role that scientific research and justification played in Western medical practice (Knaster, 1989: p.57). Having already taken emphasis away from the spiritual components of concepts such as prāna and ch'i and placing emphasis instead on "universal energies," the author could now focus on the role of "human energy" and how it functioned physiologically in health and healing. In *The Therapeutic Touch: How to Use Your Hands to Help or to Heal*, Dolores Krieger (1979) states that.
Therapeutic Touch has recaptured this simple but elegant mode of healing and mated it with the rigor and power of modern science; there is hard evidence that treatment by Therapeutic Touch affects the healer's (patient's) blood components and brain waves, and that it elicits a generalized relaxation response. 36

The "hard evidence" mentioned by Krieger is found in two of her own studies (1975, 1974), and one by Erik Peper and Sonia Ancoli (1977- see Krieger, 1979: pp. 153-162) that looked at bio-feedback results and what they called the "EEG Continuum" of meditation. This latter study was of particular importance to Krieger, given its emphasis on "brain waves" and human "electrical" response that could be scientifically measured. Research in bio-feedback began the early 1960's, and is still being developed today (Wisneski, 1997: Gladman and Estrada, 1979). According to Gladman and Estrada (1979), biofeedback (body feedback), "refers to the use of sensitive instrumentation to monitor internal functions that are below conscious awareness." 37 This instrumentation includes a "sensitive thermometer for temperature feedback (blood flow), an electromyograph (EMG) for muscle tension feedback, and an electroencephalograph (EEG) for brain wave feedback." 38 Peper and Ancoli (1977) argued that meditation can illicit a relaxation response in a patient that can be observed, and Krieger used this information to reinforce the statement that Therapeutic Touch was a "healing meditation." According to Krieger (1979), TT can be understood as a healing meditation because of similarities in data recorded via electroencephalography, electromyography, and electrocugraphy, between the effects of meditation on the human body and the effects from Therapeutic Touch. New terms such as "alpha state" and "beta state" are introduced by Krieger to show the measurement of brain waves of individuals during
healing sessions. With this method of research, various physiological effects could be monitored by researchers while Therapeutic Touch was being performed, giving Krieger some of the "scientific" data that would be required in bringing TT into the orthodox medical field. For example, temperature differentials between pre-Therapeutic Touch and post-Therapeutic Touch states in an individual could be measured using this biofeedback method. Bio-feedback also gave the founder of TT a way to bridge the gap between Western physiology and Eastern concepts such as ch'i and prāṇa by providing a concept of "universal energies" with its own unique Western characteristics. Krieger suggests that the human energy field is a "biophysical" fact, and that bodily functions such as locomotion "occur via the electrical conductance that occurs throughout the neuromuscular system, and that one of the basic principles in biophysics recognizes that in all cases of electrical conductance, there must be a field to carry the charge." To illustrate this point, Krieger, includes a diagram of the nervous system/chakra system in this section of her introduction, thus reinforcing the idea that she is trying to build a bridge between the two systems. In 1993, Krieger would add that she,

Finds the relativistic quantum theory of new physics useful to gain insight into the nature of energy. Quantum theory holds that all reality consists of energy fields—that 99.9999 percent of the universe is space rather than what we know as solid matter. Quantum theorists say that where energy fields cross, there is evidence of the momentary creation of particles, or matter....I perceive the human energy field as a large system of incessantly interacting fields, many (perhaps most) of which we are not consciously aware. For instance, at this moment you are a test object for at least two important energy fields: the electromagnetic field, via whose photons you are seeing on this page, and the gravitational field...
As we can see, Krieger maintains a connection between Therapeutic Touch and Western ideas of energy throughout her publications on TT. In other words, she continues to Westernize Eastern concepts that have existed in their respective cultures for thousands of years. Over the last two decades, there has been considerable attention in the West given to the concept of energy and biophysics, especially as it relates to healing (Wisneski, 1997; Gladman and Estrada, 1979; Knight, 1979; Tiller, 1979). Interest has grown in the alternative health field in the development of a Western theory of human energy, and like Dolores Krieger, there have been other scholars such as Leonard Wisneski (1997) who have attempted to “bridge the gap” between Western physiological theories and Eastern notions of energy and healing. Wisneski suggests that,

I have proposed and provide here a brief overview of what might be called a unified energy field theory of human physiology. This theoretical framework takes as its starting point the existence and effect of various energy fields within and without the human body. It then seeks to demonstrate, using tenets of psychoneuroimmunoenocrinology (PNIE) how the physiology translates various forms of energy – e.g. light, sound, electromagnetism – into chemical signals that orchestrate our metabolism and the cellular activities that underlie our physical lives. This unified energy field theory of physiology can serve as a bridge between the Western biological concept of anatomy and those of Chinese and Indian medicine, which view our physical bodies quite differently....in truth, we are energy beings, a concept long recognized by the Chinese in the concept of chi and by the Indian yogis as prāṇa, and one which Western medicine recognizes, perhaps unknowingly, in its EEG’s, EKG’s, SPECT, PET, and other forms of scans. 11

Wisneski's theory has considerable similarities to that of Dolores Krieger, although Krieger started out in the 1970's and Wisneski is writing in the 1990's. Wisneski, like Krieger, understands the differences in how the physiological body is perceived in the
West as opposed to the East, and thus sees the importance and medical possibilities of establishing some form of Western energy theory that is congruent to that in Eastern cultures and medicine. Krieger does not put forth a theory such as the “unified energy field theory,” but does attempt to explain the concept of human energy in Western terminology and take it out of the Eastern context from which it is derived. Both Krieger and Wisneski also focus on how this human energy affects chemicals and glands within the body to promote good health. Wisneski (1997: p.263) suggests that the endocrine glands function as the main energy transducers in the body, serving as the *wei ch’i* (medium of energy transfer in Chinese medicine: Porkert, 1974) in Western physiology, and that “modern endocrinology now teaches us, for instance, that there is a cycle of oscillation of hormone output, which completely correlates with the Indian system.”

Krieger, in her introduction to Therapeutic Touch, suggests that the primary *chakras* relate to the endocrine glands as physical loci. The *Ayurvedic* literature describes these *chakras* as agents for the transforming of universal energies, as they become available to our bodies, to levels which can be used by human beings. Within this paradigm, the energies enter through some counterpart of the spleen which Western science has not yet recognized.

Another example of the Westernization and medicalization of Eastern concepts that is evident in Krieger’s work is the use of the medical and scientific term “homeostasis” in place of the “balance between *yin* and *yang*.” We have already seen how Krieger minimized the various Eastern concepts that Therapeutic Touch is based on, and here, through the replacement of Eastern terms with medical or semi-scientific terms, it is evident that Krieger is bringing these same concepts through a process of Westernization.
Westernization, in this context, implies that Krieger is attempting to make her healing system, a system based on Eastern concepts, compatible with Western science. Not only should it be compatible, but Krieger attempts to explain her method using Western scientific terminology. As a result, these concepts become medicalized from the perspective of the practice of Therapeutic Touch. The generalization of the concept of "universal energy" by Krieger is the first step in introducing and incorporating such a concept into a Western model that is based on research and scientific structure. The second step for Krieger is the use of scientific and medical language that allows for her healing practice to look and "sound" Western so that it would be accepted by the general public. The third step for Krieger in her approach to developing this healing method is the attempt to give the practice of TT credibility under the Western, Cartesian scientific model which is based on quantitative measurement and experimentation. Therapeutic Touch, with its foundations in Eastern notions of energy, is consequently made more suitable for the Western medicalized model of healing. It is Krieger's reformulation, minimization, Westernization, and medicalization of these Eastern concepts which has subsequently allowed her to partially integrate TT into contemporary medical paradigms.
Eastern Healing Systems and the Western Medical Model

Krieger is not alone in her Westernization and medicalization of Eastern concepts in the context of Western alternative healing systems. To develop the argument further, we can compare and contrast other Eastern methods of healing that have been introduced into Western culture. One such method that has received considerable attention in the last thirty years is Chinese acupuncture, a system subsequently studied by Krieger in her exploration of healing practices in other cultures. In the early 1970's, the Chinese practice of acupuncture was “rediscovered” in the United States (Barnes, 1998; Wolpe, 1985), bringing with it a “therapeutic modality that seem to defy anatomical, neurophysiological, and philosophical principles of biomedicine.” 

Because of the popularity of this form of healing, based on the Chinese concepts of ch'i, yin-yang, and wu-hsing (Five Evolutive Phases) (Porkert, 1974), the Western orthodox medical community was now confronted with a new healing method that did not fit into the Western medical paradigm. Orthodox medicine, based on scientific research and observation, was now confronted with a healing method based in a theoretical framework and method of practice diametrically opposite to mainstream scientific and medical knowledge. What resulted from this meeting of alternative systems of health care were conflicting explanatory models of health and illness. Acupuncture ultimately failed to become a firmly established practice in Western medicine because of the conflict in these
explanatory models. Illness, as perceived in the Western system, is caused by an invasion of foreign bodies (i.e. germs) or by a malfunction of different parts of the body. Acupuncture was based on a system where illness is caused by an imbalance of "energies" such as ch'i and yin and yang. Medical diagnosis in the West attempts to identify the bodily malfunction whereas diagnosis in acupuncture focused on identifying the nature of the disharmony of "energies" within the body. In the West, treatment focuses on the destruction or removal of invading or foreign bodies, whereas acupuncture focuses on the re-balancing of "energies" within the body. It was only when certain elements of acupuncture, like those incorporated into Therapeutic Touch, were minimized that it could fit the Western bio-medical model and finally gain some acceptance. According to Paul Wolpe, professor at Yale University.

Acupuncture had become problematic to the American physician. The medical establishment had to protect its cultural authority against its admitted inability to explain acupuncture and respond to the growing number of patients attracted to lay acupuncture practitioners. A twofold strategy was initiated: (1) research was needed to incorporate acupuncture into the biomedical belief system, and large-scale medical research projects - many federally funded - were begun; and (2) acupuncture practice had to be wrestled from lay practitioners, and so legislative and propagandist strategies began to appear....the biomedical cultural model was not to crumble so easily, however, as medical research had begun a concentrated campaign to force acupuncture into a Western mold. To do so, the entire theoretical framework of traditional Chinese acupuncture had to be replaced. Biomedicine had no means of assessing the validity of these cultural models. 

As a result of this concerted effort to Westernize acupuncture so as to make it acceptable within the bio-medical model of health and illness, the Western medical
establishment concluded that acupuncture's only possible contribution to Western medicine was that of anesthesia, a usage which subsequently was not used in China until the mid 1900's (Wolpe, 1985: p.420). Wolpe (1985: p.410) also adds that before physicians could bring this healing method into conventional medical terms, its claims had to be minimized and the technique simplified. Acupuncture in the West had now lost its original Chinese theoretical structure. The method that is so deeply rooted in philosophical and metaphysical theories in its original culture had to be simplified and minimized in order for it to be accepted in the West at all.

In the case of chiropractic and osteopathic medicine, these alternative healing systems experienced the same process. These healing practices were partially accepted as conventional by the Western medical establishment only when they could be adequately explained in acceptable "scientific" terminology (Fuller, 1989). The original claims of chiropractic medicine were based on the idea that all disease had one single cause that stems from what D.D Palmer, founder of chiropractic medicine, called "deranged nerves." He worked with the assumption that the "divine spirit" or the "Innate" generated what he called "life impulses" in the individual body, which caused illness. The relationship that an individual had with this so-called "divine spirit" would ultimately affect a person's health. For the most part, contemporary chiropractors have replaced this metaphysical explanation with a more, Westernized and scientific explanation. Andrew Taylor Still, the founder of Osteopathy, argued that disease is nothing more than an effect when the "fluids of life," generated by "divine intelligence," are not properly conducted by the nerves in the human body (Fuller, 1989: p.84). Again, contemporary osteopathy
disregards any metaphysical or religious connections, relying on material-cause explanations of health and illness that fits into the Western, orthodox medical paradigm. When both of these forms of healing were first developed, they were based on a wholistic conception of the body which has now been subsequently transformed into an mechanized, individualized system of health and illness that is closely related to modern physiotherapy. When they could be adequately explained, they could be incorporated into the biomedical explanatory model of healing and illness. This biomedical model was based on scientific research and observation that both the medical field and the general public depended on to understand both health and illness. Furthermore, as medical sociologist Malcolm Bull points out, "modern medicine is primarily neither pragmatic nor rational, but based around the institutionalized epistemological charisma of the medical profession." It has been long established in the West that the views of medicine and health are controlled by the orthodox medical profession, thus controlling the cultural attitude toward health and healing (Romanucci-Ross and Moerman, 1991; Bull, 1990; Fuller, 1989; Sobel, 1979; Kleinman, 1978). In the cases of acupuncture, chiropractic medicine, and osteopathy, the Western medical establishment took control of them and eventually circumscribed their claims.

It is my contention that Krieger began a very similar process to that of the American medical establishment when they were confronted with the practice of acupuncture. Krieger began generalizing, simplifying, and minimizing the concepts that TT was fundamentally based upon before it was presented as a possible alternative within the confines of orthodox medicine. As a result, the practice of Therapeutic Touch is based
upon Westernized and medicalized versions of long, culturally established Eastern concepts such as prāṇa, chakras, ch'i, and yin-yang. If we look at sociologist Malcolm Bull’s definition of medicalization, it is possible to show how Krieger attempted to bring her method of healing through this process. Bull (1990) states that the process of medicalization involves four closely related developments:

The construction of a scientific discourse of the body: the annexation of the discourse to a narrowly defined social group; the extension of the discourse to include hitherto unrelated phenomenon; and the non-rational acceptance of the system by persons outside of the group that controls it. 47

By using this paradigm of medicalization, it is possible to demonstrate how Krieger attempted, to a certain degree, to prepare and solidify her healing method for use in the orthodox medical establishment. For example, Krieger does attempt to construct a scientific discourse of the body and incorporate this discourse into the Western model of health and healing that is controlled by the physicians within it. The scientific discourse of the body that is referred to by Bull (1990) is an explanation of the physical body, its internal and external parts, and their function based on scientific research and observation. Krieger’s work illustrates this process by including discussion of various phenomenon and terminology that was relatively new to the Western medical world, and utilizes new research techniques such as biofeedback as a form of scientific measurement. Krieger bases her method on Eastern concepts and philosophy, but manages to develop a scientific discourse for her method based on a Western, Cartesian paradigm. For example, Krieger transformed the Hindu model of the physical/subtle body into a model based on the physical body by conflating the chakra system with the
endocrine/nervous system. The position of each chakra is shown by Krieger to be congruent to the converging points of the human nervous system. Chakras are referred to by Krieger as "transformers" which affect a human's chemico-physical field. Using scientific and medical terminology, Krieger suggests that the "vital energy" taken into the body via the breathing process is involved with an "interchange of oxygen and carbon dioxide" and is associated with the respiratory process and cellular activity. The author also insists that this "vital energy" enters through some counterpart of the spleen, which subsequently dismisses the "spiritual" body that is referred to in Eastern literature of health and healing. In developing a scientific discourse on the body, Krieger uses the research findings of biofeedback which can observe "energy" and metabolic changes in the body while displaying specific scientific measurements and data. In her research and the development of a medical discourse, Krieger attempts to focus on the physical body using Western, scientific terminology.

In presenting a scientific discourse on the body and how health can be maintained through Therapeutic Touch, Krieger was now in a better situation to bring this discourse to a narrowly defined social group. Malcolm Bull (1990) suggests that this group is the medically and "professionally elite" who provide the authoritative framework in the treatment of illness and disease:

Given the social distinctions implicit in medical discourse it is unsurprising that the 'field of visibility' should be annexed and colonized. The clinical gaze became co-extensive with the glance the clinician as the practice of medicine was restricted to a professionally elite.48
This group, according to Bull, "defines not only disease, but illness—the social role of the sick." In order for the process of Therapeutic Touch to be accepted by the general public, the method had to be at least partially accepted by the Western medical profession, as seen in acupuncture’s and chiropractic medicine’s acceptance into the Western medical model of healing. Krieger’s background in nursing and science helped her bring this new method of healing to this group. Krieger’s educational and professional background in Western scientific research gave her the necessary tools for engaging this particular audience in medical dialogue, beginning with her initial research findings on the effect of “touch” on hemoglobin levels in the blood. Eventually, she would use the data retrieved through biofeedback research to solidify the fact that “touch” did have a positive effect on the physical body. After completing her initial research, Krieger began teaching Therapeutic Touch in various nursing schools, publishing her findings and “personal TT success stories” in medical journals, and began setting up Therapeutic Touch clinics in American hospitals. The scientific discourse that Krieger used in her explanation of Therapeutic Touch allowed her to bring TT to the orthodox medical establishment for review, discussion, and eventual partial acceptance. For TT to be accepted by the general public, it would have to be accepted by the Western medical establishment first.

Bull (1990) argues that the third phase in the process of “medicalization” is the extension of the discourse to include unrelated phenomenon. This “unrelated phenomenon” involves the effect that medical discourse has on social order and society’s perceptions of life. Bull points out that,
The equation of deviance with ill-health extends the scope of medical discourse and places it in an ideological position. The social benefits of assenting to the medical definition of reality are then such as to command its acceptance, even when the results are directly detrimental to the economic, and perhaps physical interests of the individual. 50

This statement is fundamental to Malcolm Bull’s argument that the Western medical establishment not only provides health care, but provides organization for all aspects of life, which subsequently demonstrates the faith that the general public has in this particular group. The departure from socially accepted standards of behavior becomes “medicalized as medicine encroaches on the domain of law and religion redefining aberrations once deemed criminal or heretical as being medical.” 51 With respect to Krieger’s work, deviance is not the primary issue. The main issue for Krieger lies in the fact that medical discourse, in conjunction with the Western medical establishment, has great influence on all aspects of life for the general public. Krieger maintains that the practice of TT is an “experience of interiority,” and that “opening oneself to the non-material energy underlying physical existence is a symbolic experience and initiates an archetypal journey that will initiate newcomers to the metaphorical language of the psyche.” 52 Practitioners and patients of TT would need to be open to “new language,” mainly that of “vital energy,” but also have to live their lives in certain ways that would allow them to take part in the healing process of TT. Krieger believed that an individual should maintain contact with this “vital energy,” which meant that an individual would have to live their life in a manner that kept them in touch with this “vital energy.” According to Krieger, a healthy lifestyle can be maintained if an individual respects the body, and attempts to keep “energy” balanced within the body through personal exercises
such as yoga and meditation. Bull argued that the public associates sickness with "unacceptable" or deviant personal behavior, which is outside of the scope of medical discourse. He suggests that medicine is associated with morality in that a "good" person is a person who believes in the medical view of the world and that deviant behavior can lead to illness. Krieger reinforces this idea in her work in that a "good" person involved with alternative healing practices accepts the dominance of the biomedical model. In addition, a "good" person accepts the focus on energy balance and therefore accepts Therapeutic Touch. Outside of this, Krieger believes that additional personal outcomes such as personal growth and "new knowledge" of oneself can result from involvement with the wholistic practice of Therapeutic Touch. Krieger attempted to medically define reality through her development of Therapeutic Touch, explaining aspects of lifestyle that she believed would be beneficial for health and help organize other aspects of life. In developing a scientific discourse of her healing method and bringing it to the orthodox medical field, the process and elements of TT could become a part of the "medical definition of reality" that would help her method of healing to be accepted by both the Western medical establishment and the general public, eventually becoming a part of the "social order" to which Bull refers.

Malcolm Bull (1990) argues that the fourth stage in the process of medicalization is the non-rational acceptance of the system by persons outside the group that controls it. Bull argues that

The final stage of medicalization is, as Illich has suggested, the counterproductive (i.e. non-rational) social dominance of purportedly health-promoting professions and industries which is legitimated by the unverifiable ideological assumption that
medicine provides, both paradigmatically and institutionally, the best available means of organizing society. In this situation, faith in medicine is required even when it conspicuously fails to realize stated goals such as raising life expectancy. 

Society, according to Bull, needs to have "faith in medicine" and accept what is explained as reality by the medical establishment, especially if it functions as a way to organize society. In the case of Therapeutic Touch, Krieger presented her method in a way that she hoped would be accessible and acceptable to people outside of the medical community. According to Mirka Knaster (1989),

Krieger's indomitableness is more than physical. In a medical world that generally discounts alternative practices, she has been able to introduce TT into nurse's training programs, into hospitals, and even to physicians. To date, she has instructed over 18,000 health professionals from anesthesiologists to zoologists. Through several generations of Krieger's students, TT has been taught in more than eighty colleges and universities, as well as in forty-six countries...when several metropolitan New York hospitals permitted her to set up her hemoglobin and other studies, Krieger carefully adhered to their policies and restrictions.

With regard to this observation by Knaster, Krieger points out that "I have always thought that this was what gave me credibility in their eyes. I was willing to go at it from their perspective. Research is the thing that saved me or I never would have gotten support, validity, and acceptance." It is clear that Krieger saw the importance of being accepted by the orthodox community and went about establishing her method that would fit Western medical paradigms. Beyond this acceptance, Krieger's healing method would have to be accepted by the general public. They would need to have faith in this method just as they have faith in Western medicine. By developing a scientific discourse for her
method, making this discourse accessible to the Western medical establishment, and including unrelated phenomenon to the discourse, its acceptance by the general public was possible. In the process of developing a discourse for TT, Krieger, in her minimizing of Eastern concepts, attempted to lessen the discrepancies between the explanatory models of healing between the East and the West. If these discrepancies were reduced, TT would be more accessible and understandable to the general public. When we look at Therapeutic Touch as a practice, its connection to Eastern forms of healing with their philosophical and metaphysical components cannot be completely separated from Krieger’s approach. Krieger never did attempt to fully separate these Eastern concepts from her method of Therapeutic Touch, but presented the method in a way that would open itself to modern medical conceptual and methodological structures. Although Therapeutic Touch has still only been partially accepted by mainstream medicine and still today receives consistent negative attention from sources (see for example: Martsolf and Mickley, 1998; Fish, 1995; Quinn, 1989; McKee, 1988) trying to disprove or prove the method, it has nevertheless gained much more rapid acceptance within bio-medicine than acupuncture, chiropractic’s, and osteopathy. In this sense, Krieger has been somewhat successful in achieving one of her primary objectives.

Therapeutic Touch: Western Medical Acceptance

TT has only been partially accepted at this time. In order for Krieger’s system to be accepted, it had be compatible with the worldview of her intended audience, which in
this case, was the Western medical establishment and the public who define their health and wellness based on their (orthodox medicine) criteria. This is where conflict arises in explanatory models of health and illness. Krieger sets up Therapeutic Touch so that it can be explained with scientific jargon, using medical terminology. Even though she says that her method is based on various Eastern ideas, she obviously wants students of TT to view this healing method from a more medicalized perspective. It is evident that Krieger wants her approach to healing, even though it is based on Eastern perspectives and concepts, to be accepted not only by the Western medical community, but by the Western public as well. If TT was to be accepted as a legitimate form of healing in the West, it would have to be explained in scientific language, and open to scientific testing. According to Fred Frohock, the examination of medical theories, is informed by the peculiar nature of medical practice itself. Medicine seems to occupy a position somewhere between science and those spiritual and sometimes mystical discourses from which modern medicine historically derives. An increasing reliance on clinical theory and data makes medicine more like science than folk healing; for medical practice today is influenced strongly by the Cartesian separation between mind and body, and the dazzling technological advances of modern scientific inquiry. Spiritual reasoning, by contrast, views humans in a holistic perspective that includes spirit as well as body and often accepts realities not accessible to scientific inquiry.56

Krieger is influenced by scientific accessibility, especially with her education in science and medicine. Her medicalization of Eastern concepts is maintained throughout her introduction to TT, simply giving examples of how TT worked for her own subjects and how she believes “energy” can be transferred and manipulated. There are also numerous exercises given by Krieger that students can follow to learn the various processes of TT.
partially accepted and partially incorporated into the very secular and empirical modern medical establishment? The primary objective of this work has been to answer this question and bring the reader to a better understanding of how Dolores Krieger has been able to establish TT as a partially accepted form of healing next to orthodox forms of healing. This work has demonstrated how Krieger minimized the various Eastern concepts found within TT. This in turn led to the Westernization and medicalization of Eastern philosophical concepts that the practice of TT is based upon. In addition, the fact that TT remains more of an adjunctive therapy rather than a definitive form of healing keeps the practice in a place where it does not interfere with nor challenge modern medical practice.

With respect to this present work, I have attempted to bring together ideas and knowledge that should at least motivate continued discussion in the fields of alternative medicine, its connection to Eastern philosophical and religious concepts, and its possible assimilation with modern health care practices. Can Eastern concepts such as ch'i, prāṇa, yin-yang, and the chakras be fully understood and utilized in a medical paradigm without in-depth knowledge of their historical and cultural background and definitions? Would they have a bigger impact on the results of TT and perceptions of health in general if they were explored and discussed more fully? Would TT have been accepted at all by the Western medical establishment if these Eastern concepts had been given more attention by Krieger in her initial introduction of this alternative healing practice? These are just some of the questions that have been looked at in this present work. The transplantation of these concepts mentioned above into Western forms of alternative healing practices
has resulted in a reformulation and a redefinition of these Eastern concepts, making them more suitable for the Western medicalized model of healing. However, this transplantation of concepts has also meant that TT has been established within the Western medical establishment without the appropriate explanatory models of health and illness found in the cultures in which the concepts originate. The worldview and perceptions held by people in Eastern cultures with respect to health and healing are for the most part omitted from the explanations and discussion of the professional use of Therapeutic Touch. Even though the concepts of chi, prāṇa, chakras, and yin-yang may have been used to develop the practice of Therapeutic Touch, they are no longer considered dominant or essential in promoting or teaching this practice. The focus, as we have seen, is on the concept of "energy" and how it functions in health and healing. While the practice of Therapeutic Touch and its associated concepts could have been used to form a basis of open communication between advocates of Western medicine and advocates of alternative medicine in the search for a stronger, possibly more reliable health care system, this has ultimately not proved to be the case. Krieger uses reformulated and revised versions of Eastern concepts, passing up the opportunity for a more in-depth exploration of Eastern concepts and how they can be better utilized in Western medicine. Scholars such as Sivin (1995), Porkert (1974), and Needham (1956) in contrast, demonstrate the different conceptualizations of health and the body held by Eastern cultures as compared to those held in the West, attempting thereby to clarify in a positive way, what Eastern perspectives of healing can bring to Western medicine. They clearly demonstrate the fundamental view of how various philosophical and religious
concepts are connected to how health and “the physical body” are perceived in various Eastern cultures and suggest ways in which Western medicine would benefit from a better understanding of these concepts and they system from which they come. They suggest that modern medicine in the West can explore other cultural conceptions of health and possibly accumulate new knowledge associated with health and medical advancement. Therapeutic Touch could have played a role in establishing professional and academic communication between two different cultural perceptions of health, but by reducing the role of Eastern concepts in the explanation of Therapeutic Touch, the possibility of discovering new knowledge and information, particularly from Indian and Chinese cultures, has been significantly reduced.

In a recent conversation (1999) with the founder of Therapeutic Touch, Dolores Krieger insisted that alternative medicine will overtake modern medicine in respect to popularity and overall use by the general public in the next ten years. She believes that practices such as TT and other alternative medical practices will become the new modern medicine. This certainly remains to be seen. As we have seen, in her acceptance of scientific methods and her utilization of bio-medical terms and concepts, the notion of universal and cosmological connectedness is minimized along with the spiritual “essence” of healing. By minimizing these elements, Krieger attempted to link Therapeutic Touch to Western scientific theories. When we look at Krieger’s work and the situation within which the practice of Therapeutic Touch finds itself in the Western medical establishment today, a full acceptance of Therapeutic Touch or any healing practice based on “outside” theories is a long way off. Furthermore, in orienting her
alternative healing system towards compatibility with Western biomedicine, it remains an open question as to how “alternative” this system really is and what basis it might provide to challenge or replace orthodox medicine.

The purpose of this work has been to bring the reader to an understanding of a number of points which have been covered. First, in chapter 1, I showed how Krieger used and perceived Eastern concepts such as ch'i, prāṇa, yin-yang, and chakras in her written works. Second, in chapter 2, I attempted to analyze how Krieger’s use of these concepts differed from usage within their traditional Chinese and Indian cultural contexts. Third, in chapter 3, I attempted to illustrate how Eastern concepts such as ch'i, prāṇa, yin and yang, and chakras have become Westernized and medicalized within Therapeutic Touch by discussing the historical usage of these concepts and comparing it to the usage of these concepts in Krieger’s work. Fourth, I attempted to show how it was through the Westernization and medicalization of these concepts that Dolores Krieger was able to bring an alternative healing practice, with its metaphysical elements partially attached, into the orthodox medical arena.

There is one final issue that should be mentioned and highlighted. There needs to be considerably more scholarship in the area of alternative medicine and the role that Eastern concepts play within the theoretical design of each practice, as well as in the area of alternative medicine as a Western phenomenon that continues to increase in popularity. As noted earlier, many scholars discuss Eastern concepts that are found in alternative medicine and Therapeutic Touch in generalities, using less than complex Western translations. As I have demonstrated in Chapter 3 of this work, the Eastern
concepts that were used in the development of TT for example, have an extensive history and are a part of a much broader worldview in the cultures that they originate from. If we, in the West, want to learn more about alternative healing practices and bring ourselves to more decisive conclusions about their very nature, scholars must turn towards these Eastern concepts and explore their connection to health and healing. Religious Studies scholars can certainly explore this phenomenon as it pertains to changing views in the West towards spiritual attitudes, the growth of Eastern ideologies, and the “New Age” movement in general. Many scholars such as Frohock (1992), Melton (1992), McGuire (1991), Danforth (1989), and Fuller (1989) mention the interest by Western society and “New Age” practitioners in Eastern concepts such as chi, especially in relation to that of alternative medicine, but usually reduce these concepts to Western translations such as “universal energy” or “vital energy.” If these and other scholars were not so quick to bypass the importance of this phenomenon, a more complete understanding of the changing face of spirituality in the West might be possible.

This work should raise other important issues and questions related to Krieger’s approach in developing and explaining TT. Even though many of these questions lie outside the scope of this work, a few should be briefly mentioned. First, in regard to Krieger’s approach, why, if she was only using these terms in order to medicalize/Westernize them, did she use them at all? Was she attempting to pose a different notion of how the body works, or did she use Eastern terms that allowed her to move from Eastern to Western notions of the body and use both when she believed they would be helpful in her development of TT? In Chapter three, the Western theory of a
body/energy field and the use of biofeedback was discussed, particularly how it related to Krieger's work. If she wanted to develop a healing method that was based on a Western notion of "energy" and acceptable in the Western medical establishment, why then, would she not suggest a body/energy theory based on the biofeedback model to explain her method? These questions are difficult to answer, but they are relevant in understanding why Krieger simplified, Westernized, and medicalized Eastern terms and concepts. One possibility may be the exotic "appeal" that the East had in the West, particularly America. In his discussion on the New Age movement, Sociologist David Hess suggests that.

The traditional structures of orientalism are given a facelift: it is a New Age orientalism of new psychologies and sciences, of Esalen hot tubs and Taoist physics. The physicist Fritjof Capra becomes one of Ferguson's prophets, and the Western future of a "new" physics is linked to an Eastern past of Hinduism, Taoism, and Buddhism. Ferguson's Self is therefore constructed in relation to two types of Others: a negative, mechanistic Other that possesses less knowledge than the Self, and a positive, holistic Other that is mediated through exotic imagery. The negative Other is located in the science of Bacon, the existing social order based on competition and formal institutions, and the old ways of Europe (not America) or New England (not California). In contrast, the positive, exotic Other is located in the ancient wisdom of the East that simultaneously serves as a model for the future self of the Pacific Rim, the new holism, and unitary thinking.

The exotic appeal of the East may have influenced Krieger in her development of TT, especially during the 1970's when she began publishing her work. Krieger could have been attempting to combine the Cartesian, scientific view of medicine with the holistic view of health and illness that she found in Eastern cultures such as India and China. As I have shown in this work, Krieger attempts to combine and compare the new Western
science of biofeedback with the "old" wisdom from various Eastern cultures. There is also a comparison by Krieger of the central nervous system developed in the West to the system of chakras developed in the East. Krieger may have believed that the East exotic "Other" that Hess (1993) refers to, could lend legitimacy to the new science of Therapeutic Touch.

Another possible answer to some of these questions may lie in the fact that Krieger was offering a different view of illness and healing based on Eastern perceptions, but attempting to cover up the large differences it has when compared to the view of health and illness held in the West. This work has demonstrated the various differences in the perceptions of health and illness held by the West, and those perceptions held in the East. In the West, the body is viewed as a machine, and illness is seen as a mechanical breakdown. In the East, the body is viewed as an "energetic" system, and illness is believed to result from a blockage of that energy. Explanatory models of health and illness in the West are shaped by Cartesian science and Western scientific terminology. In Eastern cultures such as India and China, the explanatory models of health and illness are shaped by personal, social, and cultural interpretations of various metaphysical concepts such as ch'i, prāṇa, and yin and yang. The body is not seen as a machine in the East, and illness is dealt with from a more holistic perspective. It is possible, that Krieger attempted to hide these differences by medicalizing and Westernizing concepts taken from the East. By minimizing the concepts of prāṇa and ch'i, Krieger may have been attempting to hide the differences in the perception of health and illness held by both cultures, and offering a new and different view. By medicalizing and minimizing these concepts, Krieger offered
a different view of health and illness, but not so different that it could not be understood by readers and practitioners in the West.

From a more interesting perspective, these questions should raise the issue of how one culture/tradition can fully understand another? Is it possible? Is “translation” necessary for understanding? In addition, the question of how one culture comes to understand foreign traditions and how they pass that understanding on to their own culture should be discussed. For example, when Buddhism arrived from India around the first century A.D. the Chinese compared what they knew, such as Taoism, with the foreign ideas that they were being confronted with. Was Dolores Krieger, who was educated in the Western educational system, in this same position? Anthropologists George Marcus and Michael Fischer (1986) suggest that the two main goals of anthropology are the illustration of cultural diversity and the presentation of a cultural critique. To illustrate cultural diversity, it is necessary to understand another culture, and to then communicate that understanding to members of one’s own culture. Communication therefore can require the translation of foreign cultural concepts into concepts familiar to one’s own cultural systems. It is possible that Krieger may have minimized Eastern metaphysical concepts not through a lack of understanding, but to aide in cross-cultural communication and critiquing “our” own medical culture. However, it is possible that she may not have fully understood Eastern culture, yet took it upon herself to explain elements of various Eastern cultures and traditions. In her development of TT, Krieger not only simplified and medicalized various Eastern concepts such as ch’i and prāṇa, but possibly disconnected these concepts from their original framework as a
way to understand foreign traditions. For example, the concept of *prāṇa* is for the most part, taken out of its original context by Krieger. Her discussion focuses primarily on the concept of "vital energy," a Western translation of *prāṇa*, disconnecting the concept from its diverse and extensive metaphysical system from which it originated. By doing so, Krieger used the single concept of *prāṇa* to explain what she believed to be human "energy." Even though she may have read a great deal about this diverse metaphysical system herself, it was quite possible that her own readers would not understand such a complex foreign tradition. By disconnecting the concept of *prāṇa* from such an extensive and complex background, Krieger could possibly have more success in explaining her own method. The practices of acupuncture and chiropractic medicine, based on various Eastern concepts such as *ch'i* and *yin* and *yang*, may have gone through a similar process when they were brought to the West.

One other issue that should be briefly mentioned is that of cultural imperialism. In Krieger's development of TT, she does not use terms from other Western sciences such as physics, but uses Eastern terms instead. As a Westerner, why would she feel free to integrate foreign terms into what she has to say? Is it possible, that unconsciously, Krieger believes that these terms, and the cultures that produced them, have less insight into what is really true? Does she change the meanings of these Eastern concepts and disconnect them from their original framework because she feels as though that she, as part of the Western medical and scientific community, could better explain human "vital energy." Krieger makes statements about Eastern concepts, suggests various views of them, and describes them in her own words. As I have shown in this work, Krieger goes
as far as to restructure complex Eastern concepts. Krieger was researching and publishing work at the height of Western rationale and scientific understanding. Was she taking part in what is referred to as the “consumerist” approach to world traditions? When discussing the “New Age” movement in the West, sociologist David Hess (1993) refers to this approach as religioscientific consumerism. This is an issue that could certainly be further explored, especially how it relates to other Western alternative healing techniques that employ Eastern ideas and concepts. Even though many of these questions cannot be discussed or answered in this work, they should be considered important and eventually further explored by scholars.

Without focusing on the validity of TT, the primary focus of this work has been to demonstrate how Dolores Krieger manipulated and minimized Eastern philosophical and metaphysical concepts in order to establish the practice of Therapeutic Touch not only as an acceptable healing alternative to that of Western medicine, but as an adjunct therapy working along side of scientifically proven healing methods. Krieger reduced the importance of various metaphysical concepts such as prāṇa and ch’ī, focusing on scientific terms such as psychoneuroimmunoendocrinology, electromagnetism, biofeedback, neurophysiology, hemoglobin, and metabolism instead to develop a medical discourse for TT that would be more acceptable for the Western medical establishment. The concepts of prāṇa and ch’ī were for the most part, considered to be one and the same phenomenon by Krieger, placed in one category under the heading of “universal energy.” The concepts of yin and yang and chakras would have been vital in the early stages of the development of Therapeutic Touch, but as Dolores Krieger began to publish her literature
and attempt to bring the practice to a wider audience, these concepts received very little attention. I argue that Krieger, with her scientific and modern medical background, knew what was required to incorporate such a practice in the Western medical institution. She would have known of the struggle to bring Chinese acupuncture, with its metaphysical properties, into the West. The author had to de-mystify and demonstrate a more scientific practice if it was to be at least partially accepted by the Western medical establishment. As it stands today, Therapeutic Touch has been partially accepted by some sectors of modern medicine and still lies at the center of many debates within and around the medical community. As these debates continue, the practice of Therapeutic Touch is still being taught in nursing schools around the world and being used in modern hospitals and alternative medical clinics. The practice of Therapeutic Touch, and other alternative medical practices, are based on the assumption that humans are made up of an “invisible” energy. This notion of human energy originates out of Eastern cultures such as India and China, and has gained enough interest in the West that scholars should now turn towards a more extensive exploration of the origins and impact of this concept. There is much to learn.
Conclusion

The practice of Therapeutic Touch continues to evolve as a potentially acceptable part of orthodox medical establishments. Many hospitals and clinics in the United States, Canada, and England utilize the practice as an additional source of comfort and as a possible healing alternative (see for example: Achterberg, 1998; Knaster, 1989). The majority of medical professionals who use and practice Therapeutic Touch can be found in the nursing profession, adding the practice to their everyday routine of care-giving and patient well-being (Borelli and Heidt, 1981: pp.62-63). Even though one will in all likelihood not find a TT clinic in a local mainstream hospital, it is very possible that many nurses will know of the practice and incorporate it into their overall routine. Scholars Sayre-Adams and Wright suggest that “TT does not require patients to reject established health care techniques, rather it seeks to work with them in a complimentary and supportive way. Nurses and many other health care workers find themselves ideally placed to incorporate TT into their everyday practice...it seems to help many people while also being safe – the worst that can happen is nothing at all.” ¹ Within the nursing profession, TT is viewed for the most part as an adjunctive therapy rather than a “definitive” one (Borelli and Heidt, 1981: p. 105). The practice of TT that is used by nursing professionals continues to grow in popularity due to the works and promotion of not only Dolores Krieger, but other scholars in the field of nursing such as Martha Rogers and J.F. Quinn.² In addition, Therapeutic Touch continues to be taught as part of nursing training in schools around the world. For a healing system based primarily on metaphysical ideas, this accomplishment is truly remarkable. How is it that TT has been
which includes learning the ability to discover the “human energy field” and how to transfer that energy to others during the act of healing. Even though Krieger uses the Eastern concept of prāna to explain “human energy” in the role of healing and health, she does not discuss the meditative techniques used in Indian culture that are so closely associated with this particular concept. Similarly, although she uses the Chinese concept of ch’i in her explanation of TT, she does not discuss the process of how it can be manipulated through healing methods in that culture. These spiritual and philosophical concepts have been introduced by Krieger to a system of healing that deliberately lacks overt spiritual dimensions. For the most part, the introduction to Therapeutic Touch by Krieger disconnects the concepts of prāna and ch’i from the spiritual and philosophical backgrounds within which they originated. Krieger’s concepts of prāna and ch’i are purely empirical energies, and her system of TT is deliberately structured to provide the least conflicts with the biomedical explanatory model and the Western medical establishment.
Chapter Endnotes

Introduction: 1-11

1. According to sociologist Robert Fuller (1989, pp.66-90), D.D. Palmer, who developed chiropractic medicine, was not a medical doctor but a grocer. He had a background in Theosophical writings which discussed a “vital energy” flowing through the body. Chiropractic schools would eventually exclude Palmer’s philosophical aspects of this type of medicine. In addition, Osteopathy was developed by a self-taught physician, Andrew Taylor Still, a son of a Methodist minister. His method of healing was also based on energy and Mesmer’s notion of animal magnetism. It is believed that Palmer based much of his work on the teachings of Andrew Still. These systems of healing were introduced during the late nineteenth and early twentieth centuries.

2. Dolores Krieger. The Therapeutic Touch: How to Use Your Hands to Help or Heal. (New Jersey: Prentice-Hall, 1979), p. 12. This book is Krieger’s introduction and explanation of TT. It is still used today by students of TT.

3. Lola Romanucci-Ross and Daniel E. Moerman. “The Extraneous Factor in Western Medicine” in The Anthropology of Medicine: From Culture to Medicine (2 ed.) Lola Romanucci-Ross, Daniel E. Moerman, Laurence R. Tancredi, eds., (New York: Bergin and Garvey, 1991), p. 391. These researchers discuss how modern thought, influenced by Descartes and Kuhn, relies on scientific “fact” to believe that something works or does not. They suggest that Western allopathic medicine rests on the ideology that the structure of science is unassailable as paradigms are designed to describe and demonstrate how things really work.

4. Malcolm Bull. “Secularization and Medicalization.” British Journal of Sociology 41(2) (1990), p. 249. This essay by Bull examined Bryan Turner’s view that medicine has replaced religion as the “social guardian of morality,” arguing that Turner failed to co-ordinate the theories of secularization and medicalization. Bull believed that secularization and medicalization are compatible models of social change.

5. ibid., p. 249.

6. Mirka Knaster. “Dolores Krieger’s Therapeutic Touch.” East/West 19(8) 1989, p. 57. It is interesting to note the academic journal where Knaster has been published. This journal focuses predominantly on Eastern philosophy, but does include Western ideas and how Eastern ideas have become are part of Western thought. This article by Knaster demonstrates how scholars avoid discussing Eastern metaphysical concepts as they pertain to Western medicine.
7. Robert Fuller, *Alternative Medicine and American Religious Life.* (New York: Oxford University Press, 1989), p. 97. Fuller’s main interest lies in putting American’s interest in metaphysical healing systems into a historical and interpretive context. For example, he attempts to show the connection between unconventional medical ideas and unconventional religious ideas (ex. Eastern concepts in the West). Fuller also theorizes that some unorthodox medical systems enable modern individuals to experience the sacred. Fuller puts forth that there is an assumption by people in the West to compare Eastern concepts to the area of Western parapsychology.

**Chapter One: 12-33**


2. Mirka Knaster. “Dolores Krieger’s Therapeutic Touch.” *East/West.* 19 (8) 1989, p. 56. It is interesting to note the academic journal where Knaster has been published. This journal focuses predominantly on Eastern philosophy, but does include Western ideas and how Eastern ideas have become part of Western thought. This article by Knaster demonstrates how scholars avoid discussing Eastern metaphysical concepts as they pertain to Western medicine. This also demonstrates how Krieger continues to avoid in-depth discussion of Eastern concepts and how they are central in the development of TT.


4. Linda L. Barnes. “The Psychologizing of Chinese Healing Practices in the United States.” *Culture, Medicine, and Psychiatry.* 22, 1998, p. 413. This article demonstrates how Chinese healing practices have undergone acculturation in the U.S. since the 1970’s, and how the concept of “energy blockage” has become a part of Western medical language.


8. Dolores Krieger. "Therapeutic Touch: The Imprimatur of Nursing." American Journal of Nursing 75, 1975, pp. 785-786. This is one of Krieger's earliest publications. It was published at the time when she was doing research for the development of TT.


10. Ibid. p. 13.

11. Ibid. pp. 35-36.

12. Ibid. p. 36.

13. It is important to note that most of Krieger's discussion of prāna is based on publications that are associated with that of the Theosophical Society, primarily books written by Therapeutic Touch’s co-founder, Dora Kunz. The reason for the extension of ideas in her later publications may have been the result of changing technology, medical practices and research, and growing interest in Eastern religions (see Fuller, 1989) and other alternative healing techniques, yet she does not elaborate to the extent to give the reader a full sense of how the Hindu concept of prāna, for example, is integrated into Indian culture.

14. Dolores Krieger, Living the Therapeutic Touch: Healing as a Lifestyle. (New York: Dodd, Mead & Company, Inc., 1987), p. 3. Krieger maintained throughout her career the connection between TT and various Eastern concepts such as prāna and ch'i. Some of the concepts discussed in her first publication were expanded upon in this book, yet her references came from publications out of the Theosophical Society.

15. Ibid. p. 41.


21. Ibid., pp. 47-50. Each of the chakras are assigned an "archetypal" theme based on Jung's and Swami Ajaya's work. The mūladhara chakra, at the base of the spine, is suggested to be involved with the struggle for survival, therefore it is given the "archetypal" theme of "The Victim." The manipura chakra is related to that of domination and competition, and is given an "archetypal" theme called "The hero." The svadhishthana chakra, related to secretion and reproduction is given the theme of "The Hedonist." The anahata chakra, related to the nervous system and the heart, is assigned the theme of "The Saviour." The vishuddha chakra, associated with breathing, is given the theme of the "The Child." The ājna chakra is related to the pituitary gland and the autonomic nervous system, and is given the theme of "The Sage." The sahasrara chakra is not given a theme because Ajaya believed that it was beyond form. Both Swami Aajaya and Jung believed that archetypes represented convergences of behaviors that "define an individual as human." They represent "innate predispositions, expressed in image and symbol."

22. Ibid., p. 52.

23. Fred Frohock, Healing Powers: Alternative Medicine, Spiritual Communities, and the State. (Chicago: The University of Chicago Press, 1992), pp. 178. Scholars such as Fred Frohock suggest that "the practical side of Therapeutic Touch is widely acknowledged, although it is still disputed within mainstream medicine. It is also important to note that the modern techniques of Therapeutic Touch originated in practice, apart from theory of any sort." Frohock says that Krieger practically developed interest in her own form of healing through working with and observing Oskar Estabany, a well known Theosophist. He adds that in their investigation and observation of healing touch, Estabany and his research group adopted the concepts of prāṇa, chakras, and the notion of a transfer of energy from the East to explain healing through touch.


25. Ibid., p. 240. Krieger quotes Herbert Benson, 1975, suggesting that "if one is in the right frame of mind, all one needs to do is repeat: "Coca-Cola. Coca-Cola!..." to center oneself. Benson published works showing his results of meditation observation.

26. Ibid., pp. 43-44.

27. Ibid., p. 49.

28. Ibid., p. 71.

Chapter 2: 34-68


2. It is interesting to note that the word “spiritual” derives from the Latin root spirere which means “breathing” or “life energy” (Knight, 1979).


5. Ibid., p. 11. Eliade suggests the term “orthodox” in this sense means “tolerated by Brahmanism,” in contrast to systems that were considered heretical such as Buddhism or Jainism.


11. The Maitri Upanishad states that the susumna artery “serves as the channel for the prāṇa” and (through prāṇavāma and meditation on the syllable OM) sustains the deep meditation by which kevalatva (“solitude” or “isolation”) is realized.


17. L. Rainey, pp. 263-279. The compilation of Wang Ch’ung’s ideas of the concept of ch’i is based on the commentary of Wang Ch’ung’s ideas as provided in this article. All of the main points are included in the list.


19. Ibid., p. 20.


21. Ibid., pp. 32-33.

22. Ibid., p. 35.


27. J. Varenne, pp. 166.


Chapter Three: 69-127

1. Arthur Kleinman, “Concepts and a Model for the Comparison of Medical Systems as Cultural Systems.” Social Science and Medicine 12, 1978, p. 86. This paper discusses the “Explanatory Models” of health care systems. The focus is on the cultural and social aspect of how people explain and evaluate both health and illness outside of the clinical context. The paper is based on cross-cultural research.

2. Ibid., p. 88.

3. Arran Stibbe. “Metaphorical Construction of Illness in Chinese Culture.” Journal of Asian Pacific Communication 7(3-4), 1996, p. 186. Stibbe’s focus is on how Western metaphors have travelled to the East, but for our purposes here, the information is applicable in a reversed role.


6. Ibid., p. 12. I used this quote from Krieger in an earlier chapter but extended on it here to show how Krieger was attempting to give a better Western approach to the concept of prāṇa in that since prāṇa was said to come from the sun, there could be comparison to the process of photosynthesis that was understood in the West.


15. Ibid., p.111-113.


17. Ibid., pp. 35-36. These four phases are discussed in Ch.2 (p. 6) of this work. According to Krieger, the exchange of energy that promotes healing is based on these four phases.

18. Ibid., p. 37.


23. Ibid. p. 46.

24. Krieger’s main sources comes from publications that originate from the American Theosophical Society, namely that of Charles Leadbeater (1974, 1940), a well known seer, psychic, and dominant member of the society (Karagulla and Kunz, 1989; Krieger, 1979). The roots of modern Theosophy can be traced to Helena Petrovna Blavatsky, a Russian-born psychic. Founded in 1875, Theosophy is a syncretistic blending of ancient and occult religions and philosophies including concepts from Hinduism, Buddhism, Taoism, Neoplatonism, Kabbalism, Rosicrucianism and spiritualism. The Theosophical Society focused on the unexplained laws of nature and the psychical powers latent in man (Cranston, 1993). In later years, Krieger (1989, 1993, 1997) tends to focus more on explaining the philosophical background of Eastern concepts, but continues to use sources closely associated with the American Theosophical Society, particularly that of Leadbeater and TT co-founder Dora Kunz (1991, 1989), another well known seer, psychic, and past-president of the American Theosophical Society (Fuller, 1989; Krieger, 1979). Many of these texts, particularly those of Kunz, do not contain any references or bibliographies, disregarding relevant research and information pertaining to Eastern concepts such as prāṇa and chakras. According to sociologist Robert Fuller (1989), Dolores Krieger was introduced to Eastern healing methods and metaphysical healing by Theosophists and well-known spiritualists. For our purposes here, the fact that Krieger, and many of her references, do not refer to academic sources in her introduction and discussion of chakras and other Eastern concepts is important. It is also important to note that Krieger would have a varied and diverse background in religion and spirituality because of Theosophy’s syncretic nature, potentially leading her to borrow information from many sources and bringing them together in her own work.


31. Ibid., p. 57.

32. Ibid., p. 57.


35. Ibid., p. 147.


38. Ibid., p. 246.


42. Ibid., p. 263.


45. Ibid., pp. 415-416.

47. Ibid., p. 249.

48. Ibid., p. 248. Bull refers to sociologist David Armstrong's phrase "field of visibility." Armstrong, in discussing the social aspects of medicine, argued that since social distinctions of medical discourse are implicit, the "field of visibility" should be a part of this discourse.

49. Ibid., p. 249.

50. Ibid., p. 249.

51. Peter Conrad and J. W. Schneider, Deviance and Medicalization: From Badness to Sickness. (St.Louis: Mosby, 1980)

52. Dolores Krieger. The Therapeutic Touch: How to Use Your Hands to Help or to Heal, p.77, 80. These ideas argued by Krieger are taken from the work of sociologist Robert Fuller (1989). He brings a couple of Krieger's ideas together in this statement.


55. Ibid. p. 57.


Conclusion: 128-139


2. Ibid. This book, The Theory and Practice of Therapeutic Touch focuses primarily on modern developments and growth of TT. Martha Rogers and J. Quinn are given a great deal of credit for establishing TT as an accepted alternative to Western medicine over the last fifteen years, particularly in the nursing field. Martha Rogers in particular received a lot of attention through her various publications on nursing and TT.
3. These two brief discussions with the founder of Therapeutic Touch took place via e-mail in the spring of 1999. She basically responded to my claim that her influences were mainly associated with the American Theosophical Society by denial, suggesting that it was her research and interest in Eastern literature and culture that influenced her work.

Bibliography

Aakster, C.W.

Achterberg, Jeanne

Ahern, Emily M.

Barnes, Linda L.

Benson, Herbert

Borelli, Marianne D. and Patricia Heidt

Bull, Malcolm

Burr, Harold S.

Chatterji, Mohini M.

Chattopadhyaya, Debiprasad
1978 Science and Society in Ancient India. Amsterlarm: B.R. Gruner B.V.

Chen, Paul C.Y.
Chi. Chunhui

Chow, Effie Poy Yew

Clark, Philip and Mary Jo Clark

Conrad, Peter and J. W. Schneider
1980 Deviance and Medicalization: From Badness to Sickness. St. Louis: Mosby

Cranston, Sylvia

Danforth, Loring M.

Deussen, Paul

Deussen, Paul

Eliade, Mircea

Eliade, Mircea

Ewing, Arthur H.

Feuerstein, Georg and Jeanine Miller
Fish, Sharon  

Fish, Sharon  

Flood, Gavin D.  

Frohock, Fred M.  

Fuller, Robert C.  

Fung, Yu-lan  

Fung, Yu-lan  

Garfield, Richard  

Gladman, Arthur E. and Norma Estrada  

Goodall, Dominic  

Grisell, Ronald D.  
Peper, E.  

Peper, E. and S.J. Pollini  

Hess, David  

Hover-Kramer, Dorothea  

Jingfeng, Cai  
1988 "Integration of Traditional Medicine with Western Medicine—Right or Wrong?" Social Science and Medicine 27(5): 521-529.

Jones, Leonard H.  

Kakar, Sudhir  

Karagulla, S. and Dora Kunz  

Kim, Yung Sik  

Kleinman, Arthur and Lilias H. Sung  

Kleinman, Arthur  
Kleinman, Arthur and Peter Kunstader et al.  

Knaster, Mirka  

Knight, James W.  

Krieger, Dolores  

Krieger, Dolores  

Krieger, Dolores  

Krieger, Dolores  
1979 *The Therapeutic Touch: How to Use Your Hands to Help or Heal*. New Jersey: Prentice-Hall, Inc.

Krieger, Dolores  

Krieger, Dolores  

Krieger, Dolores  
Kunz, Dora

Kroening, Richard J., Michael P. Volen, and David Bresler

Lambert, Helen

Leadbeater, Charles W.

Lee, Rance P. L.

Leskowitz, Eric

Leslie, Charles M.

Leslie, Charles M.

Levin, Jeffery S. and Jeannine Coreil

Marcus, George and M. Fischer
Martsolf, D.S. and J.R. Mickley  

McGuire, Meredith B.  

McKee, J.  
1986 “Holistic Health and the Critique of Western Medicine.”  *Social Science and Medicine* 26(8):775-784.

Meadow, Mary Jo  

Melton, Gordon J.  

Meuller, Max F.  

Nordstrom, Carolyn R.  

Needham, Joseph  

O’Flaherty, Wendy D.  

O’Flaherty, Wendy D.  

Olivelle, Patrick  
Otto, Herbert A. and James W. Knight

Pearce, Tola Olu

Porkert, Manfred

Porkert, Manfred

Quinn, Janet F.

Rainey, Lee

Risse, Guenter B.

Romanucci-Ross, Lola and Daniel E. Moerman

Ronan, Colin A.

Rosa, Linda. E. Rosa, L. Sarner and Stephen Barrett
Salmon, J. Warren  

Sayre-Adams, J. and Steve Wright  

Schiffeler, John W.  

Sharma, Ursula  

Sivin, Nathan  
1995 Medicine, Philosophy, and Religion in Ancient China: Researches and Reflections. Great Britain: Ashgate Publishing Limited

Sobel, David S.  

Stibbe, Arran  

Strode, Walter S.  

Sundararajan, K.R. and Bithika Mukerji  

Tabor, Daniel C.  
Thakkur, Chandrasekhar G.

Tiller, William

Unschuld, Paul U.

Van Ingen, Philip

Varene, Jean

Veith, Ilza

Veith, Ilza

Wallis, Roy and Peter Morley

Waxler-Morrison, Nancy E.

Wirth, Daniel P.

Wisneski, Leonard A.
Wolpe, Paul Root

Woods, James H.

Wuthnow, Sara

Zaehner, Robert C.

Zaehner, Robert C.

Zimmermann, Francis