

Vincent Di Stefano (2006): Holism and Complementary Medicine. Origins and Principles. Allen & Unwin, Sydney

CHAPTER 7

TURNING THE MEDICINE WHEEL Between paradigms

Nothing that exists exists for its own sake; it exists for the sake of the whole.
Jean Gebser, 1949¹

Far from constituting the pinnacle of human evolution, or the ultimate flowering of "progress", the attitude of rationalism is an evolutionary dead end.

George Feuerstein, 1987²

The cultural dominance of biomedicine and its extraordinary successes have led many to believe it to be the one true medicine, the safe and effective medicine that has evolved out of the ages, superior in every way to everything coming before it and to the many other, lesser known, systems of medicine. Biomedicine has realised its present status through a commitment to what has become known as scientific method, a powerful method of inquiry aimed at generating new knowledge that can be codified, tested and transmitted to a professional community.

The key elements of scientific method are careful observation, rigorous measurement, experimentation and theory development. These elements have, in varying degrees, been part of the human endeavour to understand the phenomenal world throughout recorded history. This is reflected in the knowledge and skills used in architecture and building construction, astronomy and navigation, the discovery of medicinal agents and the practice of medicine.

Over the past century, the methods of science have been systematically applied to the study of the human body and its diseases. This has resulted in the new knowledge that underlies much of Western scientific medicine. Biomedicine has developed out of a particular epistemological project. It is based, by and large, on the concepts of materialism, mechanism and rationality.

Holistic medicine fully accepts the validity of these concepts and the insights into the nature of the body and its diseases that they have given rise to. Holism by its nature also accepts that human life is influenced by factors other than those associated with materiality, mechanism and rationality. The role of mind in the creation of health and sickness, and the existence of an energetic or spiritual dimension associated with life represent elements of the holistic understanding for which acceptable epistemologies have yet to be developed.

Not entirely rationalist: Descartes and Newton

Scientific modernism is widely seen as one of the fruits of the methods developed by Rene Descartes and Isaac Newton during the seventeenth and eighteenth centuries. It is worth reflecting on both Descartes' and Newton's broader interests in order to better appreciate their relationship with the ideas and philosophies that have been posthumously ascribed to them.

Rene Descartes was born in France 1596. As a young man, he was fascinated by the clarity, certainty and elegance of classical geometrical theorems. He wondered whether such certainty could be brought to bear on other aspects of human thought and endeavour. Putting aside the books and disputations that had characterised his early Jesuit upbringing, he began to seek out knowledge from direct experience and from the 'book of life'. He joined the Bavarian army as a soldier.

On the night of 10 November, 1619, while sheltering from a severe winter in the city of Ulm, Descartes was profoundly shaken by three powerful dreams. These dreams ignited within him a sense of mission and destiny that were to drive him thereafter. On completion of his military training in 1623, he undertook a pilgrimage to the shrine of Our Lady of Loreto in Italy in gratitude for the insights gained that night in 1619. Although Descartes himself believed that the dreams had come from God, their influence upon him was later to be described as "the most disastrous moment in the history of Europe."³

Descartes set himself the task of creating a method of inquiry that would ensure all new knowledge would thereafter rest upon unshakeable foundations. This was to be established by applying his 'method of doubt'. That method was described in detail in his *Discourse on the Method of Properly Guiding the Reason in the Search of Truth in the Sciences*, written eighteen years after his illumination at Ulm. Central to Descartes' project was the separation of mind (*res cogitans*) from body (*res extensa*):

Among the metaphysical theses developed throughout the *Meditations* is that mind and body have distinct essences; that the essence of thinking substance is pure thought/consciousness/awareness, while the essence of body is pure extension.⁴

Although he held near-mystical views of the nature of the mind, Descartes viewed the world, including living organisms, in mechanistic terms. He believed that the workings of complex systems could be understood through a systematic analysis of their individual components. This approach had a particularly strong influence on the methods that helped to empower the scientific revolution over the following two centuries.

The methods developed by Descartes were applied by a new generation of scientists who progressively retreated from spiritual or mystical interpretations of the world and its workings. The role of Divine influence steadily retreated as new knowledge led to greater powers of control and prediction. Ironically, Descartes himself maintained life-long friendships and correspondence with theologians, and lived and died as a devout Catholic.

Isaac Newton is remembered as the intellectual giant who gave to the world the *Principia Mathematica* in 1687. This work described, for the first time, revolutionary new methods of mathematical analysis. Newton's studies of the nature and interactions of light, and his discovery of the laws of gravity confirmed the extraordinary power of these methods. Newton showed conclusively that the physical universe operated according to immutable laws that, once known and understood, offered immense powers of control and predictability to those who understood them. He was a living vindication of Descartes' quest to find methods that would, once and for all, lead to a certain knowledge of truth.

Newton's genius was fed by his unyielding tenacity. A man of extraordinary discipline, he spent many of his younger years as a solitary observer of the night sky. He meticulously measured the movements of the planets through the fixed constellations, and the movements of the constellations through the seasons of the year. He made his own telescopes and experimented with various lenses, discovering that white light was composed of the various colours of the spectrum. Having been introduced to the works of Descartes, Kepler and Galileo while a student at Cambridge, Newton applied his genius to a series of investigations on the properties of light, the laws of motion and the movements of planetary bodies.

Between the lines, however, Newton gave over much of his formidable mental energy to wide-ranging alchemical investigations during his early years, and in an ongoing study of Church history and theology in his latter years. It is a curious fact that Newton's lesser known activities have been largely lost to history. American historian Betty Dobbs reflects:

The Newtonian world view, indeed, developed almost wholly on the basis of his successes in mathematics and physical science, so subtly and deeply colored the thoughts of succeeding generations that the fuller seventeenth-century context in which Newton's thought had developed was lost to view. Thus it became a curious anomaly - and one to be explained away - that Newton's studies in astronomy, optics and mathematics only occupied a small portion of his time. In fact, most of his great powers were poured out upon church history, theology, "the chronology of ancient kingdoms", prophecy and alchemy.⁵

Although the rationalist paradigm that underlies much of Western science has long been associated with the names of Rene Descartes and Isaac Newton, one may well question whether either would be comfortable with the virtual elimination of the numinous in 'scientific matters' that has since been carried out in their name.

The great divide

Much of contemporary Western medicine is unlike anything that has ever preceded it. The immense body of medical knowledge accumulated through the collective efforts of countless healers over long periods of time was largely left behind once the new methods of science began to reveal their power.

Simple extracts of plants that had been used as medicines for thousands of years were replaced by a grain or two of purified alkaloids. Humoral diagnosis, based on the four elements of the ancients, was progressively put aside as new knowledge of anatomical

pathology began to emerge. And spiritual or metaphysical interpretations of disease were deemed irrelevant after the discovery of disease-causing micro-organisms and the development of modern epidemiology.

Descartes' separation of the body from the mind, and Newton's demonstration that observation and measurement were the well-springs of certain knowledge, drove medicine ever deeper into materiality in its quest for power and control over human diseases. The new knowledge of the body and of its workings uncovered by early anatomists, physiologists and pharmacologists became the foundation upon which a powerful new institution began to take form.

By the first decades of the twentieth century, scientific medicine was well established throughout the West. Its practitioners acquired their knowledge through many years of intensive training in universities and hospitals. The new medicine was a dramatic medicine, a life-saving medicine, one capable of identifying disease with certainty and dealing decisively, if not with the disease itself, then with its distressing and painful symptoms through medication or surgery.

Reflecting on the ideas held by 'primitive' doctors and indigenous healers, medical historian Fielding Garrison was to declare in the late 1920s:

Disease [was regarded] as something produced by a human enemy possessing supernatural powers, which he strove to ward off by appropriate spells and sorcery, similar to those employed by the enemy himself. Again, his own reflection in the water, his shadow in the sunlight, what he saw in dreams, or in an occasional nightmare from gluttony, suggested the existence of a spirit-world apart from his daily life and of a soul or *alter ego* apart from his body. In this way, he hit upon a third way of looking at disease as the work of offended spirits of the dead. . . . These three views of disease are common beliefs of the lowest grades of human life.⁶

Having dismissed dreams as a by-product of disturbed digestion, and denying outright the existence of spiritual realities and the human soul, Garrison identified himself as a member of a new elite of healers whose knowledge and understanding had superseded the 'primitive' notions held by healers of other times and other cultures. Yet human nature does not necessarily conform to the Euclidean precision favoured by the scientific view of the world. Our consciousness and beliefs continue to be determined by cultural realities that are based on far more than science and rationality.

The urban shaman

American doctor Larry Dossey has recounted a memorable episode that occurred in the wards of the hospital in which he undertook his internship during the 1960s. A weakened and emaciated old man had been admitted to the hospital after having inexplicably lost more than twenty kilograms in weight over the previous six months. Cancer was immediately suspected, and the full range of pathology tests was ordered by his friend, a fellow intern who was in charge of the case. After two weeks of intensive investigations, the doctors were no closer to a diagnosis and the patient was growing steadily weaker. Dossey's friend said to the old man, "You're dying and I don't know why." His patient then confided that there was nothing that could save him, for a curse had been placed on him by a shaman. An enemy had secretly

obtained a lock of the old man's hair, upon which the shaman had performed her magic. The old man had then been duly informed of the curse. His appetite had immediately dried up and he had begun to lose weight. His health had steadily declined and he had eventually ended up in hospital.

Dossey describes how he and his friend dealt with this dilemma. At midnight on the following Saturday, when few fellow staff members were present, Dossey roused the old man and quietly wheeled him through the darkened corridors to an examination room where Dossey's friend was waiting, sitting before a table. The only light in the room was a small blue flame flickering from an inflammable tablet placed on a metal tray. After a minute or two of complete silence, Dossey's friend ceremoniously rose from his seat, and slowly approached the old man. Using a pair of stainless steel scissors, he cut a lock of hair from the old man's head. Fixing his eyes upon the old man, he lowered the hair into the flame intoning, "As the fire burns your hair, the curse in your body is destroyed."

After a further brief period of silence, they wheeled the old man out of the smoke-filled room and returned him to his bed. The transformation was immediate. The next morning, the old man ordered multiple serves of breakfast and continued to ask for extra helpings with each meal thereafter. Within a short time, both his strength and his weight began to return. As the old man left the hospital soon after, he smilingly thanked the two young doctors who had saved him.⁷

Human experience casts long shadows that are not always so easily dispersed by newer interpretations of the nature of the world, regardless of their power to explain phenomena or account for the mysterious. Looking at human disease and sickness in purely physical and mechanistic terms certainly provides us with clear and irrefutable stories of how diseases may arise and how they affect the body, but this is done at the cost of neglecting the many contexts from which we, as humans, draw meaning. The historical and cultural traditions within which we are raised can powerfully shape our view of the world and the forces within it.

A crisis in our own health, or in the health of a loved one, can draw forth many possible responses. As well as making use of whatever help scientific medicine can provide, many will also seek comfort and assistance through prayer. Places of worship such as Lourdes, Mecca, Varanasi and Medjugorje are regularly visited by many thousands of pilgrims who search for healing above and beyond the ministrations of the various medical professions. Such gestures do not necessarily reflect the actions of weak, feeble, or low grade minds. Rather, they affirm an understanding that we are moved by forces that have yet to be fully understood.

Beyond rationality: Jean Gebser

The transformations of medicine over the course of recorded history show that our understanding of the world can undergo quantum changes that affect both the way we think and the way we go about doing things. But we do not necessarily automatically discard the 'primitive' notions according to which we may have lived in the past. Although the power of analytical thought and our newly-discovered capacity for

rationality may have become signatures of the present technological age, these are not the sole determinants of our behaviour. The past is not so lightly shaken off.

Moved by the great contradictions lived out during the first half of the twentieth century, the Swiss cultural philosopher Jean Gebser sought to provide a perspective that offered some understanding of the dilemmas confronting the contemporary world. As a student of language and culture, Gebser cast his net far and wide in an attempt to discern the nature of the revolutions in consciousness that had led to the development of human rationality.

Gebser was more a generalist than a specialist, more an artist than a scientist. His ideas were drawn from the fields of literature, art, poetry, psychology, and science. At the outbreak of World War II, he moved from France to Switzerland where he was befriended by the psychologist Carl Jung. Gebser found a ready audience at Jung's institute, where he lectured for many years.

Gebser's great fascination and interest lay in the development of human consciousness. He suggested that over the course of many thousands of generations, human consciousness has undergone a series of progressive mutations, each of which has radically altered our potential. He named these, in sequence, the archaic, the magical, the mythical and the mental modes of consciousness. Gebser also suggested that the mutation that informs the mental structure of consciousness, which is dominant today, has been active over the past 10 000 to 12 000 years. He suggests further that the rational mode of consciousness that has been so influential over the past 500 years represents the most recent, though not necessarily the most humane or balanced, development of the mental structure.

Writing in the late 1940s, Gebser suggested that humanity is presently undergoing another major mutation in consciousness; the mental structure, characterised by its philosophical and material accomplishments, is presently being infused by what Gebser has termed the integral structure, characterised by an increasingly holistic sensitivity and an intensification of spiritual energy. More will be said about this later in the chapter.

Gebser believed that earlier structures of consciousness, though apparently superseded, continue to exert their influence in subtle and often unconscious ways. Our present consciousness is conditioned not only by the newly emergent rationality that characterises the present age, but carries echoes of magical and mythical consciousness. Gebser's model provides a useful framework for understanding not only the contradictory currents that have moved the will to healing during different historical periods, but also those that presently govern relations between nations, between people, and within ourselves.

In matters of health and sickness, we are moved by more than the massive cultural and institutional power exercised by scientific medicine. Despite the financial support of Western governments, the reassurance provided by rigorous medical education programs and the influence of public health campaigns, our responses to issues affecting our health continue to be visceral as well as rational, emotional as well as physical, philosophical as well as practical.

The deficiencies of a medicine founded largely upon materiality and rationality have awakened a growing realisation that there is more to the story. The movement towards holism in medicine seeks to identify and integrate elements that are presently generally neglected into a broader understanding. This may call not only for a reacquisition of medical skills and wisdom that have perhaps been prematurely discarded but, more importantly, for a renewed investigation of the nature and influence of the non-material and non-rational influences that are part of our lives.

Intuition and medicine

In recent centuries, the focus of medicine, the most human of all the sciences, has progressively shifted away from subjective human experience and turned increasingly towards objective signs and symptoms, and variables that can be controlled and limited. Fritjof Capra reflects on the consequences of this development:

Ever since Galileo, Descartes and Newton our culture has been so obsessed with rational knowledge, objectivity and quantification, that we have become very insecure in dealing with human values and human experience. In medicine, intuition and subjective knowledge are used by every good physician, but this is not acknowledged in the professional literature, nor is it taught in our medical schools. On the contrary, the criteria for admission to most medical schools screen out those who have the greatest talents for practicing medicine intuitively.⁸

Capra recognises that good medicine can still be practised not according to the book. The accessibility, sensitivity and humanity of the physician may be as important in the healing process as objective diagnosis and strict adherence to medication schedules. Capra notes that in the actual clinical practice of medicine, regardless of modality, neither subjective knowledge nor intuition are entirely overridden. Holistic medicine sits comfortably with such considerations. Understanding the role of the patient's life-world, their emotional realities, their motivations and their limitations rests upon more than a knowledge of pathophysiology and access to high-tech diagnostics.

Capra also notes that gaining high scores in the hard sciences may not be the most appropriate basis for entry into the healing professions. Despite the fact that a number of medical schools have begun to incorporate elements of the liberal arts and humanities in their programs, biomedicine remains firmly grounded in scientific knowledge. The criteria for entry into medicine continue to turn upon one's performance in mathematics, chemistry and physics.

A naturopath reflects on the role of intuition in his own approach:

I see the boundaries of the paradigm from which medicine comes as being very narrow, very circumscribed. And I think the difference is that as natural therapists we have extended our horizons or our boundaries out a lot more, so that we are working perhaps on what we call intuitive levels, or using things that work in terms of clinical results. But we may not have actual explanations for them at this point in time.

For this practitioner the boundaries within which certainty has been painstakingly charted by scientific medicine represent as much a source of limitation as of therapeutic power. He has an interest in influences that cannot be fully measured or quantified. These would include such notions as patient motivation and patient vitality. He speaks

of working on intuitive levels, as well as making use of empirically effective strategies. This reflects an openness to therapeutic possibilities that transcend strictly pharmacological approaches to healing.

Changing paradigms

The influence of Cartesian dualism during the eighteenth and nineteenth centuries freed science from the problem of mind, and made matter (in the case of science) and the body in particular (in the case of medicine) the primary fields of investigation. The phenomenal world came to be understood through a study of its constituents. The mechanisms underlying the interactions and inter-relationships of those constituents were sought through experimentation, and interpreted through the prism of mathematical analysis.

Medical philosopher Lawrence Foss has observed that the principles of dualism, reductionism and determinism provided the basis for the explanatory strategies used in all scientific investigations. In the case of biomedicine, the disciplines of physics, biochemistry and molecular biology represent the foundational elements from which there emerged a progressive understanding of pathophysiology, the study of disease processes.⁹

Lawrence Foss raises the conundrum presented by numerous research findings in medical literature supporting the notion that activities of the mind can have an effect on the health of the body. He cites a five-year research study that was terminated six months before it was due to be completed because it overwhelmingly confirmed the benefits of psychological counselling on the progression of coronary heart disease. Yet this and many other studies, as Fritjof Capra has said, have "failed to have a significant influence on mainstream medical thinking."¹⁰ Mind, human subjectivity and the nature of consciousness remain vast jousting grounds of conjecture.

The findings of such studies, together with the many 'anomalous' phenomena, including the placebo effect, that are associated with the healing process, cannot at present be satisfactorily accounted for by the paradigms underlying scientific medicine. The question of whether contemporary Western medicine adheres to a single paradigm or whether it is an aggregate of a number of differing paradigms is also fraught. One often hears of reductionist or holistic paradigms, materialist or energetic paradigms, and disease-oriented or health-oriented paradigms of medicine.

The term paradigm in itself may represent a further source of confusion. Social researcher Egon Guba comments:

It is not surprising that most persons asked to define the term paradigm are unable to offer any clear statement of its meaning. I say it is not surprising because Thomas Kuhn, the person most responsible for bringing that concept into our collective awareness, has himself used the term in no fewer than 21 different ways.¹¹

Guba himself has no problem with the ambiguity inherent in the term, as he believes that the concept remains useful precisely because of its indeterminate nature. Philosopher Carl Matheson offers his own reflection on the theme:

There is considerable disagreement over the proper interpretation of the word "paradigm". At one extreme is a very narrow interpretation according to which a paradigm consists of a set of exemplars. . . . At the other extreme a paradigm consists of an entire theoretical worldview. . . . According to a third reading, which is orthogonal to the others, a paradigm is a fundamentally sociological entity, individuated and constituted by patterns of education and alliances. . . . It is best to choose a fairly wide sense of the term.¹²

Regardless of the difficulty in nailing a precise meaning of the term, it continues to be used widely in discussions related to the various models underlying different forms of medical practice. Thomas Kuhn, the philosopher of science who first coined the term in 1962, has described the process whereby the particular understandings that underlie a given discipline can undergo major or even revolutionary change:

The transition from a paradigm in crisis to a new one from which a new tradition of normal science can emerge is far from a cumulative process, one achieved by an articulation or extension of the old paradigm. Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. During the transition period there will be a large but never complete overlap between the problems that can be solved by the old and the new paradigm. . . . When the transition is complete, the profession will have changed its view of the field, its methods and the goals.¹³

This comment offers a useful means of interpreting the present difficulties confronting scientific medicine in relation to certain aspects of the phenomenon of healing, particularly those associated with mind-body healing. The problems are essentially paradigmatic, and reflect an essential inadequacy in the foundational elements underlying the practice of biomedicine. More holistic approaches to healing have, in recent times, contributed significantly to extending the view of the field that may help to bring about a deeper understanding of realities that cannot presently be accommodated by the paradigms underlying scientific medicine.

Medicine and mind

The increasing community patronage of non-orthodox approaches to medicine during the latter half of the twentieth century presented a significant challenge to the cultural dominance of biomedicine. This challenge was at first largely dismissed. During the 1970s and 1980s, such developments began to be vigorously opposed in medical literature, and more broadly debated in political theatres and the media. More recently, however, a number of these approaches have been co-opted into the medical curriculum as units or programs in complementary or integrative medicine.

But the matter is not simply resolved by increasing the number of modalities that are considered acceptable, or by incorporating a few natural substances or unusual methods that have proven their efficacy, into the ways of biomedicine. The growing utilisation of complementary medicine throughout the Western world points to a need to address more deeply such issues as the foundations of human nature, the adequacy of reductionist epistemologies and treatment methods, and the role and influence of mind in both health and disease.

Acupuncture represents more than the insertion of stainless steel needles into selected points in the body. It embodies a profoundly holistic philosophy that places us within a sea of energy with which we are in constant interaction. The various herbal medicine traditions are more than sources of such therapeutic agents as *Echinacea angustifolia* or *Ginkgo biloba*. They place us within the matrix of life itself, sharing at a fundamental level the same living energy that drives a seed to its eventual expression as fragrant flower or towering tree. Osteopathy is more than one of the many modalities of physical medicine. It is founded upon an understanding that the human organism has a powerful, innate capacity for self-healing that can be mobilised by structural correction.

One of the more regretful consequences of the Cartesian project was the separation of mind from matter. The world of matter, the *res extensa* of Descartes, became the domain of scientific investigation. The physical world was seen to be subject to laws and mechanisms that could be uncovered and elucidated through the methods of science. That world included living organisms. The forces that maintained life were believed to be linked to physical and chemical processes that would in time be sufficiently understood to provide a comprehensive explanation of life itself. The *res cogitans*, or the world of mind, provided the means whereby rational intelligence could be directed towards understanding the nature of the material world.

In more recent times, our thoughts, emotions, and mental activity have come to be viewed as epiphenomena, or as complex consequences of chemical reactions occurring within the *res extensa* of the brain and the central nervous system. This notion has been clearly articulated by Arthur Kornberg, Nobel Laureate in medicine and one of the founders of genetic engineering:

Can we come as close to understanding the mind and human behavior as we have metabolism? The first and formidable hurdle is acceptance without reservation that the form and function of the brain and nervous system are simply chemistry. I am astonished that otherwise intelligent and informed people, including physicians, are reluctant to believe that mind, as part of life, is matter and only matter. . . . Brain chemistry may be novel and very complex, but it is expressed in the familiar elements of carbon, nitrogen, oxygen, and hydrogen, of phosphorus and sulphur that constitute the rest of the body.¹⁴

A practitioner of traditional Chinese medicine expresses his own unease at the notion that either mind or human behaviour can be fully encompassed by the laws of chemistry and the laws that govern the transformations of matter:

There has been a great silence in Western science about the things that we haven't been able to measure and quantify. And they are things like consciousness, awareness, the nature of being. And clearly people who are recognising and [are] aware of this great silence need to speak, and need to give people confidence to say: Yes. I am more than just my body.

This reminds us that the mystery of human nature encompasses more than the material domain. Materiality and rationality are only a part of the myriad influences that determine our lived experience. We can suffer as much through grief as we do from broken bones. Meaning resides as much in metaphor and symbol as in the identification and naming of disease processes. Although the fact of subjectivity may

be a nuisance according to certain points of view, it nonetheless remains an integral part of human consciousness.

Not by Bread Alone

The reality of individual consciousness has not figured strongly in the biomedical paradigm. The elimination of subjectivity and the tethering of scientific endeavour to the 'objective' world, that part of the phenomenal world that can be observed and measured, has resulted in a neglect of much that gives individual human life its meaning. The model of the phenomenal world presented by Western science does not and cannot give the full picture. Economist and cultural reformer E.F. Schumacher offers a dose of wisdom:

Science cannot produce ideas by which we could live. Even the greatest ideas of science are nothing more than working hypotheses, useful for the purposes of special research but completely inapplicable to the conduct of our lives or the interpretation of the world.¹⁵

Social forces are neither visible nor measurable, yet they condition our lived experience. Psychological and emotional tendencies do not have readily identifiable biochemical or physiological markers yet they colour and often determine our experience of the world. The spiritual realities that provide guiding principles for many among humanity are only passingly referred to, if at all, in any serious discussion of influences on health and disease.

Human consciousness is a variable phenomenon influenced by heredity, nurture, learning, experience and a number of drugs, among other things. As individuals, we often experience the same event in different ways. We may hear what we want to hear; we can have varying levels of understanding of the influence of childhood and adolescent experiences on the formation of our character or personality; our consciousness of even basic realities such as sound, taste or vision can vary from one person to another. And our consciousness of the more subtle dimensions related to energetic or spiritual reality is even more variable.

American nursing academic Dolores Krieger has introduced many within the nursing profession to an approach to healing that has become known as "Therapeutic Touch". The term itself is a misnomer, for the technique does not involve any actual physical contact between practitioner and patient. This practice is based on an acceptance of the reality of a radiant or energetic body that substands and interpenetrates the physical body. Krieger developed her system of healing as a result of collaboration with Dora Kunz, an accomplished seer or visionary capable of perceiving the activity of luminous energies in and around the human body.¹⁶

Much of the healing that occurs in certain forms of shamanism, particularly those associated with the use of psychoactive drugs, is said to be mediated through the manipulation of luminous energies that become available to the shaman and often to fellow participants during healing rituals and ceremonies. Cultural anthropologist Terence McKenna reports on the role of luminous energies in certain shamanic rituals:

Shamans, under the influence of potent monoamine oxidase-inhibiting, harmine- and tryptamine-containing *Banisteriopsis* infusions, are said to produce a fluorescent violet substance by means of which they accomplish all their magic. Though invisible to ordinary perception, this fluid is said to be visible to anyone who has ingested the infusion.¹⁷

Religious traditions of most cultures speak of luminosity and radiance as qualities associated with the presence of spiritual energy. And many of those traditions associate that spiritual energy with a potential for healing both body and mind.

Biomedicine is based on science, not religion. It is, of necessity, a thoroughly secular profession. This is a direct consequence of its foundational relationship with scientific method and its largely materialist orientation. Such a secular role is fully consistent with the pluralism that characterises Western society. But individual practitioners remain free to quietly work according to their own understanding of what is possible.

As the boundaries of what is considered acceptable progressively broaden, we may begin to witness an increase in interest in both the nature of such energies and their potential application for the purposes of healing.

Life force

Many within complementary medicine sit comfortably with such notions as *energy*, *vitality* and *spirit* and their influence in the work of healing. The notion of a life force is central to the understanding of many practitioners of naturopathic medicine. A naturopath offers his own reflection:

Life force I believe is innate in everyone. The Indians call it prana. We all have it, this vitality. Animal magnetism, other people call it. The ch'i, the Chinese call it. It's a force or a vitality that is partly, I believe, electromagnetic in nature. But it is expansive, it has the capacity to just grow and grow and to amplify. This can be turned up or turned down, like a dimmer on a light. By using the correct principles of living, I believe it can be amplified and turned up.

This comment reflects the inherent difficulty of dealing with experiences and concepts for which there is no common language. It is suggested here that the term life force points towards a phenomenon that has yet to be identified and investigated by medical science. He further suggests a close relationship between the state of the body and the quality of that life force. He believes that the human energy field can be made stronger by certain practices and "by using the correct principles of living".

Jan Smuts, who coined the term 'holism' in the 1920s, recognised early the difficulty of finding the right language to describe activities within living systems:

Body-and-soul is the model or scheme on which both thought and science are based. There is an *anima* dwelling in a *corpus*, one entity living in close symbiosis with another. As Descartes formulated it, there is the *res cogitans* in the *res extensa*; there are two distinct separate *res* or entities, and the difficulties and contradictions arise from their mutual assumed interaction.

The theory of Vitalism or the vital force seems simply to emphasise this dualism. But if we wish to overcome these difficulties and contradictions we have to probe more

deeply than these popular views. We must get down to the tap-root from which the two apparent entities or substances have grown. The subject is most difficult and uncertain.¹⁸

Those difficulties and uncertainties continue into the present day.

An osteopath offers a serious-minded attempt to interpret the meaning of ch'i, a term used in traditional Chinese medicine to describe the energetic currents associated with living bodies:

Talking first of all about ch'i. It's not an it. It's a them. There is an enormous chemical soup and interchange of movement and heat and so on going through the body and all round the body in all sorts of different directions at all times, and to pick out the electrochemical or electromagnetic aspect of that or to pick out the circulation of endorphins or whatever and say, "Oh, this is what we are talking about, that's what we're talking about." No. The idea of ch'i is a metaphor, an abstraction and a simplification of a way of perceiving some currents that are going on in that chemical soup if you like. And it's not an it. It's a them. It's a simplification of many things into one to try and make sense.

This quote suggests that the term *ch'i* points towards the energetic dimension of changes that may occur on a physiological or biochemical level. In this sense, he is far closer to Smuts' perspective than the naturopath quoted earlier. He notes that elements within these electromagnetic fields may be associated with the neural and chemical activity that are integral to metabolism. Whether such energetic manifestations represent a unified dynamic that encodes information reflective of functional aspects of the body and its organ systems is, however, another story.

It is well understood that heat represents the physical expression of electromagnetic vibrations in the infra-red region of the electromagnetic spectrum. In a similar way, the electrochemical changes associated with the transmission of neurologic impulses throughout the nervous and sensory systems may create their own subtle fluctuations that are reflected in the bioenergetic field associated with our living bodies. There is clearly more to the picture than flesh and blood. But our osteopath reserves judgement regarding the various interpretations of the nature and significance of these energies. He continues:

Saying ch'i energy or saying chakras or saying meridians, or auras, or astral-bodies and so on, are simplifications, in order to try and make something explicable in a more concrete form when you perceive it, and to have a language of talking to other people about it. In another sense, they are actually metaphorical perceptions in that we are not ever perceiving the real.

This comment reflects the inherent difficulty of articulating the nature of perceptions that may vary between one individual and another.

The fact that widely diverse cultures have given linguistic expression to such perceptions through the use of such terms as ch'i, prana, chakras, meridians, spirit and auras points strongly towards their universality. The osteopath quoted above views these terms as metaphors for the intangible. With no common language, interpretation remains idiosyncratic. With no material substance, there is nothing to grasp and hold. The finger can only point to the moon.

A practitioner of Western herbal medicine offers his own view of the relevance of such considerations in the clinical setting:

I believe that there is an energy. But it's not something that I focus on. It's not something I will ever talk about, but I believe that there is an underlying factor there. I believe it takes many, many years of clinical exposure to start to understand it, let alone work with it. I feel that component is there but it's not something which I particularly focus on. I believe that as an individual practitioner, within an individual practitioner's model, it may have some importance. But I believe that its importance tends to be overrated. The knowledge is useful. But I don't believe that it's a very important aspect of it.

This herbalist acknowledges the existence of an energy that can be used for healing purposes, but is reluctant to discuss the matter further in the clinical context. There exists no scientifically acceptable paradigm or conceptual model that comfortably accommodates such possibilities. Nor is there a common language through which these ideas can be expressed. Yet this practitioner accepts that some practitioners can and do utilise such notions in their daily work.

As with our earlier quoted osteopath, such considerations are not central to his work as a clinician or as an educator. Nor can they be said to be central to the practice of holistic medicine. But an acceptance of the reality of such energies creates a certain tension between the principles that can be openly acknowledged as the basis of one's healing activities, and those that remain unspoken.

Beyond the margins

During the 1960s, American psychiatrist Shafica Karagulla conducted a series of depth interviews with individuals who exhibited what she called "higher sense perception". Dora Kunz, who provided much of the insight that enabled Dolores Kreiger to develop the methods of Therapeutic Touch, was among her interviewees.

Karagulla also interviewed a number of medical practitioners as part of her study. Some spoke of perceiving energy fields in and around their patients' bodies; others of being able to relieve acutely ill patients by placing their hands over the affected areas. One practitioner claimed the ability to look directly into the body and observe the activity of its various organ systems in order to determine the presence or absence of pathology. Another formed her tentative diagnoses on the basis of the nature and quality of the energy fields she perceived around her patients. Most interestingly, all of these respondents tended to hold silence both with their patients and their peers regarding their abilities, preferring rather to use conventional diagnostic procedures in order to validate their own observations and intuitions:

Almost without exception they kept quiet about their unusual talents because they feared any mention of such things might hurt their professional standing. In most cases each had felt that perhaps he [or she] was alone and peculiar in this regard.¹⁹

Those interviewed were not part of the so-called lunatic fringe of alternative medicine, but were competent and fully qualified practitioners of biomedicine. And despite the fact that their own perceptions did not conform to what are considered normal or valid

sources of knowledge from the scientific perspective, they continued to make use of their observations in their professional life. At a more personal level however, the cost of inhabiting such a perceptual world contributed to a degree of alienation from their colleagues, and a loss of freedom to discuss among peers their own observations for fear of estrangement and possible ridicule.

One of the more interesting aspects of Karagulla's study is the fact that virtually every respondent offered a differing description of their observations. Such a situation represents a methodological nightmare in terms of generating a consistent and reproducible charting of the perceptual terrain inhabited by those able to directly perceive the subtle energetic currents associated with living processes. Karagulla's study represents an early entry into an area that has for too long been either denied, neglected, or quietly pursued on an individual level.

Another naturopath furthers the discussion:

Within the naturopathic arena, there will be those whose frontier will continue to evolve. And so what I believe will happen in the future, is that natural therapists of whatever persuasion are going to go more and more into energy medicine. It's as if there is always a group within the natural medicine arena that remains the frontier band, even though some of the guard may be absorbed into [orthodox] medicine, if that makes sense. So there will be those that really start to work purely at an energetic level. They'll basically just look at a person, be able to see energy imbalances, and from their own mind powers start to create changes.

This naturopath is not alone in his projections. American sociologist Meredith McGuire comments on similar ideas expressed by respondents in her own study of non-orthodox approaches to healing:

Many respondents felt that their alternative healing approaches were actually ahead of medical science. They were sure that when it gained the ability to tap such phenomena, medical science would vindicate most of these alternatives. They believed that science was only beginning to discover the truth of what their belief system had told them all along.²⁰

It is clear that there are many healers operating outside the framework of biomedicine who both accept the reality of an energetic dimension to human nature, and accept that certain individuals are capable of perceiving and interpreting such energies, and are intervening at a purely mental or volitional level. Such notions fall well beyond the boundaries of the current paradigms that inform biomedical understanding.

Medicine and energy

Material observations will respond to material interventions. An altered blood chemistry can be remedied by the use of material medicines, such as iron supplements for anaemia. But when one begins to speak in energetic rather than material terms, new possibilities begin to enter the picture.

A homoeopath respondent offers her own thoughts on the conceptual dilemma confronting practitioners who work from an energetic perspective:

I think that things like Kirlian photography are touching the edge of it. There is the work of Rupert Sheldrake who has talked about morphic fields and morphic resonance. I think he's at the forefront of the cutting edge of science. I think that it is going to come because to me it is so real that it has to. It's just that science, the paradigm that we have at the moment, doesn't incorporate these concepts or these understandings of subtler energies, subtler realms.

Neither homoeopaths nor acupuncturists are necessarily capable of directly perceiving energy fields associated with the body. Yet practitioners of each approach aim to bring about a primary corrective transformation in such subtle energies in patients. These approaches are based on a view of living systems that is very different to that described by the biomedical paradigm.

The quote above mentions such recent developments as electrophotography, developed by Russian scientist Semyon Kirlian, and the challenging theories of Rupert Sheldrake as invitations for serious-minded investigations of these areas. Kirlian photography in many ways represents a technology whose day has perhaps come and gone too quickly. Yet much of the work done in the 1970s confirmed its potential usefulness as a research tool for the investigation of biological and intentional energies.

Apart from the sheer beauty of many of the images produced by the technique, Kirlian photography offers a means of creating images which confirm that *something* changes in such activities as deep meditation, spiritual healing and active visualisation. The nature of that something however, remains elusive, as there is no commonly acceptable conceptual framework within which to accommodate such phenomena.

American researcher Kendall Johnson recorded a number of striking images of the effects of zen meditation practices and acupuncture on the electrophotographic image.²¹ Earle Lane has similarly recorded remarkable electrophotographic images of the effects of transcendental meditation and the use of high doses of Panax ginseng.²² And H.S. Dakin has obtained extraordinarily challenging images while working with metal-bender Uri Geller in 1973 and with psychic healer John Scudder in 1974.²³ The ideas of Rupert Sheldrake appear similarly to have been shelved until we enter a climate more favourable to the scientific investigation of the numinous and elusive.²⁴

A naturopath quoted earlier identified “the naturopathic arena” as fertile soil in which such notions can take root and find expression. Yet homoeopaths, acupuncturists and practitioners of Therapeutic Touch have long been cultivating similar soil. Another osteopath offers his own view of what may lie ahead:

I foresee in my lifetime that probably the orthodoxy of the day will have some of the things that we used to think of as being radically different. As old men we might stand around saying, "Did you see that? I don't believe it! There's a professor of medicine on the television saying the patient's aura was disrupted around the tumour". And they might develop that. Now you already see that. If you just watch the television carefully, you are already starting to see things like that occurring.

This osteopath sees the current limits of acceptable knowledge as pushing out rapidly. A professor of medicine is a high symbol of medical authority and accomplishment. This image is used here to project what is at present an uncharted and heretical diagnostic notion, the direct vision and interpretation of the body's radiations. If such realities are truly part of the phenomenal world, they will sooner or later come to light.

They are not and cannot be the exclusive domain of any one cultural or professional group. These realities will in time come to be investigated through the use of methods and technologies that perhaps have yet to be developed. Then will begin what Thomas Kuhn has termed "the extraordinary investigations that lead the profession at last to a new set of commitments, a new basis for the practice of science."²⁵

A deepening vision

It may be helpful to revisit the ideas of Swiss philosopher Jean Gebser in the difficult quest to understand the nature of perceptions that are not universally acknowledged as real or as valid. Consciousness itself is a variable phenomenon. Although it is intangible, ungraspable and unmeasurable, our individual consciousness determines to a large extent our sense of meaning, and our capacity for understanding.

Gebser holds that humanity as a whole is presently in the process of undergoing a major mutation of consciousness characterised by what he terms "the concretion of the spiritual". This unusual expression reflects an attempt by Gebser to counter the notion that spirit represents an abstraction, a linguistic metaphor similar to such terms as vitality, intelligence, soul, or mind. For Gebser, as for many others, the term spirit signifies not so much an extra-mundane and incorporeal presence, but denotes rather a vibrant, coherent and increasingly visible energetic presence in the world:

The grand painful path of consciousness emergence, or, more appropriately, the unfolding and intensification of consciousness, manifests itself as an increasingly intense luminescence of spirit in man.²⁶

Gebser here suggests that the current debate regarding the very existence of an energetic dimension associated with living processes could be short-lived. At present, relatively few individuals appear to be capable of perceiving and reporting upon their experiences in regard to the subtle energies associated with living systems. Perhaps this has always been the case. But one does not need to look far to realise that such perceptions have been part of human experience throughout history. Five centuries ago, Paracelsus offered the following description of what he considered to be useful attributes for any who wish to take on the mantle of healing:

The physician should speak of that which is invisible. What is visible should belong to his knowledge, and he should recognise the illnesses just as everybody else, who is not a physician, can recognise them by their symptoms. But this is far from making him a physician; he becomes a physician only when he knows that which is unnamed, invisible, and immaterial, yet efficacious.²⁷

As we know, the development of medical science has resulted in a vast knowledge of the visible, and a near-perfect understanding of the relationship between the patient's symptoms and the diseases which they signify. But a deep knowledge of the unnamed, the invisible, and the immaterial has yet to be attained.

The osteopath quoted on the previous page draws from his own experience and from popular culture to suggest that we can no longer evade what becomes increasingly obvious for increasing numbers of people. Regardless of its origins or its nature, the so-called aura is understood to be part of spiritual reality and is available to human

consciousness. According to Gebser, the perception of spiritual energies becomes more widespread as humanity moves collectively towards an intensification in consciousness. A number of respondents suggest that this phenomenon (or, more correctly, *noumenon*) will come under increasing medical scrutiny as the boundaries of the acceptable begin to broaden. Our osteopath continues:

I don't think that everyone that's in alternative medicine is a more sensitive and loving person compared to anyone else, but they have definitely given time to develop those senses. Medicine and the healers of every tribe have always been sensitive to other things. And we know some people are sensitive to energies, some people to auras, lights, just inflections in voice, you know. You develop this, you can learn it.

The training of practitioners in many of the modalities of complementary medicine has traditionally tended to emphasise the humanistic dimensions of learning to a far greater extent than that which characterises undergraduate programs of biomedicine.

A humanistically oriented education will tend to encourage a more leisurely exploration of interior realities. This may help to sensitise practitioners to the subtler influences within life, be they related to lifestyle, relationships, emotions or spirituality. This of itself will further the development of a more holistic consciousness that will find its own expression in clinical practice. The quote above recognises sensitivity in healing as a perennial attribute of many who aspire to the role of physician and healer. Our osteopath further raises the notion that through active training, one can consciously develop a heightened sensitivity to the subtle communications and energies that enable us to more readily participate in the life-world of others. Such attributes need to be intrinsically valued before they can become part of the education and training of healers. The biomedical establishment remains largely sceptical of the reality of the energetic dimension that appears to be integral to many of the modalities of complementary medicine.

Between paradigms

There has always existed a strong tendency for powerful institutions to control both the thought and conduct of their members. This holds as strongly today as it did in dynastic Egypt and Renaissance Europe. Egyptian doctors were forbidden to depart from the established norms of treatment under fear of punishment. Giordano Bruno was burned alive for defending the notion that the earth moved around the sun. Galileo Galilei chose rather to bend and recanted, under threat of excommunication, his own observation that the earth truly moved around the sun. Thankfully, we live in more clement times.

Yet many who work within both medical orthodoxy and more particularly in the various modalities of complementary medicine continue to experience the opprobrium of a powerful institution, particularly if their philosophical viewpoints or treatment methods do not conform to the standards determined by the dominant system.

One of Thomas Kuhn's more valuable contributions has been his reminder that much of the scientific knowledge held as sacrosanct at any given time is in fact contingent and relative. The present form of biomedicine is itself a reflection of the philosophies, epistemologies and technologies that have developed in the Western world in recent

centuries. It does not represent the omega point of the healing mission, but is more in the nature of a transient social, professional and institutional phenomenon with its own share of problems and contradictions.

The institution of biomedicine is strongly reflective of the science, philosophy and methods that have shaped it, and although immensely powerful and effective in certain areas of management and treatment, remains but one of a number of possible approaches to the problem of human suffering borne of sickness and disease.

The growing confirmation of the influence of mind and spirit in human experience will continue to quietly push the boundaries that define the practice of contemporary scientific medicine. As attention turns towards the role of more subtle influences on our health and wellbeing through the development of new methods of research and new philosophies, the style of medicine as we know it in Western communities will inevitably change.

Endnotes

1. Jean Gebser, *The Ever-Present Origin*, p. 542
2. Georg Feuerstein, *Structures of Consciousness: The Genius of Jean Gebser: An introduction and critique*, p. 119
3. See Peter Chojnowski, "Descartes' Dream: From method to madness", *The Angelus*, XXV, no. 4, April 2002. The article is available at http://www.sspcx.ca/Angelus/2002_May/Descartes.htm.
4. Lex Newman, "Descartes' Epistemology", Section 7: *Proving the existence of the external, material world*, Stanford Encyclopaedia of Philosophy, viewed at <http://www.plato.stanford.edu/entries/descartes-epistemology/>
5. Betty Dobbs (1975), *The Foundations of Newton's Alchemy: or, 'The Hunting of the Greene Lyon'*, p. 6.
6. Fielding H Garrison, *An Introduction to the History of Medicine*, p.. 21
7. Larry Dossey, *Time, Space and Medicine*, pp. 3-6.
8. Fritjof Capra, *The Turning Point: Science, society and the rising culture*, p. 350
9. Lawrence Foss, "A Challenge to Biomedicine: A foundations perspective", *Journal of Medicine and Philosophy*, vol. 14, pp. 168-9
10. *Ibid.*, p. 171
11. Egon Guba, *The Paradigm Dialogue*, p. 17
12. Carl Matheson, *Historicist Theories of Rationality*, Stanford Encyclopaedia of Philosophy, viewed at <http://plato.stanford.edu/entries/rationality-historicist/>
13. Thomas Kuhn, *The Structure of Scientific Revolutions*, p. 84
14. Arthur Kornberg, "The Two Cultures: Chemistry and Biology", *Biochemistry*, 1987, vol. 26, p. 6890. This article is adapted from Kornberg's Plenary Address to the American Association for the Advancement of Science given in February 1987. It is available online at http://www.uft.uni-bremen.de/chemie/isensee/kornberg_biochemistry.html
15. E F Schumacher, *Small is Beautiful: A study of economics as if people mattered*, p. 85
16. Psychiatrist Shafica Karagulla offers an in-depth portrayal of the perceptual world of Dora Kunz, to whom she gives the pseudonym Diane, in her study of various forms of clairvoyant perception *Breakthrough to Creativity* (Publ. De Vorss and Co., California, 1967. See particularly pp. 124-61). See also Dolores Krieger, *The Therapeutic Touch: How to use your hands to help and heal*.
17. Terence and Dennis McKenna, *The Invisible Landscape*, p. 95.
18. Jan Smuts, *Holism and Evolution*, p. 176.
19. Shafica Karagulla, *Breakthrough to Creativity*, p. 78.
20. Meredith McGuire, *Ritual Healing in Suburban America*, p. 198
21. Kendall Johnson, *The Living Aura: Radiation field photography and the Kirlian effect*, pp. 106-119
22. Earle Lane, *Electrophotography*, p. 43
23. H.S. Dakin, *High Voltage Photography*, pp. 26-33. Regarding the phenomenon of metal-bending, see the detailed and provocative study by UK experimental physicist John Hasted, *The Metal Benders*, Routledge and Kegan Paul, London, 1981
24. Rupert Sheldrake, *The Presence of the Past: Morphic resonance and the habits of nature*.
25. Thomas Kuhn, *op. cit.*, p. 6
26. Jean Gebser, *The Ever-Present Origin*, p. 542
27. Jolande Jacobi, *Paracelsus: Selected writings*, pp. 63-64