

The Philosophy and Practice of Holistic Health Care

Deborah Ann Nelson

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Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.”

Signed

Date

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Dedication

To my daughter Emma and my son Kieran.

Abstract

For almost three decades 'holistic health care' has been a widely invoked term. It is called upon as an antidote to mechanistic science, as justification for the use of alternative therapies, as instruction to good practice and even as a boundary marker in establishing professional identity. In the service of these intentions it has assumed various meanings. The first aim of this study is to identify from the literature, the illusion of shared meaning that saturates this term and to expose the implications of this lack of clarity. The elusive nature of the meanings attributed to holism and the problem of determining an appropriate method of pursuing these meanings is addressed. A particular understanding of conceptual analysis and practical reasoning are defended as adequate tools. The group of ideas from which the term holism can be distinguished, individualism, dualism and reductionism, form the context of the examination of understandings of wholeness. Eight distinctions of wholeness are examined and the common conceptual feature of 'purpose' is suggested. This requires considerable justification which is provided by an exploration of the notion of 'partness'. Recourse to the seminal work of Smuts (1926) is sought and the derivation of the idea of holism from evolution theory is explored. A key understanding explored is the nature of emergent properties and their role in the holistic doctrine, 'the whole is more than the sum of the parts'. Employment of the word holism in social science, philosophy, and biology is examined and a number of fallacies about holism exposed. With a somewhat clearer understanding of holism, and a working notion of wholeness, theories of health are discussed as contenders for a philosophical basis for 'holistic health care'. While several show some congruence, it is argued that the Foundations Theory of Health can be shown to demonstrate the characteristics of work for wholeness identified in this work. The conclusion that holistic health care is in essence working creatively with incipient wholes, is explained and justified by a discussion about how a health worker might become more holistic in her practice.

Preface

I am not a trained philosopher and nor are the thousands of my fellow health workers who attempt to make sense of what they are trained to do, and to do it with both insight and compassion. This is not as easy as it might seem. The substantial contradictions, inherent conflicts and plain bizarre conventions of the health care world make it a very confusing arena. What it is to be a good health worker is seldom unequivocal. It has become clear to me that as a start, good health workers must also be thoughtful health workers. There is a rich tradition of thinkers in all cultures that helps us to do this, but thinking is a skill that must be developed. This work is an attempt to draw on this heritage and to develop my own thinking skills. I cannot turn myself into a trained philosopher, but I can begin to understand the philosophical questions that underpin work for health and to apply my thinking to resolve some of the conundrums. The conundrum I chose to address is that of holism in health care work.

Ideas about holistic health care are said to have had their roots in the sixties. Challenges to the dominant hegemonies were part of the spirit of the time, as counterculture ideology was stirring in all areas of human experience. The struggles to change the thinking in the racial, gender and environment arenas were energized by concerns about health and power. The critique of psychiatry, the consumer movement, the human potential movement, the influence of transpersonal psychology and eastern wisdom traditions, and the indigenous culture renaissance, have as at least one common theme, the challenge to medical orthodoxy. However for some reason no clear understanding of holistic health emerged from this rebellion. As a health worker and as a recipient of health services, I (like many others) have become increasingly suspicious of the term 'holistic health' and doubtful that there could be substance behind this idea.

And yet the wish that there could be something about encounters with health services that could leave people more whole than before, that could work with their striving to be whole has been an enduring one for me. There have been a number of factors that spurred me on. Witnessing the indomitable quest in children for autonomy and for other attributes that can be ascribed to wholeness, is incentive enough to pursue the phenomenon of this striving in adults. David Seedhouse's ideas about the meaning of health have been an inspiration and as I understood more of their implications, a clearer view of the place of wholeness in health became a possibility. But there was some exploring to be done and this work is an attempt at this exploration. The theories, the social and political pressures, the constraints of science and of belief are the background of this exploration but the heart of it is people's experience of wholeness and an approach to health care that can facilitate this. Holism is an abstract idea but I think understanding it has consequences for the way we see the world and the life we encounter in it.

In our fragmentary world where knowledge is formatted into discrete fields and specialization is highly valued, being in search of holism is a fraught activity. It would be unwise for this study to claim anything like the intension or ability to penetrate speciality disciplines to significant depths in order to *evaluate* the machinations of their use of holism. Teilhard de Chardin (1955) speaks for many thinkers when he expresses hesitance to hold opinions about fields of study in which he is not termed an expert and there are sound academic reasons for this. However, it is precisely to achieve more than discipline specific views and nuances that a broad sweep of the territory is necessary and venturing someway into the specialized worlds of experts is assumed justifiable. Naivety or plain misunderstanding may contaminate this work, but it is expected that corrections will be forthcoming and at least some cross-discipline themes will have been drawn.

Introduction

When studied narrowly in himself (sic) by anthropologists or jurists, man is a tiny, even a shrinking creature. His over-pronounced individuality conceals from our eyes the whole to which he belongs; as we look at him our minds incline to break nature up into pieces and to forget both its deep inter-relations and its measureless horizons: we incline to all that is bad in anthropocentrism. (Teilhard de Chardin, 1955, p. 35)

Identifying the problem

'Holistic' is a term increasingly used in health care literature and is a topic discussed in undergraduate study of various health care professions (Knowledge in Nursing 1. Course readings, 2000). It is generally considered to be a positive thing and to be an important development in modern approaches to health. However 'holistic health care' is in effect, a meaningless notion. The term is used in a number of different ways without clear definition. It is used:

- as a panacea for the ills of reductionist medicine,
- as 'proof' of good practice, (the assumption being that it is unarguably a good thing),
- as a tool in the establishment of professional boundaries (the assumption being that certain disciplines/professions can lay claim to holistic practice), and in the world of service provider advertising,
- it is used to attract clients by claiming to have some unique but not specified understanding of health.

So what can we say about the integrity of this phrase, holistic health care?

- there is a plethora of references to it in the literature but very little thorough deliberation,
- it is laden with ideological nuance,
- it has been used by everyone from the fringe sector to conventional medicine.

Holistic health care is a meaningless notion for at least four closely related reasons.

1) It has no clear limits

Broad assertions about holistic health care abound (Bonn, 2001; Patterson, 1998). In addition to both contradictory and vague claims made in the name of 'holistic health care', the possible meaning of holism is said to be subjective.

It would seem to follow therefore that a definition of "holism" will always be individualistic, based on (the) perception of what "whole" is and where it ends; or whether we accept that it has an end. We can discuss the concept in abstract terms, but we cannot define the parameters. Holism may have to be regarded (in a similar way) as the definition of pain i.e. what the individual says it is. (Patterson, 1998, p. 289)

While Patterson glimpses some of the difficulties raised by the idea of holism, she sweeps them away with an extreme relativist position. This is not a useful way to develop health care theory nor is it ethical. It is important to have transparent and defensible principles behind the words used in health care, not only to enable effective debate about the ideas, but to prevent their *misuse*. Misuse of a word is gravest when the meaning is purposely left loose with the intention of harnessing the slogan value. Power can be wielded by reference to an idea that can be all things to all people. The illusion of shared meaning can lead to the exploitation of people, to the wasting of resources and to the

undermining or destruction of a potentially useful word.

General confusion about the meaning of holism is not the only obstacle to clarity. There is confusion in the literature about the terms 'holistic health care', 'alternative health care' and 'complementary medicine'. These and several other terms are used interchangeably with the assumption that they have a fundamentally common theoretical base. This requires challenge. The much quoted Eisenberg study (Eisenberg, Kessler et al., 1993) showed that there has been a substantial rise in the use of 'alternative' or 'complementary' medical services during the last decade of the 20th century. This has been interpreted as a desire for a return to 'wholeness' that people feel is missing from modern medical treatment. The question this thesis poses is, what makes a particular approach to health 'holistic'?

"Have you seen the breast lump in bed 24?" a student is overheard asking his peers in the canteen. No mention of Mrs White who has had to come into hospital leaving her three children with relatives and the shop she runs in the hands of a friend, while she has her breast lump investigated. (Macgregor, 2001, p. 250)

Mrs White may wish that the student had referred to her in ways more respectful, more humane, more compassionate. She could probably explain what she was wishing for and should, by any professional standard, be getting. However if she asked for holistic health care, what in fact would she be requesting? There are ways of referring to the health of individuals or groups of people that reflect a more contextual approach but what is the useful *limit* of the context and in what way can this be said to improve the quality of experience of health care Mrs White and her family have? What would make her health care 'holistic'?

According to some it would be an acknowledgment of the person rather than the condition and there would of course be much debate about what this could in

fact mean. To others, holistic care would mean the provision of integrated care, or the application of the biopsychosocial model, a systems approach, the provision of alternative therapies, the exploration of spiritual understandings and ways of healing, or maybe some would say all of the above. Even if all of the above are part of holistic health care, there is no way to tell that this is *all it is*. The important point is that with no clear understanding of 'holism' it would be impossible to know and it would be unethical to claim to be providing it.

Some efforts have been made to list the characteristics of 'the new paradigm of medicine' and how it enables holistic nursing (Blattner, 1981). Although this at least enables debate, it is not made clear how these characteristics were derived, or why they were chosen and not others. In a recent publication on autism there is an entire chapter by Audet, (Miller-Kuhaneck, 2001) devoted to "The Nature of Pervasive Developmental Disorders: A Holistic View" in which the word 'holistic' is never mentioned again after the title.

This study aims to explore the complex ideas that are embedded in the notion of holism and thus enable a clear and defensible theory of holistic health care to be expounded. If no such theory is possible, health workers will have to abandon the term 'holistic care' as meaning nothing that is, in fact, useful in practice.

2) It has no agreed core meaning

The complexity and specialization that has characterised modern medicine has unequivocally been successful as an acute disease-combating enterprise. But is this all there is to health care? Has the price for this expertise been 'wholeness'? The calls for holistic health care that come from the public, from health professionals, from 'complementary' health providers and even from orthodox medical practitioners suggest that there is a need for a restoration of

‘wholeness’ but they are not necessarily calling for the same thing, nor would they choose the same way of attaining it.

“Biological systems are too complex to be fully understood through conventional experimentation” says immunologist Robin Callard (Institute of Child Health, London, UK) ... “Because they are non-linear systems they may have properties that are not obvious from biological considerations alone and we need mathematical modelling to show how they work”. Understanding biocomplexity – how the components that make up a cell, organism or ecosystem interact to make the system function as a whole – is one of the biggest challenges facing biology today ...”The basic idea of biocomplexity is that the whole is more than the sum of the parts”, explains Geoffrey West (Sante Fe Institute, USA) ...biocomplexity “represents a way of looking at biological systems that focuses on the general holistic features rather than on myriad details.” (quoted in Bonn, 2001, p. 288)

This extract illustrates the lack of agreed meaning, the talking at cross purposes about ‘wholeness’ that will need to be resolved if holistic health care is to be a useful notion. Most writers in the holistic health care arena would not be willing to see the answer to wholeness in mathematical modelling nor see attention to detail as an obstacle to ‘wholeness’.

Williams (1998) claims that holistic health care refers to all approaches to health not taught in orthodox medical schools. However, the British Holistic Medical Association was founded by Patrick Petrioni in 1983 and has primarily general practitioners as members.

The BHMA was from the outset well disposed towards the practice of complementary therapies within medicine. It has a category of membership for complementary practitioners and its newsletter carries a good deal of information about seminars and training opportunities on complementary therapies. (Cant & Sharma, 1999, p. 101)

The principles of holistic health care ascribed to by the BHMA are according to the above authors:

- the importance of the mind/body link,
- the importance of the patient's own subjective experience,
- the need for the compassionate physician to heal themselves.

While these may be laudable aspirations, it is useful to compare them with the following:-

1) Authors who would have the central principles of holistic care to be those of a systems approach which privileges wholes over parts.

Medical holism can address itself to individuals, the environment or populations either separately or in various combinations. It has, in the first instance, the connotation of focusing on the human body in a systemic fashion, privileging the general state of the organism rather than the condition of individual organs. The parts in turn are perceived to have many intense and multidirectional interconnections. In many formulations the whole is said to determine the actions of the parts. From this perspective sickness is regarded as a general disorder of the body even if disease can be classified in terms of say, local lesions or external etiological agents. (Lawrence & Weisz, 1998, p. 2)

2) Authors who claim holistic health care principles to:

- be aimed at balance between nominated aspects of personhood,
- include personal responsibility,
- be an antidote to specialization,
- be a treatment option for intractable conditions.

Holistic medicine is a movement, or an approach to treatment, evolving mostly within the medical profession, but also among complementary therapists. It is a response to the need to find new methods of dealing with

stress-related and degenerative health problems. It is also a reaction against increasing specialization within medicine. Holistic medicine integrates a variety of potential psychological treatments with preventative instruction. It attempts to give a global treatment to each patient with as much emphasis on psychological and preventative care as on the treatment of pathologies. This is how it is defined by the American Holistic Medical Association: Holistic medicine is a system of health care, which embraces personal responsibility and fosters a co-operative relationship among those involved: leading towards optimal attunement of body, mind, emotions and spirit. (Fulder, 1996, p. 9)

Clearly, almost any agenda can be introduced as part of holistic medicine. While a vague appeal to oppose dualism is a common thread, these examples show how cavalier is the use of the word 'holistic'. Extract one deals with the integration of non-medical practice in healthcare, the second extract predominantly with a systems view of the body, and the third annexes 'the health as personal responsibility' territory and offers 'global treatment', whatever that is. These examples from the literature demonstrate the need for greater clarity about the notion of holism in health care.

3) It is wielded as a slogan

Holistic health care has the semblance of a movement and is certainly perceived as such by some (Cant & Sharma, 1999; Fulder, 1996). These authors associate holism with alternative therapies and complementary medicine and in this guise it is seen as a challenge to orthodox medical hegemony. There is certainly extensive evidence of this view of holistic health care on the Web where countless holistic health services and networks are promoted. There are several courses offered, for example, The New York College for Wholistic ¹Health Education and Research.

¹ The use of 'wholistic' rather than 'holistic' is not referred to anywhere in the literature except Gordon (1990) who describes the use as one of preference, not signifying any particular nuance.

The mission of the New York College is to transform health care in the United States and improve the quality of life of Americans. The New York College envisions a wellness-oriented health care delivery system based on the fundamental principles of wholistic medicine – the integration of mind, body and emotion, resulting in optimum well being. (<http://www.nycollege.edu/about/founders.html>)

This is clearly ‘the slogan’ variety of assertion. It is claimed by champions of holistic health care that western scientific method has led to a splitting off of health from its derivative, wholeness. Holism is a movement to restore, or re-expose the connection. While it is far from a coherent movement, as we have seen, it infers an ideology of a particular kind, a dogma of sorts and it has been used as if it had political power. However it is not enough to be hailed as a panacea for the malaise caused by the Enlightenment, or our subsequent tendency to fragment experience in order to gain knowledge. The battle cry of ‘holism’, requires scrutiny before it can be useful health care theory.

4) *There are few objections to vagueness*

Nursing has embraced holism for both its justification of the use of alternative therapies (Cant & Sharma, 1999) and for its apparent antidotal power to reductionist approaches to health care. Owen and Holmes (1993) cite Capra & Spretnak (1984) in recommending the politicising of holism so that it can ...“ become an emancipatory philosophy rather than a descriptive one”. They qualify this as an orientation to a wider ecological perspective.

Their article highlights the dearth of adequate thinking about the meaning of ‘holism’ in health care.

Of more than 200 papers in the latter period (1986-1987), 180 appeared in journals concerned primarily with aspects of general and specialty practice, mostly in relation to alternative therapies, and it appears that no effort was made by the researchers or authors to distinguish the different senses in which the term “holism” was used. (Owen & Holmes, 1993, p. 1689)

Far from this presenting an obstacle to health care writers, holistic health care is a very desirable commodity. This is evident in two ways.

- 1) Holism has become a therapeutic imperative.
- 2) Holistic health care has become a professional boundary issue.

These assertions will be examined in chapter one. The former may be a positive injunction but is at present impossible. Without a coherent understanding of holism, holistic health care is chimerical. The latter highlights one of the most obvious anomalies in current holistic health care literature. According to Watson (1995), recourse to Nightingale gives an historic credence to a claim to holism by nurses, and has provided impetus for a sense of proprietary about the idea. Others too, see holistic practice as the domain of nurses.

From our viewpoint health education needs to either take hold of body/mind concepts, as they apply to health promotion, or other professions will take the lead. The American Holistic Nursing Association is a perfect example of a profession that already has a twenty-year head start. (Read & Stoll, 1998, p. 3)

How can it be argued that such boundary guarding behaviour is holistic? Yet Walt Stoll was a founding member of the American Holistic Medical Association.

Seedhouse (2000) articulates the particular problem illustrated by the above reference. Holism, so espoused by nurses, is called on to live harmoniously beside the 'separatism' of professional boundaries.

The problem is surely obvious. According to many nurse theorists, nurses are meant to : "advocate' patients" fundamental needs, to care personally – even to the extent of understanding what life means to the patient – and to practice holistically – spurning false distinctions between symptoms and patient, patient and patient's life, and patients' lives and the social world.

Yet at the same time nursing is to be a separate profession, treading a unique path as it tackles its own special issues. (Seedhouse, 2000, p. 63)

This poses the idea of 'holistic health care' as a challenge to all health professionals who jealously guard their territory and calls into question whether holism and health care as it is presently conceived, are compatible at all

Coleman (1993), a general practitioner, laments in Nursing Times, the increased influence of alternative medicine.

Colleges of this or that therapy sprout up to bolster the pretence (pseudo-scientific foundation for alternative medicine). Indeed, so desperate has the alternative world been to steel (sic) a march on its more powerful adversary that it has hijacked the concept of holism so that by now, the word has lost its meaning. To most people holism has become synonymous with alternative. (Coleman, 1993, p. 50)

These comments are unfairly directed at 'alternative' practitioners. Some mainstream health care disciplines have attempted to 'hijack the concept of holism' too. Where Coleman shows insight is in the realization that holism means everything and nothing. Its meaning has been obscured to the point of uselessness.

And yet...

It is reasonable to expect some connection between ideas of health and holism because of their common denominator 'wholeness'. The words 'health' and 'wholeness' both stem from the same root word.

It is instructive to consider that the word 'health' in English is based on an Anglo Saxon word 'hale' meaning 'whole', that is, to be healthy is to be whole.... Likewise, the English 'holy' is based on the same root as 'whole'. All of this indicates that man (sic) has sensed always that wholeness or integrity is an absolute necessity to make life worth living. Yet over the ages, he has generally lived in fragmentation. Surely the question of why this has come

about requires careful attention and serious consideration. (Bohm, 1980, p. 3)

The remedy: Towards understanding holistic health care

Thorough deliberation about the meanings of these words and the nature of their relationship is a practical way to reduce the confusion and vagueness that is the origin of the problems stated above. This does not mean enforcing a particular, narrow understanding. It means exploring possibilities, spelling out implications and laying bare for debate, those ideas that can be defended as central. The study of holism reveals a certain tension. Wholeness is recognized as a casualty of analysis and yet to grasp its nature all there is, in the academic tradition, are various forms of analysis. This is no small obstacle to this study and ways of overcoming this obstacle will be addressed in depth in chapter two. Can an idea be explored without analysis? Is analysis necessarily fragmentation?

I would ...call attention to the general problem of fragmentation of human consciousness....It is proposed that the widespread and pervasive distinctions between people...which are now preventing mankind from working together for the common good and indeed, even for survival, have one of the key factors of their origin in a kind of thought that treats things as inherently divided, disconnected, and "broken up" into yet smaller constituent parts. Each part is considered to be essentially independent and self-existent. (Bohm, 1980, p. xi)

Despite using the tools of philosophical investigation, this study is not aimed at division and fragmentation in a mechanistic sense. Instead, it must, if clarity is to be achieved, tease out lines of argument and identify tendencies, seek similarities, differences and contradictions in the use of the word holism.

Central to an exploration of holistic health care are understandings of *wholeness* and of *health*.

Understanding 'wholeness'

The word holism was coined by Smuts in 1926. His work Holism and Evolution, is the watershed for ideas about holism. Since the term holism has been drowned in interpretation, retreat to its origins seems appropriate. Careful analysis of how Smuts defined the term holism is fundamental to this study, but ideas about wholeness have long been a recurrent feature of thoughts about reality and how it is to be understood. These will be explored in chapter four.

Strictly speaking, holism as a word did not exist before 1926. This does not stop authors from using the word to describe thoughts about wholeness expressed by earlier thinkers and herein lies some of the confusion about the meaning of the word. Some authors have expressed surprise that holism does not appear in the first edition of the Oxford Dictionary (1899). This surprise stems from their knowledge that since antiquity contemplation of wholeness has preoccupied thinkers (Russell, 1946). One of the earliest references to 'the aggregate of all that exists' survives in a poem by Parmenides, a leading figure in the Eleatic school (450 BC). Variations of ideas of wholeness have been reworked through the ages by various great thinkers including Parmenides, Anaxagoras, Socrates, Plato, Spinoza, Leibniz, and Hegel. Smuts acknowledges these men and declares how his ideas of wholeness have been influenced by, or differ from them.

This study explores these influences and refers to their development in the disciplines that have in the 20th century put them to use, notably biology, philosophy, and social science.

Smuts refers to the great physicists of his time and their contribution to the understanding of reality by the change in concepts of space and time and matter. But Smuts knew nothing of the quantum revolution that followed and which for some has raised fresh possibilities for ideas about wholeness and reality (Briggs & Peat, 2000; Bohm & Peat, 2000). He was developing his ideas

in the early twentieth century, which was still coming to terms with the extraordinary discoveries of the century before. A new vantage point from which to survey these discoveries was provided by the Darwinian revolution. Initially taking a profoundly mechanistic view, the theory of evolution challenged understandings of teleology. Various ideas arose to fill the gap created by the loss of the Creation Story. Among these were Vitalism, Organicism, and a revival of the Aristotelian idea of Entelechy. Debates about evolution focused on the concept of 'organism'.

The prestige of biology caused men whose thinking was influenced by science to apply biological rather than mechanistic categories to the world. Everything was supposed to be evolving, and it was easy to imagine an immanent goal. In spite of Darwin, many men considered that evolution justified a belief in cosmic purpose. The conception of organism came to be thought the key to both science and philosophical explanations of natural laws and the atomistic thinking of the eighteenth century came to be regarded as out of date. This point of view has at last influenced even theoretical physics. In politics it leads naturally to emphasis upon the community as opposed to the individual. (Russell, 1946, p. 698)

This is a fascinating bridge from biology to politics and it is one that the idea of holism has traversed. There is a substantial literature about holism and its influence on politics and social theory: in Germany between the world wars (Prull, 1998), in the United States (Albert, Cagan et al., 1986) and in a work on the topography of Western Marxism (Jay, 1984). Thorough examination of these applications of holism is beyond the scope of this thesis but there is a natural overlapping with ideas fundamental to health for instance, the ancient enigma, - ideas about the nature of individuality and the of the role of the state as an example of a greater whole. In this regard, Karl Popper (1972) was an implacable critic of holism. Along with historicism, he saw holism as a support for totalitarianism. The idea that a community of people is somehow greater than the individuals that make up that community is, according to Popper, misconceived, fundamentally incoherent and socially dangerous. There may well be messages for health care workers and their assertions about holism that bear contemplating.

Arthur Koestler, like Smuts, resolved this apparent denigration of the individual to the group or the group to the state or larger whole. In “Janus. A Summing Up” (Koestler 1978) he formulated his ideas about the nature of wholes, which he renamed holons as each whole is in fact part of a greater whole. He described the tendency of wholes to engage in a struggle between self assertion (Smuts called this individuation) and integration (Smuts called this universalising). There is an inevitable tension in developing wholes between the tendency to integrate with a greater whole and the self assertive tendency towards wholeness. Huxley’s preface to Teilhard de Chardin’s The Phenomenon of Man (1955) described the same struggle in the context of human existence. He summarized Teilhard de Chardin’s insight:

He realised that the appearance of human personality was the culmination of two major evolutionary trends – the trend towards more extreme individuation, and that towards more extensive interrelation and co-operation: persons are individuals who transcend their merely organic individuality in conscious participation. (Teilhard de Chardin, 1955, p. 20)

Exploring what ‘wholeness’ means involves some of the major conundrums of philosophy: the dualism of the enlightenment, what it is to be a whole person, the nature of reality, and whether all things are connected to form a whole.

Smuts attempts to resolve the mind/body distinction by his notion of holism. This is extremely relevant to holism in healthcare and is one of the few holism ‘tenets’ common to most health workers who claim holistic pedigree. In a chapter entitled “Mind as an Organ of Wholes”, Smuts describes Mind as a culminating phase in creative holism, “the eye with which the universe beholds itself and knows itself divine” (Smuts, 1926, p. 229). Just as life is an emergent property of matter, so mind is the emergence of ever more complex wholes. There is in the philosophy of mind a vast literature of deliberations and debates and some of these are explored in order to provide a context to Smuts’ ideas.

Antonio Damasio's work (1999) is recent contribution to the field that clearly has relevance for this study and which supports Koestler's claims about the basic tendencies of personhood. Attempting to remediate what he calls "Descartes' error", Damasio explores the relationship between mind and body.

...(I)t is difficult to think of a more seductive challenge for reflection and investigation. The matter of mind, in general, and of consciousness, in particular, allows humans to exercise, to a vanishing point, the desire for understanding and the appetite for wonderment at their own nature that Aristotle recognised as so distinctly human. What could be more difficult to know than to know how we know?...Consciousness is, in effect, the key to a life examined...our beginner's permit into knowing all about the hunger, the thirst, the sex, the tears, the laughter...the flow of images we call thought, the feelings the words, the stories, the beliefs, the music and the poetry, the happiness and the ecstasy. At its simplest and most basic level, consciousness lets us recognise an irresistible urge to stay alive and develop a concern for the self. At its most complex and elaborate level, consciousness helps us develop a concern for other selves and improve the art of life. (Damasio, 1999, pp. 4, 5)

These ideas need to be explored if an understanding of holistic health care is to be possible.

Understanding health

For the relationship between holism and health to be tested, a clearly articulated theory of health is essential. The Foundations Theory of Health (Seedhouse, 1986/2001) is used in chapter eight of this study to explore this relationship. Justification for this choice is made by illustration of the impossible task of conceiving the notion of 'holistic health care' without a robust theory of health. This study builds on work that has already made a substantial contribution to the clarification of the extent of work for health and will be an extension of a defensible theory on which practice can be based.

Understanding holism: leads from the health care literature

The literature that informs this work is vast and critical review of a sampling of it will be integrated throughout the project. However, a summary of the significant work in understanding holism and in the use of the concept in health care is useful in setting the context for the study.

Holism is an adjective applied when the totality of a phenomenon is expressed, for example, holistic economic programmes, holistic management, holistic approaches to problem solving. In a general sense holistic is taken to mean,

- thorough as in having considered all the options,
- as having a whole/global approach (whatever that can mean),
- as being complete as in full complement,
- as having included 'alternative' or complementary ideas,
- as acknowledging connectedness.

A tenuous thread can be seen between these ideas, an appeal to the notion of 'all that is' or wholeness. A vague but comfortable feeling of sufficiency – no one can ask for more than 'wholeness'. But a much richer notion of wholeness must lie behind holism if it to become a clear and genuinely useful idea. Without a shared understanding of holism that reveals its depths as an idea, we have no more than slogan value. This study explores the implications of these understandings of holism, noting their similarities and differences in a search for a way of embracing wholeness that is coherent and useful in the pursuit of health.

Concluding remarks

The notion of wholeness seems to be a pervading influence on understandings of what it means to be human and on understandings of the nature of reality around us. Our perception of our place within this reality and relationship with it has implications for how we act. How we attribute meaning and how we make sense of the world around us affects our very being. For the last two hundred years the fragmentation of reality has been championed in the pursuit of knowledge, in the name of science. Health care has been both benefactor and victim of this fragmentation. If we understand ourselves to be separate, self contained individuals living in a compartmentalised world, our actions will reflect this atomistic conception. There may be some fruitful consequence to this enterprise but many people share the misgivings expressed by Bohm.

Indeed, the attempt to live according to the notion that the fragments are really separate is, in essence, what has led to the growing series of extremely urgent crises that is confronting us today. Thus, as is now well known, this way of life has brought about pollution, destruction of the balance of nature, over-population, world-wide economic and political disorder and the creation of an overall environment that is neither physically nor mentally healthy for most of the people who have to live in it. (Bohm, 1980, p. 2)

Martin Buber, a philosopher of the twentieth century, through his exploration of what he calls 'the real questions', points us to Feuerbach's 1843 observations of what it means to be human.

The single man (sic) for himself possess the essence of man neither in himself as a moral being nor in himself as a thinking being. The essence of man is contained only in the community and unity of man with man: it is a unity however, which rests only on the reality of the distinction between I and Thou. (quoted in Geering, 1983, p. 15)

'Holism in health care' has been pitted against individualism, dualism, and reductionism; it has been acclaimed as an emancipatory philosophy, an antidote to specialization and biomedical hegemony. It is commonly described

with reference to what it is not. It does serve a purpose just as it is. It is a rallying cry for the disaffected, a positive affirmation of humanity's connectedness with the universal fabric, a promise of hope if there is always another healing option to try.

However, ironically the notion of holistic health care has fuelled fragmentation of a kind. It has been cited in professional boundary issues, it has been the butt of accusations of pseudo science, idiosyncratic therapies and conflicting efficacy claims. It is clearly an enormous task to tap all that inspires this notion and to order it coherently. However, some attempt must be made if 'holistic' is to be an adjective used in defining an approach to health care. The aims of this thesis are:

- 1 To explore the use of the word 'holistic' in health care.

- 2 To develop a defensible notion of 'holistic health care'.

This will be useful even if it serves no more purpose than to be a whipping boy. At least the anomalies, the inconsistencies, the vagueness and the complexities inherent in the task will be unmasked.

Chapter One

Holistic health care: A dubious notion

Such is the Sickness of many a Good Thing.

Was he then Adam of the Burning Way?

hid away in the heat like wrath

concealed in Love's face,

or the seed, Eris in Eros,

key and lock

of what I was? I could not speak

the releasing

word. For into a dark

matter he came

and askt me to say what

I could not say. "I .."

From: Such is the sickness of many a good thing. Robert Duncan.

(in The Norton Anthology of Poetry. Eastman, 1970, p. 1127)

More than a slogan?

An argument has been outlined in the introduction defending the assertion that 'holistic care' is currently a meaningless phrase.

The next phase of the argument maintains that more must be expected of the notion 'holistic health care'. For this expectation to be realized, questions must be asked.

- What are the core tenets of holism?
- How can the choice of these be defended?
- Which are commensurate with health care?
- What in fact is health care?

These appear to be very elementary questions but they are not easy to answer. They may even sound trivial. After all, holistic health care has been a therapeutic imperative for at least a decade and some health care professionals claim to have been providing it in various forms since the early twentieth century (Lawrence & Weisz, 1998; Donnelly, 2003). This has only been possible because its diverse meanings have been kept sufficiently vague or malleable that they can be grist to the mill of whichever health care practitioner happens to be claiming to offer it.

This state of affairs has plagued groups such as the American Holistic Medical Association.

As part of its evolution the AHMA developed its core curriculum areas: knowledge felt to represent holistic medicine that was not covered in medical school. Nutrition, self-regulation, exercise, homeopathy and chelation therapy, as well as some others, were included. Every year practitioners of modalities such as chiropractic and herbology would complain that their techniques were not represented in the core curriculum. Every year we found ourselves in a defensive position. How could we call ourselves “holistic” if we weren’t including lectures on massage therapy, for example, at our annual meeting? There were so many modalities, so many advocates of different healing systems. (Altenberg, 1992, p. 12)

There is an implication that holism has to do with ‘including everything’ that is ‘non-medical’. Although the problem of defining holism was a ‘no limits’ problem, Altenberg’s (1992) remedy was to declare holism *more than* a group of modalities that offer alternative to drugs or surgery but to be,

...a way of being in the world – an approach to the patient that acknowledges that she or he is more than a collection of organs and tissues that work mechanically like a machine. Holism acknowledges that each of us is greater than the sum of our individual parts – each of us is a hologram in which each part also reflects the whole. (ibid. p. 12)

This approach is to attempt to identify the common denominator in approaches to holistic health care and is a more sensible way of exploring meaning than listing treatment modalities. However it does not go far enough. How do we understand this ‘being in the world’? It does not tell us anything about ‘the greater’ that is each of us nor about ‘whole’ we reflect.

What is required is a detailed examination of the characteristics of health care that is claimed to be holistic and to critically assess which of these can be defended as practically meaningful. From the health care literature it is inferred that the *possible* hallmarks of ‘holistic’ care are:

1. Alternative/complementary techniques/practices/non medical intervention/care

2. Integrated/biopsychosocial approaches which include.

- Overcoming body mind dualism
- A social context
- A cultural dimension including traditional health care methods
- A spiritual dimension
- Environmental issues

3. An 'ecological perspective'

Ways of achieving holistic health care provision are purported to be:

1. Interdisciplinary (team) work/collaboration
2. Comprehensive(thorough)/contextual approaches
3. A systems approach
4. Multiskilling, (pick and mix.)
5. An emphasis on 'patient participation' and shared responsibility
6. A requirement for health care providers to be engaged in their own 'healing'

There are factions that champion single hallmarks or various clusters of them as core holistic methods. Some are claimed to be standalone systems in opposition to biomedical science, proclaiming the fundamentally different premises they accept, others are revisions and extensions to 'conventional' health care aimed at mitigating the effects of atomistic clinical thinking. Examination of the way these hallmarks are employed in the service of holistic health care will provide a more vivid understanding of the *problem of meaning* referred to in the introduction. The questions raised in this chapter will constitute the framework for the subsequent chapters.

The Hallmarks

1) *Alternative/complementary techniques*

What is an alternative or complementary therapy? What is it about these therapies that justifies the descriptive 'holistic'? The Eisenberg (1993) study that first documented the substantial rise in the use of unconventional medicine in the U.S., defined alternative therapies as, "interventions neither taught widely in medical schools nor generally available in hospitals" (Eisenberg, Kessler et al., 1993). Such an expansive view could conceivably be seen to include almost any intervention. Indoctrination, even torture, certainly, piracy and tax collecting; anything considered a non-medical intervention but conducive to health by somebody at some time, could be labelled alternative/ complementary health care.²

² *In Britain, the term 'alternative medicine' predominated in popular usage up to the end of the 1980's, implying association with 'alternative lifestyles'. As greater acceptance by doctors...became apparent the term 'complementary' came to be more wide spread, signifying the possibility of a more co-operative relationship with biomedicine. (Cant and Sharma, 1999, p. 9)*

It appears to have escaped notice that 'complementary' and 'alternative' are mutually exclusive categories. Complementary means helping to constitute a whole, to supply a lack, whereas alternative means something that may or must be, instead of something else, a choice between two things, one of the things to be chosen.

Notwithstanding these serious limitations, the techniques that muster under this CAM (complementary and alternative medicine) banner do so primarily by virtue of their challenge to the hegemony of modern western clinical medicine. They are in fact a heterogeneous lot. Some authors have attempted to clarify the meaning of this label by listing the types of therapy used by practitioners of 'alternative and complementary' medicine. For example, in 1992 alternative practice was classified into seven categories.

1) mind-body interventions: psychotherapy, support groups, meditation, imagery, hypnosis, biofeedback, yoga, dance therapy, music, art therapy, and prayer and mental healing.

2) bioelectromagnetics application in medicine; application of non-ionising electromagnetic fields for bone repair, nerve stimulation, wound healing, treatment of osteoarthritis, electroacupuncture, tissue regeneration, immune system stimulation, and neuroendocrine modulations.

3) alternative systems of medical practice: home healthcare, traditional oriental medicine, acupuncture, Ayurveda, homeopathic medicine, anthroposophically extended medicine, naturopathic medicine environmental medicine, Native American medicine, Latin American community based practices, and other community based healing systems.

4) manual healing methods: osteopathic medicine, chiropractic, massage therapy and biofield therapeutics.

5) pharmacological and biological treatments: antineoplastins, cartilage products, EDTA chelation therapy, immunoaugmentative therapy and other therapies.

6) herbal medicine: European phytomedicine, Chinese herbal remedies, Ayurvedic herbal medicines, Native American herbal medicine and others.

7) diet and nutrition: vitamins and nutritional supplements orthomolecular medicine...dietary management of food allergies and the diets of other cultures.(Schneiderman, 2000, pp. 83, 84)

Schneiderman is quoting the 1992 report prepared by a group of leading U.S. practitioners of alternative medicine prepared for the National Institute of Health. He adds his lament about the subsequent addition by the World Health Organization of applied kinesiology, Kirilian photography, impact therapy, reflexology, Rolfing, cymatics, psions, radiesthesia, radionics, orgone therapy, pyramid therapy, Dianetics, and flower therapy. There continue to be claims made for new therapies or rediscovered traditional therapies in journals related to holistic health care: it is not possible to make a collectively exhaustive list. Nor would this be a useful strategy in clarification of the meaning of holistic health care because the modalities are so diverse.

Cant and Shama (1999) attempt to categorize those with similarities and list five categories of alternative medicine according to their time and region of origin. This gives some order to the array but offers no insight into the threads they have in common. There are other attempts at forming categories, but each is too arbitrary to be useful.³

It is clear that these lists are no more than catalogues. 'Alternative and complementary medicines' is at best an open-ended catalogue and has a tenuous claim to being a single category at all.

³ It is important to make clear that this thesis is not about 'efficacy of treatment'. Claims for or against medical or alternative therapies are quoted to illustrate the distinctions between the approaches to the understanding of holistic care, whatever they may be, and to highlight the existence or absence of criteria for definition of holistic health care.

There is no common factor other than 'non-medical' and that is not sufficient to provide any understanding of holistic health care.

These futile attempts at categorizing are done in order to defend what can be accepted as legitimate health care practice both for funding purposes and to 'protect the public'. Of course they are useless in this regard. They vary according to the author's opinion about efficacy, safety, and ethics, of alternative methods and whether they are writing in support of, or opposition to, medical hegemony.

To avoid confusion, "alternative" methods should be classified as genuine, experimental or questionable. Genuine alternatives are comparable methods that have met science-based criteria for safety and effectiveness. Experimental alternatives are unproven but have a plausible rationale and are undergoing responsible investigation. Questionable alternatives are groundless and lack a scientific plausible rationale. (Barrett, 1998, p. 4)

Barrett gives homeopathy as an example of the last category and goes on to decry the refusal or inability of 'alternative' practitioners to accept the burden of proof via recognized science. He attributes their anecdotal success to spontaneous remission or the placebo effect. Treatments designed to 'stimulate the body's ability to heal itself' are ridiculed, as are those that claim to direct and release energy flows in the body. Centuries of traditional Chinese and Indian understanding of treatment are dismissed as not conforming to the material, testable laws of cause and effect. He is equally scathing about more recent non-medical therapies, for example chelation, chiropractic, or cancer therapies. He claims however that medical 'facts' are derived from scrupulous research and review leading to shared, scientifically accurate information, an eminently debatable statement (Smith, 1991). According to Barrett, an 'alternative' approach to health has one or more of the following characteristics.

Its rationale or underlying theory has no scientific basis;

It has not been demonstrated safe and/or effective by well designed studies;

It is deceptively promoted; or

Its practitioners are not qualified to make appropriate diagnoses. (ibid. p. 8)

While Barrett does not speak for all biomedical practitioners, this hostile treatment of alternative or complementary medicine demonstrates one distinction between these groups: those that consider they have a basis in science and value that basis beyond all other criteria, and those for whom this basis is not important. However, there are health professionals who choose to integrate these approaches (Gordon, 1990; Altenberg, 1992). Nurses in particular have embraced the CAM modalities (Au & Hiew, 2002; Lewis, Veda et al., 2003; Wright, 2003). Are these very different understandings of health care compatible? Can techniques with opposing philosophical bases be simply added together? Is this marriage of science and non-science a hallmark of holistic health care?

A factor aimed at blurring this science/non science distinction is the demand for research to determine the efficacy of alternative and complementary methods.

In 2000, the growing popularity of complementary and alternative therapies resulted in the formation of the White House Commission on Complementary and Alternative Medicine. The Commission's charge is to recommend how to maximise the potential benefits of complementary and alternative therapies to all. ... Their major recommendations include the need for research to determine the efficacy of holistic therapies used alone or in combination with traditional therapies. (Donnelly, 2003, p. 119)

An example of the call to research is the publication of Focus on Alternative and Complementary Therapies, a journal established to present evidence on the effectiveness of CAM.

The editor-in-chief, Professor Edzard Ernst, of the Department of Complementary Medicine at the University of Exeter, is regarded as one of the world's leading experts in CAM research. The question to ask is whether subjecting alternative therapies to the rigours of scientific scrutiny detracts from them the qualities that may be said to be holistic? For example: a sample of the article titles for a current issue (March, 2003) would suggest this is a possibility;

Herbal Medicine.

No benefit of Echinacea in the treatment of the common cold?

Herbal combinations useful in the treatment of acute upper respiratory tract infections.

Effective herbal prophylaxis for menstrual migraine?

No convincing evidence for the use of an Ayurvedic herbal formula in the treatment of alcoholic liver disease.

Kava and the potential for drug interaction.

Potential for herbal remedy in alleviating PMS symptoms.

<http://www.ex.ac.uk/FACT/CONT/comingup.html>

Practitioners of CAM protest that the 'gold standard' of the randomised double-blind clinical trial is singularly inappropriate for examining their methods. It requires:

(T)he standardization of... the precise herbal mixture (lost: the entire theoretical and practical basis of Oriental medicine), ...use under double-blind conditions (lost: the therapist), with a restricted group of ... cases (lost: the applicability of Oriental medicine for all kinds of diseases, conditions and individuals) and ...isolation of the single active ingredient from the mixture so as to test it (lost: much of the effectiveness and safety).

There will be left a single powerful and toxic new Western drug 'discovery', probably merely symptomatic, with a very narrow field of use. (Fulder, 1996, p. 23)

Is this an example of killing the goose that laid the golden egg?

Useful information and specific techniques might be added to the medical repertoire, but does this piecemeal selection of alternative methods constitute 'holistic' health care?

Consider this example of the therapeutic responses delivered as a holistic health care plan (Gordon, 1990).

Michael's mother consulted Dr Gordon about her 13 year old son's asthma which was getting worse despite his using an inhaler. Dr Gordon suggested to the mother that Michael ring if he wanted an appointment. When mother and son arrived for the appointment, Dr Gordon asked the mother to leave the room. Within minutes the small, shy, sandy haired boy became more animated and explained how his asthma had worsened after starting at a new school that summer. He described how he felt he was falling further and further behind in Maths and English. Questions about his diet revealed that Michael ate junk food and drank fizzy drinks to make himself feel better. He had had lots of colds and many sinus infections for which antibiotics were prescribed. He complained of a metallic taste in his mouth.

The 'holistic' treatment offered:

"When I examined Michael, I saw a thin anxious boy with ribs pushed against his skin. He had the barrel like chest characteristic of those who have to use all their muscles to force the air out of their lungs. I could hear the wheeze in his chest and when I touched his back, I could feel that some of the vertebrae in the middle of his spine were turned to one side. I did some adjustments on his spine and put the vertebrae back where they belonged and then took his pulse. The lung pulse was low and so too was the spleen pulse.

In Chinese medicine the spleen includes the pancreas, which itself also has several functions including the metabolism of sugar. The spleen also regulates the immune system and “gives energy” to the lungs. So it was not surprising to me that Michael was craving sweets and having many infections and that both these were common in people with asthma. In the Chinese system sugar craving and a depleted immune system are connected with low spleen energy, and low spleen energy produces low lung function. After the spinal adjustment Michael seemed to stand a bit straighter, and after his acupuncture treatment his breathing was easier and he seemed to have more energy. The metal taste, he said, was gone. When I spoke with Michael about his illness, I told him that the chronic condition had become a crisis because of his worries about school and the new school year. I explained that the antibiotics that were used to treat his colds and sinus problems had not really cured the basic weakness in his lungs or his sinuses and may have in the long run, made him vulnerable to other more resistant bacteria. I explained that in Chinese Medicine, weak lungs were associated with depression and anxiety. Being at a new school had increased his anxiety and decreased his energy. Because he was bright but having trouble in school, I also suggested, first to him, and later to him and his mother that he tested for learning disabilities.

I spoke with Michael and his mother about his diet and pointed out that the sugar and caffeine in soft drinks would deplete his pancreas and immune system and make him more vulnerable to fatigue and infection. I recommended that he stop drinking them. I also suggested that he remove wheat and milk, common allergy producers, from his diet and also junk food (which is filled with sugar), salt and food additives.

When it became clear that this would mean that Michael would have to bring his own lunch to school, his mother became anxious. Then Michael began to get agitated. I pointed this out to them. Michael said that he too had noticed that whenever his mother got “up tight” he felt it in his own body.

“Forget about her anxiety,” I said, and Michael laughed for the first time.

I asked Michael if he would be willing to bring his own lunch to school and he said he would. He was “very tired” of being sick and if changing his diet would help, he could do it.

“One more thing,” I added. “Every morning when you get up I want you to stand in front of a mirror with your shirt off and pound your chest and shout like Tarzan for fifteen minutes. “That,” I explained, “will help stimulate your lungs.” Michael laughed at me as if I were crazy, but said he would try. (ibid. p. 82)

This is a particular assessment and treatment plan, and thoughtful – the question to ask is what makes it ‘holistic’?

- Is it a different way of seeing “the problem”?
- Is it a different way of seeing “the person”?
- Does it involve a different way of seeing health?
- Is it the inclusion of environmental, familial, social, psychological, and life style factors?
- Is it the use of Traditional Chinese Medicine? (or any traditional medicine for that matter?)

Dr Gordon addresses the boy in a respectful and understanding way. The symptoms are addressed by thorough observation, explanation, reassurance, education, dietary advice, and attention to the young boy’s school performance, affect and relationships at school and in the family, surely a part of any good practice. However, it is immediately clear that Dr Gordon’s therapeutic advice is based on other than orthodox western understandings of physiology; spinal manipulation, the use of Chinese medical principles and practice such as acupuncture. Other than having skills that some orthodox general practitioners do not have, this doctor also has beliefs that orthodox practitioners may not share. Is it these beliefs that make the treatment offered holistic? If this is the case can an orthodox medical practitioner ever offer holistic health care? It is not possible to answer these questions yet.

Some progress toward distilling the essence of alternative and complementary therapies and what makes them holistic is made by Fulder (1996).

He attempts to find the common ground by listing the characteristics of approaches to treatment termed 'complementary medicine'. In his opinion they all attempt to:

- recruit the self-healing capacities of the body and amplify natural recuperative processes.
- augment the energy on which health depends.
- place emphasis on the restoration of health rather than removal of sickness.

This is achieved by:

- working with, not against the symptoms: the understanding being that the symptoms are communications of underlying factors which are the real objects of health care.
- recognizing the uniqueness of each person: the understanding being that constitutional difference makes each person's symptoms arise for different reasons.
- seeing human beings as integrated wholes; the understanding being that of mind-body and spiritual unity
- not fixing the state of illness at which treatment must begin or wellness at which treatment must end: the understanding being that these are decided contextually.

- keeping therapy minimally interventionist: the understanding being that low doses, low concentrations and mild remedies are most effective.
- engaging in a partnership between healer and patient: the understanding being that self help is possible and desirable.
- acknowledging the relationship between all living creatures and their environment: the understanding being that health is to do with energy rather than material phenomena.

While Fulder's lists make substantially more progress than the Schneiderman catalogue quoted above, the terms used are extremely vague and there is no real correspondence between what complementary medicine attempts to do and how it achieves this. What are 'the self healing capacities of the body', 'the natural recuperative processes' (surely the same thing), what is 'the energy on which health depends', how does one 'work with and not against symptoms' and what are 'the real objects of health care'? These terms are not self evident and clearly some theory or explanation is required. What is apparent from this list is the skeleton of an implicit but particular understanding of health. An understanding that includes an appreciation of the importance of each person's resources, their vitality, their connectedness with the environment, the unity of their being, the capacity they bring to every situation. These ideas require further clarification to be useful but at least constitute the basis for an argument that it is not the treatment modality that determines whether health care is holistic or not. It is not possible to claim to be providing holistic health care simply because some techniques from alternative and complementary methods have been tacked onto conventional care. (This is quite contrary to the claims made in screeds of health care literature).

This study will explore the proposition that holistic health care is a far more substantial notion: that 'holistic' is a description of a particular view of human

potential and a particular view of health. Is this the crux of health care? This will be explored in chapter seven along with other possibilities gleaned from this chapter.

2) Integrated/biopsychosocial approaches

Non-biomedical therapies have been called holistic and claim to treat ‘the whole person’ but developments originating within the medical world have claimed this laurel too, describing their version of ‘the whole person’ – the biopsychosocial person. An understanding of the inter relationship between mind and body was regained in biomedicine by the work of Walter Cannon on the psychophysiology of fear. He was influenced by William James, Herbert Spenser and Charles Darwin and his experimental work in endocrinology culminated in his 1915 seminal publication Bodily Changes in Pain, Hunger, Fear and Rage. From this interest in the physiological changes wrought by the autonomic nervous system, he discovered the process of homeostatic control (1932) for which he is remembered and which has become a metaphor for systems in general (Young, 1998). The work of psychoanalyst Franz Alexander and psychiatrist Flanders Dunbar on the relationship between emotional life and bodily processes led to the formation of the American Psychosomatic Society and publication of the *Journal of Psychosomatic Medicine* in 1939 (Sarafino, 1990). The biopsychosocial approach to clinical practice formulated by George Engel has been a watershed for ‘integrated practice’ since the late seventies. Health psychology has become a specific discipline expounding this approach. There are many clinical fields that claim to embrace the biopsychosocial model. As an example of holism there are two significant problems with it.

Firstly, although understanding the ‘psychosomatic’ relationship was a significant development in the understanding of health, inevitably it was not enough to encompass all the contributing factors in health. Health care practitioners have added firstly social and more recently spiritual, cultural and environmental dimensions to their ‘whole person approach’.

This is a reiteration of the problem of adding alternative therapies. Has the limit to 'wholeness' been reached? A recent paper by Khroutski of the Institute of Medical Education of Novgorod State University proposes a "cosmobiological paradigm" to encompass the wholeness that is the human experience (Khroutski, 2001).

The second problem is that these dimensions of what it is to be a person are added on, listed, aggregated, taken into account. This in no way escapes from the atomistic thinking of the clinical approach. It appears that western scientific method so pervades health care thinking that it subordinates all forms of understanding in this way. The critique of scientism that streaks the literature is perennially undermined by the power of its object. Aspiring to 'wholeness' is reduced to adding dimensions as one would twenty cent pieces to make a dollar.

Health care has not always been so piecemeal nor ideas of personhood so fragmented. Nostalgia for a lost 'wholeness' punctuates the literature. For example, Bloch (2001) describes a treatment regime, offered by the medieval theologian, philosopher and physician, Moses Ben Maimon, (also known by the Greek version of his name Maimonides) for one of his young male patients presenting with symptoms of melancholia, anorexia, vomiting, constipation and indigestion. Bloch claims that the plan covered biological, psychological and social dimensions of treatment and was thus a precursor to the biopsychosocial model. However, Maimon's therapeutic recommendations were clearly more than that:

Maimon perceived personhood to be a *composite process*. Harmony between the various activities of the body, which also included imagination and thought, was seen to be achieved by a unifying force which strove to keep this equilibrium. He recognized the changes that emotional experiences cause in physical function and the part played by stress in vulnerability to illness.

He acknowledged both the role of natural healing and the physician's skill. He contended that a disease has different causes, and manifests differently in each person, so the focus of treatment should be the person not the pathology. He advised a cheerful ambience, moderation in temperament and avoidance of extremes of emotion and advised that contact with people was best avoided when 'one is overpowered by imagination'. He included a recommendation for a sparing diet of good quality food with rough grained wheat, avoidance of fat, and moderate wine consumption, as well as the importance of fresh air, exercise and cleanliness in his prescription. Mild remedies were preferred. Humility was considered an attribute in a physician, as was caution. The physician was exhorted to constant awareness of the complexity of the art of application and of the possibilities for error. The role of a divine presence to pervade all human experience was ceded.

This physician recognized the interrelation of mind and body, the importance of balance and moderation, the role of stress and individual differences, the role of good diet and exercise and the role of the physician's skill and demeanour. He declares the importance of divine presence. Is this a blueprint for holistic health care?

Maimon may have been extremely thorough and have had something of the understanding of personhood and health referred to by Fulder above, but the issue of limits to health work is a significant problem. Maimonides' injunctions amount to 'how best to live', much as health promotion campaigns do today. Seedhouse (1997) reveals the difficulties associated with 'good life health promotion'. There is no objective way to establish the ingredients of 'the best way to live' and health care workers are not in a position to assert that they are able to do this. 'Health care' is not the same as 'life care'. So Maimon, while his treatment plan was comprehensive, posited no domain of a persons' life

which stands beyond the jurisdiction of health care providers. This is a characteristic of much of the holistic health care literature.

The holistic approach to medicine includes humanistic medicine, which emphasises the relationship between physicians and patients, and the psychological and spiritual development of both patient and physician: psychosomatic medicine, which is concerned with the interdependence and mutual influence of psychological and physical factors; and behavioural medicine, which stresses the psychological and social causes and effects of illness. (Gordon, 1990, p. 4)

To be 'holistic', it appears that treatment must involve every aspect of a person's life. A parallel is thus evident with the problem of the 'medicalization of life' so decried by Illich, Foucault and others.

The biopsychosocial model is offered, not from the same ideological perspective but in the same meliorating spirit as the alternative/complementary approach. The narrow confines of symptom based ideas of health are expanded by considering a greater variety of contributing factors or a greater variety of treatment modalities, perhaps even an infinite variety. What in particular, is the holism in that? It remains impossible to say but there is undeniably a theme of the pursuit of wholeness.

Mind-body links.

Understanding the relationship between mind and body is one of the great human conundrums. However, in relation to health care, much of the intricacy of what Schopenhauer called 'this great world knot' has been overlooked. The materialism of the nineteenth century gave the body first place and relegated the psyche to the rank of something secondary and derived. This was paralleled by the slide of concepts of health from those of vitality, or fitness to accomplish daily tasks, to the conception of health as the absence of symptoms. Health

care became treatment of symptoms. Health care workers were left with a very pedestrian choice: treat physical symptoms as the dominant problem, with cursory concession to emotion and other factors or treat 'mental' problems as the primary problem but as epiphenomena of physical problems, some end product of the physiology of the glands.

A consequence of the dominance of this model is that most clinicians have learned to see illness as either "organic" (having a manifest or measurable physical disturbance, with therefore no room for subjective aspects) or "functional" (physical symptoms accompanied by less obvious tissue abnormalities), in which some role for subjectivity might be conceded, if not pursued. Put slightly differently, the common dualistic medical posture allows for real organic diseases and generally less respectable illnesses originating in the mind. (Broom, 2000, p. 161)

Broom expresses the opinion that even clinicians that afford a psychological role to causation in illness do so from an inherently dualistic perspective. Human thinking has become trapped by dualism. It has not always been so.

The ancients could still see body and psyche together, as an undivided unity, because they were closer to that primitive world where no moral rift yet ran through the personality ... (i)t was on this archaic level that pre-philosophical man (sic) lived and experienced the world. He was entirely in the grip of his emotions. All passions that made his blood boil and his heart pound, that accelerated his breathing or took his breathe away, that "turned his bowels to water"- all this was a manifestation of the "soul". Therefore he localized the soul in the region of the diaphragm (in Greek phren, which also means mind) and the heart. It was only with the first philosophers that the seat of reason began to be assigned to the head. (Jung, in Storr, 1983, p. 135).

The dualism of the orthodox medical approach, and of techno-science in general, is a conceptual scheme that has been vigorously attacked by all groups claiming holistic pedigree. The focus of these attacks is diffuse. Some are levelled at the reductionism inherent in the view that there is no more to mind than brain function and others at the physicalism of this view. Some emphasize the spiritual dimension of personhood to a point approaching idealism. A brief discussion on the origin and nature of dualism follows in

chapter two, but at present it is the claims of health care workers to transcend the separation of mind and body that are of interest. What form does this transcendence take?

Common themes in holistic health care literature are:

- A naïve interpretation of 'mind' as meaning anything from consciousness to the spiritual construct, soul (Dossey, 1989).
- A vague appeal to monism that is neither easy to communicate nor practically useful. "In a (w)holistic approach to healing, we celebrate not the body beautiful, but the body sacramental. Process is the essence of this model and as such, it is the antithesis of dualism" (Finch, cited in Schuster, 1997).
- A substitution for one kind of dualism for another. For example, mind body healing is associated with caring and caring is distinguished from curing which is focused on chemical reactions and micro organisms (Kaiser, 1994).
- Lists of 'mind-body' interventions, notably relaxation techniques, cognitive restructuring, problem solving, nutrition and exercise and various behavioural treatments are drawn with little attention to what common thread could bind them (Nakao, Myers et al., 2001; Rybarczyk, de Marco et al., 2001).

Proponents of holistic health care do not trouble themselves excessively with the implications of their assertions. This is particularly evident in the body/mind arena. Under obligation of consistency, all health care work is body/mind work if the distinction between body and mind is dissolved.

There is a proselytising tone to the call to body/mind methods.

The 1990s are already being viewed as the decade of behavioural medicine and the bodymind connection. In an introduction to the 9th International Conference "Health, Immunity and Disease"...it was stated that, "Today in America and throughout the world we are witnessing a cultural transformation in health care. This change is emerging at a time when mind/body therapies and approaches to healing are clearly taking shape. As practitioners, we have achieved a new level of credibility among the conventional medical community by demonstrating behavioural medicine as a viable healing methodology that can not only control costs, but increase quality of life". (Read & Stoll, 1998, p. 6)

Whatever assertion is made about the relation between body and mind, it can be no more than a working hypothesis. Despite the developments in psychoneuroimmunology and neuroscience in general, it must be conceded that there remains an unexplained relationship between physical and psychological phenomena. The complexity of this relationship is no doubt the reason for its radically insoluble character, but it remains a frontier of exploration at the most specialized level (Elderman & Tononi, 2000).

The response of modernity to this mystery was separation. The response from holists is characterized by a call for unity. However, the nature of this unity is chimerical and the call for it naïve, considering the structurally divided house of western health care.

Consider this example:

Leigh has had a life-long struggle with weight gain. At 48 years of age she is 130 cm tall and weighs 137 kgs. She has increasingly been feeling very depressed and attributes this to the deaths in short succession of her elderly grandmother, her parents and her husband's mother. Leigh has a part-time job as an office clerk but has been very involved in supervising the care of these people. She was particularly close to her father, who had suffered from

Alzheimer's and her grandmother who had died of bowel cancer.

Relationship difficulties with her mother since adolescence did not prevent her from providing all the care and attention her mother required in the last stages of lung cancer. Leigh is the strong person in her marriage and is a very diligent and caring mother of two girls. She has been treated for high blood pressure and 'water retention' for some years with encouragement from her doctor that she lose weight. Like many over-weight people Leigh has lost many kilograms, only to regain them and others in addition. She has books and videos on dieting, on exercising and on motivation. She has belonged at some time to every weight loss program in the city. Lately the complications of obesity had been significantly affecting what she was able to do but she has compensated for this in ingenious ways and seemed to be coping well. Finally, however, she consults her doctor about her extremely swollen feet. She also mentions her low energy levels and her worsening shortness of breath. After examination the doctor tells her that she has pulmonary oedema and congestive heart failure. She is in danger of dying unless she loses weight. The doctor acknowledges the time Leigh has spent caring for others and admonishes her for not spending time on herself. He tells her that exercise would be dangerous unless undertaken with supervision and suggests she get a personal trainer at the local gym. He makes a follow up appointment.

There is no denying that the obstacles posed by obesity stemmed from and in turn affected Leigh's mind/body and yet her reality is carved up into compartments. What is offered is physical medicine as far as that will go, and then, when this has failed, exhortation to modify life style. In order to get an opportunity to explore the "somatic metaphor" (Broom, 2002) that her obesity represents, Leigh would have to find another kind of doctor. Of course she would still have to see the general practitioner for her physical meds. What chance is there that she will experience the mind/body connections, the unity of personhood that is the holist's call?

There are health practitioners who strive to establish workable models that

over-come mind/body dualism and to develop techniques and theories that address the human experience as the intricately matted phenomenon that it is (Bell, 1989; McDermot & O'Connor, 2001; Broom, 2002). However, these authors do not use the word holism nor claim to embrace holistic tenets.

Social context.

The context of community and its effects on health seem impossible to ignore but much of specialist orthodox medical practice achieves this. In rehabilitation and treatment plans there is commonly attention paid to the social functioning of the patient and the importance of maintaining or re-establishing community links, but the role of society's values in the health arena are commonly ignored (except perhaps for specific populations such as adolescents). There is a vast literature protesting this position and some of it is penned by those advocating holistic health care.

Nineteenth century nursing, exemplified by Nightingale, promoted holistic principles... in that it challenged nurses to identify the influences of the patient's social setting, and focused attention on prevention and "natural" responses to disease. The concern was for the whole patient – mind, body and spirit – and higher total environment. (Owen & Holmes, 1985, p. 1689)

However, while nurses may embrace this rhetoric there is an ambivalence in the community's support for social reform. Prevention is a lauded aim but the commitment of adequate resources is a perennial problem. Selye's work on stress, the influence of systems theory on family therapy, and the 'healthy behaviour' movement of health promotion, are examples of the recognition of the social context of health but none of these address the obstacles to health posed by the social fabric itself. Rather, social factors are added on to clinical information. If holistic health care is the consideration of social factors, which factors are these, the values inherent in the society or the needs of an individual within that society?

Consider this example:

Greg is 55 years old. He has diabetes that has been poorly controlled and has started developing kidney problems. The nephrologist is predicting end-stage renal failure. Greg has had chronic infected wounds on both legs and has had several toes on his right foot amputated: he is anticipating the amputation of his left leg at the knee. He has heard that the only treatment for his wounds is a particular wound care product – growth factor. The wound care clinic is reluctant to provide it as the cost is high and, in their opinion, no better than other products. Greg feels he is being inadequately and that his fate is to have his body whittled away by surgery. His mood has fallen as the frustration with his deteriorating condition increases. Greg is facing financial problems due to soured investments. His wife is managing a full-time job and helping to take care of her elderly mother. He has a long-time friend who visits him regularly.

Should the holistic health care worker help Greg resolve his financial difficulties, persuade the wound clinic to give him the product he wants, talk to the nephrologist about hope and optimism, organize treatment for depression, introduce meditation and guided imagery, concentrate on good wound care management using alternative methods, help Greg to see that the control of his diabetes is a partnership and that he has some responsibilities, introduce Greg to a support group of diabetics, get his extended family to help his wife with the care of her mother, or suggest herbal remedies for stress, lobby the drug company for cheaper growth factor or the government to subsidise it, encourage the friend to take a more active role in ensuring Greg carries out his self-care routine, raise awareness of diabetes in the community, all of the above and perhaps more? The literature does not provide guidelines for deciding the limits to holistic health care for Greg. The “Patterson approach” (Patterson, 1998) described in the introduction is the only recourse: whatever therapies or interventions that the health worker is capable of administering or procuring from other holistic health care workers and directed to as much of Greg’s life as they see fit.

This is an undesirably opportunistic basis for health care decisions. Both provider and procurer of holistic health care are operating in a theoretical vacuum.

Culture as personhood.

What if Greg is Maori? Would holistic health care for him include some of or all of the above with some 'culturally safe practices' included, or a completely different protocol based on Maori understandings of health? Does 'holistic' mean western and indigenous health care in the most beneficial combination, or does it mean considering a person's culture as definitive of personhood and then adding on whatever western intervention may be needed, or does it mean something else entirely?

Evidently New Zealand health providers have not discovered or have not implemented the appropriate services as difference in the health of Maori and the rest of the population continues to be substantial. (The Population Health Manifesto. Public Health Association)

Perhaps indigenous understandings of health are exemplars of the notion holistic health.

Maori concepts of health are holistic. They span the dimensions of physical, mental, spiritual and extended family, also incorporating the importance of land, language and culture. Maori view these dimensions as being interrelated and unable to be viewed separately. Wellbeing is maintained through a balance of all these dimensions. (Ministry of Health, 1995)
<http://www.moh.govt.nz>

It is beyond the scope of this study to undertake an in-depth exploration of Te Taha Maori understandings of health. However, the story of Hone gives a vivid illustration of this understanding and provides some insight into an indigenous culture whose approach to health claims the holistic appellation.

Hone was an inpatient in a psychiatric unit. On our arrival, Hone stood to deliver a mihi to us, his manuhiri. This actually took some time as Hone was so heavily medicated, he kept falling asleep during his whaikorero. He kept apologising, and staff made attempts to get him to sit down. We said it was "kei te pai" as it was culturally necessary for Hone to feel he was carrying out his Maori requirements to welcome us to his place. ... (Hone's) diagnosis, treatment and continuing care have been influenced by the fact that he is Maori, male and considered potentially violent. He feels his mana has been desecrated, and this was partly due to non-recognition of his role as kaikorero for his people. He was not given the opportunity to perform karakia and learnt very quickly not to talk to his ancestors in public view. Hone's whanau were not involved in the decisions about his care in the community and yet there was an expectation that his whanau would care for him – that is without support or resources. Hone's whanau are now a bit frightened of him because they've been told he could be dangerous because he is porangi. Hone feels he is not respected, therefore his mana is undermined and he now has to deal with double discrimination. (Milne & McDonald, 2000)

<http://www.hdc.org.nz/publications/speeches/BeyondtheWalls-Tiheimaui.html>

The interrelated nature of the dimensions of health is clear in this story. Hone's health is inextricably linked to his understanding of himself as Maori. It is in fact not possible to examine them separately. Even though, in presenting Maori understandings of health they are named separately: Te Taha Tinana, Te Taha Hinengaro, Te Taha Wairua and Te Taha Whanau, they have been depicted as the walls of a whare – te whare tapa wha: all four walls are needed to provide shelter, to ensure strength and to demonstrate integrity. (Durie, 1985). Birth, death and indeed daily experience are bound by these understandings.

Another factor distinctive of Maori is the personal authority embodied in the concept of *mana*. Dignity is valued in all cultures but is overtly linked with health in Maori (Te Roopu Awhina o Tokanui, 1986). There is a striking difference between the biopsychosocial model and Te Whare Tapa Wha. During the last century, dimensions were being added to the western concept of health and so the claims of fundamental relatedness are somewhat tenuous. This is not to claim they are unrelated but to question the extent to which their intrinsic relatedness is appreciated in a society that is preoccupied with atomistic

thinking. Maori understandings of health, on the other hand, have always been inextricably linked with what it is to be Maori.

Tihei Mauriora – the celebration of the life essence. The moment when the new born child inhales its first breathe and then breathes independently and with freedom. Tihei Mauriora! The celebration of the mother and father of the life that has been nurtured and protected within the confines of the womb. The potential for this new life is given recognition as his life essence establishes its own rhythms. Tihei Mauriora. (Milne & McDonald, 2000)
<http://www.hdc.org.nz/publications/speeches/BeyondtheWalls-TiheiMauri.html>

The imperative to consider culture in health⁴ care is extensively addressed in the ‘cultural safety/competence’ literature, but the place of culture in holistic health care practise remains unclear.

1. Does holistic health care view culture as:

- A context?
- An ingredient in personhood?
- An intrinsic, inseparable, phenomenon that saturates existence?

2. Does taking a ‘cultural view’ make a health care plan holistic?

⁴ There is in the literature, extensive discussion of holistic health care work with other indigenous peoples and in general it takes the form of describing the view of health of the community and then describing attempts, often through the use of alternative therapies to meliorate the effects of western interventions (Au & Hiew, 2002; Napoli, 2002).

Spirituality for wholeness.

A more recent 'add-on' to the biopsychosocial banner is the spiritual dimension. An integral feature of pre-enlightenment humanity, spirituality has been dwarfed by biomedicine and then by psychology, the proud secular science. A sense of 'the spiritual' has been split off from the everyday experience of most westerners. But spiritual yearnings have not gone away and holistic health care purports to satisfy these yearnings. The biopsychosocial rhetoric is supplemented by a call for health care to embrace spirituality. The rationale for this inclusion of spirituality however, provides the first obstacle to its achievement. The rationale offered in holistic health care literature is circular indeed.

Nursing, in its claim to provide holistic care for clients, is recognising the need to address spirituality, one of the dimensions upon which holism must be based.

...The work of Watson specifically acknowledges that spiritual awareness is one of the nurse's responsibilities.

...Nagai – Jacobson suggest that spirituality is the cornerstone of holistic nursing practice and

Carson proposes that spirituality should become the fourth recognized domain of nursing. (Dyson, Cobb et al., 1997, pp. 1183, 1187)

From these four comments it would seem that holistic nursing must address spirituality:

- because spirituality is part of holism:
- because spirituality has been claimed as a nursing responsibility, i.e. is part of nursing.

This kind of thinking does not bode well for a careful exegesis of spirituality that could be insightfully applied in health care.

There have been more authoritative calls to pay heed to a spiritual dimension to health based on a return to lost wholeness: perhaps Carl Jung is the exemplar. He acknowledges the obstacles to achieving this.

The labours of the doctor as well as the quest of the patient are directed towards that hidden and yet manifest “whole” man (sic.), who is at once the greater and the future man. But the right way to wholeness is made up, unfortunately, of fateful detours and wrong turnings...(T)hey cost an enormous amount of effort: they demand the very thing we most fear, namely the wholeness which we talk about so glibly...though in life we give the widest possible berth. It is infinitely more popular to go in for “compartment psychology” where the left hand pigeon-hole does not know what is in the right. (Jung, in Storr, 1983, p. 256)

Defining what is meant by spirituality is the next obstacle to its provision. The holistic health care literature is cavalier in this regard, contenting itself with a medley of possible constituents: for example, hope (Clark, Cross et al., 1991) connectedness and harmony (Burkhardt, 1989) religious and non-religious belief systems i.e. the principle values held by an individual (Hay, 1989) connection (Goldberg, 1998) and the expression of caring (Oliver, 1990) are among these. However, nominating possible aspects of spirituality falls short of any useful understanding of what it is that holistic health workers ought to be providing.

A distinction between spirituality and religion is made by various authors.

...(T)he concept of religion is generally associated with the teachings and rituals of various faith traditions...spirituality on the other hand is often viewed as a universal human trait that arises from the human need for hope and meaning. (Winslow & Winslow, 2003, p. 172)

Which of these is constituent of holistic health care? Some promoting spirituality appeal to the same relativism that afflicts the literature on holism in health care: for example, “spirituality is whatever the individual values most highly” (Hay, 1989). Others prescribe and teach techniques of praying, meditating and other ‘transcendent’ activities. Religious orders provide their version of holistic care from theoretical frameworks within the tenets of their faith. An example is the Franciscan Wholistic Health Centre of Cincinnati, which, “explicitly promotes a healing of the spirit within each person’s religious tradition through intentionally integrating spiritual, religious and holistic techniques” (Schuster, 1997). This centre is based in the grounds of a hospital and claims to work closely with allopathic medicine in order, in the short term, to mitigate the effects of clinical medicine and, in the long term, to transform the practice of orthodox medicine. The staff routinely pray for the patients and consciously commit to their own spiritual development. It is this spiritual motivation that, in Schuster’s opinion, constitutes wholistic care and it has transformation of health care as its goal.

The integration of wholistic care helps heal the wounds caused by the impersonal, reductionistic, purely scientific and highly bureaucratized hospital systems that have evolved over the last half century. It helps reinvolve the patients and restore the personal control over their health and illness. The founding of such a centre, its funding and acceptance within an allopathic hospital and its success answers a leadership challenge: not simply to restore but actually to refound the original mission of a hospital. (ibid. p 59).

Spirituality in health care thus falls into one of two mutually exclusive categories: the permissive or the prescriptive. Both categories present problems of application. What if the spirituality of the patient requires body mutilation? What if the spiritual teachings offered amount to proselytising?

Is either appropriate for holistic health care? What informs the health worker’s decision to pursue one rather than another? What if the patient has no interest in the ‘wholeness’ that this dimension can offer? What theoretical framework is

there to guide health care workers?

Consider this example.

Harry is sixty four and has “end stage” emphysema. As a doctor, he is too well ware of the implications of his condition which has slowly been eroding his abilities to accomplish even the simplest tasks. In addition to taking an array of medications, Harry uses supplementary oxygen all night and frequently during the day. His doctor, a long time friend, is very attentive and diligent about monitoring the effects of the medication and ensuring that Harry is as comfortable as possible. After a subcutaneous bleed induced by coughing and exacerbated by the anti coagulant therapy, Harry is admitted to hospital for monitoring. In the bed next to him is Agmat, a practicing Muslim who has lung cancer. Agmat receives a great many visitors who join him in his active prayer life. Five times a day, starting at dawn, a prayer rug is unfolded and after bowing towards Mecca, the visitors offer ascriptions of praise, prostrate themselves and then bow again, repeating the sacred phrases. The hospital has made special arrangements so that Agmat, who is not expected to live long, is able to fulfil his religious duty. Harry is not a religious man. In fact he has never really come to terms with a traumatic boarding school experience in the care of Catholic brothers. His adult life as a scientist, as a researcher, has fuelled his contempt for organized religion and the wonder he experiences at the intricacies of the natural world has been sustenance enough for any spiritual stirrings. However, facing death and the futility of any medical treatment for his failing body, Harry feels a profound emptiness. He has been sleeping very little and since his admission he finds it difficult to keep a terrible anxiety at bay. He is frightened of dying: of ceasing to be. He is frightened of the process of drowning. He feels utterly alone. The religious rituals that play themselves out in the space between his oxygen tube and his drip stand and the same accoutrements belonging to Agmat, him fill him with an inexplicable anxiety. His heart pounds and his flushed face shines with sweat. A nurse stops briefly at his bed as she rushes to complete her ward duties and asks if everything is all

right. Harry closes his eyes, unable to answer. The house surgeon is called and Harry is given medication for his tachycardia, the only thing he can bring himself to complain of.

What ought the health workers in this example have done in order to offer Harry holistic health care?

Clearly, adding spirituality to the holistic shopping list is a complex undertaking.

Holism and spirituality are perennially linked in the literature but the nature of the relationship between them remains enigmatic. There is a need for exploration of each of these notions in the context of health care.

Environmental health.

The notion of environmental factors influencing health stretches back in history to ideas about miasmas, the effect of certain winds, or the phases of the moon. Modern concerns have centred around pollution, the stress of city life, poverty, population density, ozone depletion and the like. Sub-specialties of bio medicine have evolved: community medicine, public health, and environmental medicine. An historic example of the awareness of environmental hazards to health was the discovery by Dr John Shaw in September 1854, that deaths from cholera in London were traceable to a water pump in Broad Street. He ordered the pump handle removed and thus prevented the spread of an epidemic (Tufte, 1983). However, the holistic health care literature appeals for more than an environmental tidy up. Kermode (2002) distinguishes between environmental health that seeks to keep humans protected from adverse environmental effects, and that which seeks to protect the biosphere from the effect of humans. Clearly these are intimately related but merely viewing the environment as a context for humans is not the same as appreciating the intricate and complex inter-relationships of Nature. It is this realization that places ecological understandings as one of the major hallmarks of holistic

health care.

3) *The ecological perspective*

This view has emerged from the global grass-roots movement of 'deep ecology' founded by the Norwegian philosopher Arne Naess. Its significance for health care is the acknowledgement of the fundamental interdependence of *all* life and the fact that, "as individuals and societies, we are all embedded in... the cyclical process of nature" (Capra, 1996). Much of the inspiration for this movement has emanated from great wisdom traditions of indigenous peoples where the links between ecological perspectives and spiritual and cultural facets of what it means to be a person, are clearly evident.

The western science of ecology with its roots in organismic biology has avoided the ravages of atomistic thinking and is an example of a world view that is defined by relation. The interactive systems of nature, utilizing but ultimately transcending the innumerable parts that make up the system have provided a metaphor for wholeness that has been embraced by social ecologists. Working with the web of nature has been a catalyst to thinking about wholeness and indeed health. The view of personhood through the ecological lens has particular relevance for holistic health care. Ecology, as the study of the way nature works, is a way of discovering meaning through connection, a way of understanding complex phenomena, and it is a way of ensuring comprehensive thinking.

An example of recent work in global thinking is that of Ronald Coleman and Marilyn Waring on the "Genuine Progress Index" that measures sustainability.

The Halifax version of the GPI measures 22 elements of Canadians' quality of life, ranging from soils to human freedom, providing a much more comprehensive picture of wellbeing than the dollars counted in the gross domestic product...(GPI Atlantic) has produced a series of reports on the health costs of obesity, tobacco and HIV/Aids and a report on "the ecological

footprint” of Nova Scotians – the area of land required to supply all the resources that each person uses. (Collins, 2003, p. 14)

What we measure is literally a sign of what we value as a society. If critical social and ecological assets are not counted and valued in our measures of progress, they receive insufficient attention in the policy arena....The components (of the index) are being constructed to provide annual benchmarks of progress and to be easily replicable by other jurisdictions. By valuing a wide range of social economic and environmental assets and recording any depletion or depreciation in their value, the GPI is intended to provide policy makers with accurate information on provincial strengths and early warning signs of potential weaknesses that can allow timely and rational responses to emerging needs. (Coleman, 2003, <http://www.gpatlantic.org>)

However, all the measuring in the world will not change the present level of environmental destruction unless it can curtail the human level of gratuitous consumption or at least set more rigorous standards for industry.

Consider this example.

Carrie is an eleven year old girl, living with her parents and four brothers in a rural area near a large wool-scouring plant. Her father works as the foreman and her older brothers have holiday jobs there. Carrie loves school and has many friends. She is very good at athletics and runs to and from school most days. She seems a strong healthy child but something is worrying Carrie. The smell of the works keeps her awake at night and makes her feel nauseous. She has been told off at school for falling asleep in class and felt extremely embarrassed. The smell does not reach the school, which is partly why she can't wait to get there in the morning. The worst thing about it is that she can't complain because her father has always been very scathing about people who complain about a good rural industry that happens to smell a bit. He has criticised these people as 'weak bellied' and says he is just thankful to have a job. Carrie has begun to fear that she is 'weak bellied', because she feels like vomiting soon after she gets home from school each day. She has begun to

dread the summer because the smell is worst then. Her brothers swim in the river near the discharge point and joke about the rash they get. Carrie never swims and is fearful of their taunts to throw her into the river. She never wants to invite her friends from school to her house. She often lies awake at night wondering if things will ever change. She decides to tell her teacher about her fears and her nausea, but in the morning her courage fails her

This child's health is affected. Her concerns do not yet extend to the destruction of the living systems of the river by cumulative effects of discharged effluent; perhaps as a thoughtful adolescent they will. For the moment it is *her* life that is being diminished, *her* vitality sapped and *her* potential curbed. She and undoubtedly many others in her district are suffering. But her father needs a job. Of course Carrie is suffering less than the countless thousands of children who live near, or have to work in, industrial installations of a far more toxic and debilitating nature. Her story serves to highlight the pervasive assault on health of less dramatic environmental pollution than a hazardous waste dump or an asbestos mine. These at least, are documented as health liabilities.

Humanity continues to lay waste to the environment on a life threatening scale. To change this, some suggest, would take a spiritual transformation (Moore, 1992), some look to ideas of voluntary simplicity: thoughtful consumption, resistance to artificially created needs and sensitivity to limited resources (Russell, 1982) and some to a different way of understanding the earth and her processes (Volk, 1998).

How is this to be applied to health care? The ecological view of reality exposes the fundamental complexity and inter-relatedness of everything. If everything is connected, what is the practical limit to holistic health care?

4) Ways of working

In order to fulfil the requirements demanded of some of these hallmarks of holistic health care there are recommendations for working in particular ways.

Each of these offers challenges:

- Interdisciplinary (team) work/collaboration: This is commonly equated to holistic health care, but the power differential of the orthodox medical hierarchy stretches the team analogy too far. The territorial guarding of professional boundaries and lack of consensus on which disciplines should be included in the 'team' are further obstacles to this analogy.
- Comprehensive/contextual approaches: Although certainly a candidate for holism in health care, limits must be set or this approach lays humanity open to the ravages of healthism, where every experience is subsumed under the banner of health care.
- A systems approach or cybernetics: This approach had its foundations in nature incorporating ideas of feedback, self regulation, exponential run a-ways and homeostasis. There is some congruence with these ideas and understandings of holistic health care. However, cybernetics has been transformed though the development of information technology into a 'megatechnology' which has threatened ideas of spirituality and culture while promoting a mechanism of its own.
- Multiskilling: The perception that holistic health care is but one 'modality' away, and that additional training will ensure its provision, can lead to superficial and piecemeal addition of skills. Learning an additional technique in no way guarantees that the health care offered is holistic.

There is also emphasis on the patient-provider relationship evident in the literature.

- An emphasis on 'patient participation': empowerment the goal.
- A requirement for health care providers to be engaged in their own 'healing'.

Many authors address the nature of the therapeutic relationship and list features of communication which characterize holistic health care. There are weaknesses in this approach to defining such care.

Firstly, the characteristics are commonly, warmth, acceptance, informality, good communication, sense of significance, equality, considerate action, - all features of a positive relationship. But what principles underlie the particular kind of relationship that seems to characterize holistic health care? An apparently arbitrary list of characteristics is not enough to be defining. Secondly, that these attributes may be conceived to be absent in orthodox medical relationships does not mean that they are therefore necessarily part of the identity of holistic health care relationships. There is confusion in the literature about the difference between how people would like to be treated and what it is about holism in health care that would inspire this treatment. These relationship characteristics may be evident in holistic health care but they may also be features of forms of health care which make no holistic claims.

Holistic health care could have aspects of all of the above hallmarks or ways of working. It seems that it depends who is consulted, which 'discipline' they practice in and what informs their world view. The same can be said for many ideas in health work for example, 'care' has a particular nuance of meaning for certain health workers and there is a robust intra- and inter- disciplinary discussion about what meaning can confidently be attributed to the word 'care'

(Sourial, 1997). There is something of the same kind of debate about holism but with even greater diversity of application and even more vehement claims of 'conceptual ownership'. For some reason, in the struggle to establish professional boundaries, this word has become a vigorously claimed and defended concept, 'ownership' being established by selecting attributes that are seen as congruent with the other principles espoused by a particular group. But in the case of holism this process of 'pick your own' has all but destroyed the integrity of the word. So what is the deep appeal of this word: how has it become an essential acclamation of so many therapeutic endeavours? What lies behind its power?

Why has 'holistic' become a therapeutic imperative?

It is not possible to answer this unequivocally but certain possible reasons are evident in the literature.

Firstly, there is the reported disenchantment with orthodox medical treatment.

The critique of biomedicine has been in progress for half a century. René Dubos, Ivan Illich, and Michel Foucault, have led this critique. But ultimately it has been the consumer who has demanded change.

...(T)he public has turned to complementary medicine as refugees from the inadequacies of conventional medicine. They look for relief from failed treatment, lack of understanding, lack of heart, obsessive technicality and side effects. They are turning away from modern medicine just when it is, or is supposed to be ...better than it has ever been...it does not feel right any more to take codeine for bad backs, life long inhalers for asthma, steroids for skin diseases, chemotherapy for cancers, Valium for psychosomatic disorders and to know that this is it – nothing more on offer. People know they are basically still in the sickness category. Intuitively, many stop believing in the claims of medicine and intuitively they drift into the orbit of alternatives. (Fulder, 1996, p. 14)

It is not just the public who is disenchanted, many health care workers have experienced this too. Andrew Bell (1989) describes his experience:

I decided to go into family medicine...I'd worked in a broad range of hospital jobs and was well qualified for general practice. I knew my abilities and my limits and felt I was standing on a firm and solid foundation. After about three years, however, that foundation became rather shaky. Family medical practice was a humbling experience as I came face to face with the impressive limits of modern medicine. The practice I started was a rural one on a very beautiful island. Among the island people were many with a keen interest in "holistic health". When these people came to me for their medical needs, they often discussed medicine and the alternatives, and as I began to see the enormous gaps in orthodox medicine's ability to help ill people, they had an increasing influence on me. They challenged the basic assumptions that medicine is based on and placed me in a confusion that is only clearing after ten or so years. They challenged the whole concept of tackling illness in isolation: "Disease is not just an entity in and of itself. It is a product of the whole person and their relationship to their world". Through their influence I developed an interest in alternative therapies. (Bell, 1989, p. 21)

The toll, both in quality of life and in financial terms, of the exponential rise in chronic, non infectious diseases has fuelled investigation into alternative ways of inducing health. This has been accompanied by increasing awareness of the role of life style in health which has reoriented health care to exhort people to modify diets, exercise and take responsibility for their health.

Secondly, there is the disenchantment with reductionism. Whether one believes reality to be 'knowable' or not, what we observe around us reveals patterns, and contemplation of these patterns is a deep, perhaps primordial preoccupation. Human beings, indeed all life forms to some extent, are dependent on their capacity to make order, organize the patterns around them. Thoughts about these patterns range from a stream of consciousness type flow, to fervent analysis and category synthesizing. The scientific paradigm has hot-housed our ability to perform the latter, and our western culture, particularly academic culture, has been steeped in it. Remarkable discoveries have been made and

vast and profound knowledge has been accumulated. And then, we find ourselves in a strange place: Erwin Schroedinger, one of the most eminent of physicists calls to our attention:

...(That) the spread, both in width and depth, of knowledge during the last hundred odd years has confronted us with a queer dilemma. We feel clearly that we are only now beginning to acquire reliable material for welding together the sum total of all that is known into a whole; but on the other hand, it has become next to impossible for a single mind to command more than a small specialized portion of it. (Havel, 1996, <http://www.cts.cuni.cz/~havel/>)

So specialization, often blamed in the literature for the sterility of the human experience has ironically, also contributed to the possibility of an understanding of 'wholeness', at least by science. Of course there is the argument that the quest for wholeness has been occurring outside the strictly scientific arena since time began. For those of a spiritual persuasion, science has been an obstacle and even its spectacular achievements are cold comfort in the wake of the destruction it has wrought. What has been lost? Many people have deep concerns about the extent to which humanity has been dwarfed by scientific scepticism towards anything that cannot be quantified and by the dynamics of a relentlessly orchestrated consumer society. Colin Wilson speaks for these people:

It may well be that future generations will describe the first half of the twentieth century as "the age of meaninglessness"; the sense of lack of meaning, of purpose, dominates our literature, art and philosophy. There is a general feeling that the certainties provided by religion have been lost and can never be replaced; science, by solving our practical problems, can only make this inner void more painfully obvious. It seems self-evident that in this sense of purpose, inner direction, Western culture has been running at a heavy loss for at least a hundred years; it is a matter for speculation how long it can go on before becoming completely bankrupt. (Wilson, 1965, p.16)

A vapid society, a disdain for questions of teleology, and a sapping materialism, are the context for the revival of appeals to holism.

Thirdly, the influence of postmodernism as a contemporary theoretical trend, has contributed to the radical critique of the modernist world view and a questioning of formal authority and hierarchical structures. Heather Eastwood (2000) in an article titled, Why are Australian GPs using alternative medicine? Postmodernisation, consumerism and the shift towards holistic health, explores the way postmodern thought has undermined biomedicine. The relativisation of knowledge and the decline of the modernist criteria for validation have contributed to the diminution of biomedical prestige and to the inclusion of previously excluded sub-cultures. In her view, postmodernism has created the space for those opposed to the scientific ideology of progress and to the rationalist philosophical ideal that is modernity. The critique of the enlightenment has enabled that which is not penetrable by science to be explored through 'small narratives' and has resulted in the democratisation of high and low culture. It has given permission as it were, for consumer demand for alternative therapies, spiritual, emotional and environmental aspects to care, and for autonomy over one's own health which in the view of Eastwood are features of the postmodern voice. The consumer ideology of capitalism demands choice, and this leads to the development of competition for patients that manifests in 'the greening of medicine' and the appellation holistic to non-medical health work. Holmes (1996) is among many writers who acknowledge the feminist critique of techoscience and the development of alternative approaches to the masculine character of science as contributions to the demise of modernism and its emphasis on objectivity. Its replacement by 'ways of knowing' that include intuition, spiritual awareness and ecophilosophy are characteristics that holists claim.

Fourthly, perhaps the most prosaic imperative is the professional boundary claims that plague the holistic health care literature. Since the development of biomedicine, there have been profound differences in basic assumptions between what was claimed as science and 'the rest' of health care.

In the middle of the nineteenth century those that held that there were specific drugs for specific diseases were called quacks: a century later the traditionalists were called quacks. In the seventeenth century the early “Chymists” were harassed by the herbal Galenicists for using poisonous concoctions, yet in this century it is the herbalists who are persecuted by the chemists. 130 years ago scientific method was damned as irrational and irresponsible (out of the false pride of the laboratory...has arisen the worst evil of therapeutic nihilism), yet in modern times, scientific medicine uses precisely the same terms for those practicing more traditionally. (Fulder, 1996, p. 12)

Besides the contested distinction about what constitutes ‘the authentic health care practitioner’ between biomedicine and all other health care practitioners, there has been the thrust by nurses to escape the hegemony of biomedical science by reclaiming their holistic roots (Robins, 1999). This subject is a thesis in itself: the following factors are relevant at present.

1) Nursing literature demonstrates an increasingly open criticism of positivist science.

2) This criticism takes the form of calls to holism which champion phenomenological and existential dimensions to nursing and which lay claim to “a counter-scientific ethical and aesthetic footing, commonly centring around caring...respect, love, and friendship” (Holmes, 1996).

Nursing may well have a professional doctrine that is congruent with many of the holistic health care tenets proffered in this chapter. However there is clearly a flaw in thinking that suggests that this view of health should be confined to nursing.

The fifth phenomenon that has made holistic health care a therapeutic imperative is the remarkable stories of survival and redeemed quality of life told by people affected by chronic, debilitating conditions for which biomedicine can offer little. Norman Cousins’ (1982) work Anatomy of an Illness inspired many with his

emphasis on positive emotions, including love, faith, a strong will to live, determination and hope (Moyers, 1995). Ian Gawler, diagnosed with bone cancer in January 1975 at the age of 24, had his leg amputated and was declared terminally ill. He turned to meditation, alternative therapies, changed his life style

and diet. Twenty years later he runs courses, retreats and workshops in Melbourne focusing on a combination of diet, the mind, meditation, family support and hope. Ross Latham, one of up to 65 thousand people who have attended these retreats, was diagnosed with non Hodgkin's lymphoma. Gawler's approach, he says, gave him hope.

The worst thing about a cancer diagnosis is that it takes all your hope away and it scares you to death. If people can read about other people who have done well in a horrifying situation, they can get so much strength and can do so much more if they have a little hope and less fear. (Chisholm, 2003, pp.4,5)

The biomedical view is that spontaneous remission is far more likely to be the cause of the success stories told by Gawler and others, but many remain convinced that complementary methods, mind/body therapies and changed attitudes, or some combination of all these factors tipped them into remission.

A curious state of affairs

Even subsequent to an exploration of its possible meanings, holistic health care remains an unsatisfyingly elusive notion. It is manifestly clear that the concept of it is practically impotent. This is not to say it has no meaning: it has too diverse a range of meanings to be a useful term in health care practice. However, increasingly during recent times there has been a call for something that is implied by this notion. This 'something' has to do with some essence or combination of the following.

- Natural things
- A unity of all things
- A connectedness of all things
- Transcendence of things
- Respect for context
- A yearning for wholeness
- The balance of things

It is not possible to say more than this. Holistic health care has come to mean 'something desirable' even 'something' that human beings need. But we are at a loss to be able to articulate this need in any more precise a fashion. This leaves health workers in an invidious position. They are being asked for, and are wanting to provide, something that is enigmatic. Holistic health care is the health care worker's blind alley. There is much to entice them down the road but they cannot proceed past a certain point.

Not all health care workers are aware of their predicament. The literature shows that some have proceeded as if the meaning of holistic health care is clearly understood, some as if the meaning is undisputed and some as if the meaning is flexible. It is easy to refute the first two assertions, but the third presents more of a challenge. There is bound to be a certain characteristic dependence on the variables of context, a certain relativity, about the notion of holistic health care. It is certain to involve values, beliefs and an ordering of priorities, a range of interpretations. But it is not sufficient to leave our understanding of holism so

deliberately vague: Firstly, because it is impossible to proceed in practice and secondly, because a completely flexible notion is impossible to dispute. For an idea to be contestable it must first have some formulation. An unformulated notion is fed by vague allusion and is resistant to critical challenge.

So it remains impossible to give an account of agreed core ideas or agreed limits to holistic health care. This ironically gives rise to a fragmentation of sorts: disputes about efficacy claims, professional boundaries, and multiple idiosyncratic definitions and therapies applied to people seeking wholeness. It appears to offer a way forward but will remain the health worker's blind alley unless further clarifications are made. In order to proceed, the following is required:

- An exploration of understandings of wholeness.
- An exploration of understandings of health.

The following chapters explore the notion of holism with the aim of formulating a defensible notion of holistic health care. First though, the challenge of appropriate tools with which to investigate this notion must be addressed.

Chapter Two

In search of holism: A relational method

Do not all charms fly

At the mere touch of cold philosophy?

There was an awful rainbow once in heaven:

We knew her woof, her texture; she is given

In the dull catalogue of common things.

Philosophy will clip an angel's wings,

Conquer all mysteries by rule and line,

Empty the haunted air and gnomed mine-

Unweave a rainbow, as it erstwhile made

The tender-personed Lamia melt into a shade.

From: Lamia, in A selection from John Keats. (Pettet, 1974, p. 156)

Given the argument advanced in the previous chapter, there is no longer even a moderate defence for those who so unquestioningly apply the term holistic to the health care they provide. It is not justifiable to make 'holistic health care' a principle of practise when there exists so little clarity about its meaning. A deeper understanding of holism is required if it is to be usefully applied in health care.

Preparatory Questions

The ideas identified as associated with understandings of holistic health care in the previous chapter, natural things, a unity of all things, a connectedness of all things, transcendence of things, respect for context, a yearning for wholeness, the balance of things, entail addressing some of the 'big questions' that have been part of philosophical inquiry for centuries. Clearly it would be inappropriate for this study to pursue these ideas with the expectation of absolute boundaries or final statements. However, acknowledging their fundamental nature is an essential part of taking holism seriously. The kind of understanding sought will be about relationships between things and will have to accommodate the interdependence of ideas.

The task in this chapter is to select an appropriate set of tools to undertake this exploration of holism. There is dissent in the literature about what constitutes a valid method for an inquiry into holism (Phillips, 1976; Esfeld, 2000). What kind of methods will facilitate this understanding? The selection of a method of investigation affects the kind of knowledge revealed. Testing a hypothesis empirically entails discovering whether it is consistent with other pre-established facts or with pre-established analytical propositions. However, as 'thoroughgoing holists' assert that there are no facts that are not theory laden themselves (James, 1984), it makes empirical study of holism a futile undertaking. In the selection of a method of investigation some preparatory questions arise.

What kind of knowledge is sought by this work?

The development of medicine in the nineteenth and twentieth centuries has been increasingly driven by technology and by science and has resulted in the monolithic entity 'biomedicine'. The hegemony of science has saturated every aspect of what is conventionally called health care.

Much has been revealed about the cause and treatment of disease and there has been attention paid to promoting health. However, during the last quarter of the twentieth century, there are many who have raised questions that prompt revision of the view that reliable knowledge derives solely from characteristics of the scientific method. There are widespread claims from health workers (Claxton, 1986; Moore, 1992; Bell, 1989; Wilson Schaef, 1992) researchers, (Walsh & Vaughn, 1993) philosophers (Wilber, 2001) and authors, (Moyers, 1993; Friedman, 1994; Spretnak, 1991) that the price paid by humanity for its blind faith in positivism has been alienation and a sense of futility that has eroded any sense of wholeness or unity. They have called for acknowledgement of the ways humans participate in the construction of knowledge, the value of context, the value of pluralism. An inquiry into holism cannot ignore this protest.

An overview of the history and scope of epistemology is beyond the scope of this study but there are epistemological questions that are relevant to understanding holism in health care. The previous chapter demonstrated the consequences of ignoring these questions. Epistemology is an attempt to establish a base from which the possibility of knowledge arises. It is the study of what can be known and of the ways in which knowledge is accessible. What is a sound starting point for the growth of knowledge? Even a cursory look at the history of ideas reveals that the foundations of knowing have changed over time.

- It demonstrates so vividly that what constitutes knowledge is disputed.
- It makes clear the range of understandings of knowledge that have led to the various methodologies of which theorists are so defensive.
- It accounts, to some extent, for the fragmentation of knowledge and for the origin of the fractures.

For example, philosophers have energetically proposed various theories of knowledge: knowledge has been described as:

- What cannot be doubted
- True belief
- An understanding derived from reason or cause
- Derived from a source of certainty/Requiring a criterion of truth
- Derived from experience
- Derived from rational thought
- Derived from truths which are prior to demonstration
- Derived from intuition

What is a sound starting point for the growth of knowledge? Pyrrho and his sceptical school of philosophy maintained as a requirement for knowledge, a 'criterion of truth'. Plato would have the title 'knowledge' reserved for those assertions about which there can be no error and drew distinctions between knowledge and beliefs. Belief could be converted to knowledge by 'fixing' it by cause or reason. Knowledge was reserved for the Forms and the source of human knowledge was seen as a kind of remembering. This hint at the innateness of knowledge has been a consideration entertained by many: in poetry and even in science it keeps surfacing as possibility. Knowledge as a result of experience, particularly sensory experience, has been an idea that Aristotle bequeathed and which has been refined at various times, perhaps most powerfully by the Empiricists. The view that knowledge is brought about

when the subject matter can be ordered in to a syllogism which embraces a middle term that provides *reason* is also Aristotelian. Knowledge in this view consists in explanatory or reason-giving propositions and this clearly is the view of knowledge adopted by Science. Descartes in his search for certainty would have the *unprejudiced self* as this foothold. This introduced the first person approach which locates justification for claims to knowledge in the individual's own mind. In contrast, postmodern writers would have the value of historical and traditional prejudices appreciated and their truth value recognized as starting points for deliberation.

Successive generations of philosophers have attempted to answer the question, 'can we know the real world or only our view of it?' The systemic philosophers of the nineteenth century had the assertion of objective truth as a defining characteristic of reality and in the twentieth century Popper declared objective knowledge to be *the* significant scientific epistemology. He differentiated between the subjective act of thinking and the objective content of theories and arguments, which he maintained, are independent of anyone's belief or disposition. "Knowledge in the objective sense is *knowledge without a knower: it is knowledge without a knowing subject*" (Popper, 1972). Although claiming that knowledge in the subjective sense is irrelevant to the study of scientific knowledge, Popper conceded that it is the subjective knowledge or belief that stimulates the process towards objective knowledge. The hypothesis to be tested, the guess to be evaluated, are instrumental in the impending growth of in, what he terms, "the third world" of objective knowledge.

In stark contrast Gadamer, influenced by Kierkegaard and Nietzsche, stands in explicit opposition to the scientific ideal of prejudice-less objectivity. He argued that there are no dogmatic answers to difficult questions, there exists in fact, no systematic objective knowledge; what philosophy can reveal is "truth-for-us" rather than "truth-as-such". Gadamer establishes the role of prejudice as a position of understanding that must be accepted as a starting point of any discourse. These prejudices are initial conditions for the possibility of reaching

agreement and understanding. They have truth value but are not final conditions. He sees the process of philosophy as that of raising definitive questions that clear a space for lively discourse. In the Socratic tradition, ideas (prejudiced by their nature) are submitted to the testing ground of the dialectic. Gadamer points out that :

The difference between methodological sterility and genuine forms of understanding is imagination, that is the capacity to see what is questionable in the subject matter and to formulate questions that question the subject further....The real event of understanding goes continually beyond what can be brought to the understanding...by methodological effort and critical self-control. It is true of every conversation that through it something different has come to be. (Gadamer, 1976, p. xxii)

Foucault, Lyotard and others have expanded this postmodern domain. The substantial hostility directed at postmodern theorists was in part to do with the extreme challenge they offered to established ideas of knowledge. The ideas that knowledge consists in authenticated truth capable of explaining reality and that the production of knowledge was value and politic free, were comfortably ensconced before Foucault relentlessly challenged them. In the preface to The Order of Things, Foucault (1973) quotes a “certain Chinese encyclopaedia” which states that,

...(A)nimals are divided into: a) belonging to the Emperor, b) embalmed, c) tame, d) sucking pigs, e) sirens, f) fabulous, g) stray dogs, h) included in the present classification, i) frenzied, j) innumerable, k) drawn with a very fine camel hair brush, l) et cetera, m) having just broken the water pitcher, n) that from a long way off look like flies....(p. xv)

This classification brought to Foucault’s attention how people in a particular time or space can understand things in ways that are impossible to imagine from another time or space. It was perceived as revolutionary and the response from the establishment was vitriolic. However, the legacy to epistemology has been fruitful. This idea that knowledge is bound up with specific world views is clearly pertinent to this study.

It has made it possible to accept that knowledge comprises contradictions, is in a symbiotic relationship to a particular set of questions, is certainly culturally value laden, is even perhaps a process rather than an end product. Two ideas about knowledge which are illustrated by the extract above and are relevant to the exploration of holism are the Saussurean understanding of meaning as relational, ideas and activities do not mean anything in themselves – they only make sense when related to other ideas and activities, and the Heideggerian (and psychoanalytic) insight into the illusion of the free subject- people are not free to think and act independently of the structures that are their context.

From these assertions it would seem that 'knowledge' is largely a product of the interaction of awarenesses that combine to form our perception of reality. Knowledge understood in this way stands in contrast to knowledge gained from dismantling ideas into parts and examining them independently and objectively.

The view that any inquiry, even "scientific inquiry", can be detached, impartial, and objective is incorrect. In all inquiry the unquantifiable, human, creative, emotional intuitive, caring, egotistical, competitive element is indispensable. ... The idea of "total objectivity" is a myth. (Seedhouse, 1986, p. 95)

While this view has become commonplace it warrants restating to highlight that in seeking a core understanding of holistic health care in order that practice is possible, there is no expectation of an objective *raw* truth. Accepting this limitation does not however diminish the notion of knowledge in any way, it simply makes it context dependent. It makes describing or exploring our notions of reality, truly examining them, a fundamental part of experiencing understanding. It forces a change from the metaphor of the machine to one of the mosaic. Searching for patterns is as fundamental a way of making sense of the world as studying individual aspects of it.

What is the relationship between thought and reality?

It is the nature of thought that questions can be asked for which there is no adequate answering by thought. The relationship of thought to reality is an ancient philosophical problem and of course one exceeding the purpose of this inquiry. Eastern traditions have been deeply aware of the inscrutability of reality and seek a direct non-intellectual experience of it.

The most important characteristic of the Eastern world view – one could almost say the essence of it – is the awareness of the unity and mutual interrelation of all things and events, the experience of all phenomena in the world as manifestations of a basic oneness. All things are seen as interdependent and inseparable parts of this cosmic whole; as different manifestations of the same ultimate reality. The Eastern traditions constantly refer to this ultimate, indivisible reality which manifests itself in all things, and of which all things are parts. It is called Brahman in Hinduism, Dharmakaya in Buddhism, Tao in Taoism. Because it transcends all concepts and categories, Buddhists also call it Tathata, or Suchness. (Capra, 1975, p. 142)

The Western approach to reality has been one of intellect. From Plato's famous cave to the present, contemplations about this relationship have been assiduous. Many ways of exploring it have been proposed and much human intellectual vigour has been directed at this task. Very important questions derive from variations of this ratio. The naïve materialism of Democritus and his theory of Atomism and the Absolute Idealism of Hegel and Fichte find their genesis from some of the same questions. What is real? What is reality like? How does the appearance of reality relate to a possible objective reality? Is reality to be taken as the sum total of all that is manifest, indeed is there a subject-independent manifestation at all?

These questions cannot be answered by philosophy or science, so why have they preoccupied so many thinkers? One reason is the search for order, for relation, for understanding of the connectedness of things. Thought is a capacity of human kind and the perennial question is, 'How does this

experience of personal understanding relate to understanding in general?’

There is a powerful irony in the study of this relation. Western academic tradition pursues connectedness with a mode of thought that presents as a series of separate images and these are then coalesced into categories of meaning that entrench the experience of separateness. It follows spontaneously that reality taken to be as our thoughts are, will be separate, fragmented, a mere collection of images.

Even in the Western tradition there have been thinkers who have challenged this view. The idea of reality as a process is attributed to Heraclitus who is purported to have said that a person cannot walk into the same river twice. Not only would the drops of water be different but the person and their experience would also be different in countless ways. Constant change is therefore the mark of reality. Others, for example Frege and Popper, have proposed that there are three realms of reality, material things, psychological things and abstract things but the primacy, relationship between, and relative dominance of these, remains equivocal, no matter what particular combination of categories is proposed. This is so because they are categories, i.e. thoughts, systems of labelling and grouping that have been useful as tools for sorting experience. These can be useful: Foucault calls them constituent models that make possible the presentation of linked experience. But they are drastic simplifications. They are certain experiences plucked out of a seething mass of experiences according to a set of rules, made sense of and claimed as knowledge of reality. This process of plucking and making sense of, is what we call thinking. It is fruitful to look at modes of thought, and how they contribute to the way evidence is mustered for a particular view of reality.

David Bohm’s contribution to elucidating this relationship has origins in both science and philosophy. His concern is with the 2000 year old paradox that thought, although an actual process of movement, a stream of consciousness, appears as a series of static images. He asserts that “science itself is demanding a

new, non-fragmentary world view.”

...(T)he present approach of analysis of the world into independently existent parts does not work very well in modern physics. It is shown that both in relativity theory and quantum theory, notions implying the undivided wholeness of the universe would provide a much more orderly way of considering the general nature of reality. (Bohm, 1980, p. xii)

He proposes a way of considering reality and consciousness that would not be fragmentary and is indeed part of reality and consciousness. He gives as an analogy the dance of the honey bee by which one bee indicates the location of the honey flow to other bees.

It is an activity which, when properly carried out, acts as a pointer or indicator disposing the bees to an order of action that will generally lead them to honey. This activity is not separate from the rest of what is involved in collecting the honey. It flows and merges into the next step in unbroken process. So one may propose for consideration the notion that thought is a sort of “dance of the mind” which functions indicatively, and which when properly carried out, flows and merges into a harmonious and orderly sort of process in life as a whole. (ibid. p. 55)

This is not the same as saying that reality and thoughts are the same thing, or that there is no more to reality than thoughts about it. Rather it provides a way of conceiving the connection between thought and reality. It indicates the importance of thinking: it raises the possibility that when thinking is done ‘well’, it can be relied upon to guide action and to produce understanding that is free from contradiction and confusion. This will be explored in chapter four but is relevant to the present argument for ways of thinking that enable relatedness to emerge.

Whitehead (1938) too, was concerned about modes of understanding.

We must enlarge our effort at understanding. In the nineteenth century, the Greek scholars were somewhat narrower than the best of the Greeks, the Christian scholars were somewhat narrower than the best of the early Popes, and men of science were somewhat narrower than the founders of the study

of mathematics and of physical science. The nineteenth century in aggregate knew immeasurably more than the Greek, and the Popes, and the founders of science, all put together. But the moderns had lost the sense of vast alternatives, magnificent or hateful, lurking in the background, and awaiting to overwhelm our safe little traditions. If civilization is to survive, the expansion of understanding is a prime necessity. (ibid. p. 45)

Understanding, according to Whitehead, involves the notion of composition. He was the first modern thinker to discuss the question of the relationship between knowledge and reality from the standpoint of constant flux. He proposes two modes of understanding. If the thing to be understood is viewed as composite, the understanding of it will be in terms of its factors: what they are and how they relate to each other. "The second mode of understanding is to treat the thing as a unity, whether or not it is capable of analysis, and to obtain evidence as to its capacity for affecting its environment" (ibid. p. 46). Whitehead calls the first mode internal understanding, it conceives of the thing as an outcome, and the second external understanding, it conceives of the thing as a cause. He proclaims them reciprocal processes. (There are similarities with Koestler's (1978) ideas discussed in later chapters.) Philosophy is thus in Whitehead's view the attempt to,

...make manifest the fundamental evidence as to the nature of things....It makes the content of the human mind manageable; it adds meaning to fragmentary details; it discloses disjunctions and conjunctions, consistencies and inconsistencies. Philosophy is the criticism of abstractions which govern special modes of thought. (ibid. p. 49)

This in view, philosophy exposes 'the nature of things' to reveal relationships. These may be connectedness or disconnectedness, coherent or incoherent but remain part of the vastness of context. It is our ways of thinking that can limit our understanding or facilitate it. While it is of course impossible to understand 'all that is reality', how we think, how we use our thoughts, can affect the quality of what it is possible to understand. This entails being mindful of the effect of the ways we think on what we understand.

How is method related to the nature of understanding sought?

Inextricably linked to questions about what constitutes knowledge are the questions about how it can be achieved. Since the early stirring of scientific and philosophical inquiry in the sixth century BC, various methods have been stipulated as adequate or appropriate for the development of knowledge in most realms of human inquiry. The history of the changes in these methods mirrors the vicissitudes of human thought as both are powerfully influenced by political atmosphere, social conditions, religious dogma, new discoveries, even fashion. Proponents of particular methodologies, using the language and ethic of their worldview, establish more or less fixed rules and assert their power to reveal 'knowledge', 'truth', 'reality'. Debates rage about the meaning of, even existence of, these holy grails.

There are multiple theories of the creation of knowledge. They can be roughly grouped into those that seek knowledge through investigation of the particular, a problem carefully isolated to reveal its fundamental elements, and those that seek knowledge through investigation of context, relation and meaning. The former makes claims of objectivity, while the latter recognizes an intrinsic feedback system in the process of knowledge creation. What constitutes the perception of knowledge, or truth, or how reality is construed, influences the ways in which investigations of phenomena are structured. In turn how investigations are structured influences the kind of knowledge, truth or understanding of reality that is revealed. In science, this enmeshment has been denied. However, if it is claimed that 'facts' are objective, external, independent realities awaiting discovery, and if knowledge is rendered equivalent to 'facts', the consequent understanding of reality will have a particular quality. Conversely, with awareness of the complex relationships between phenomena and experience, between perception and interpretation of perception, between logical content and intuitive association, understanding of a different quality will be achieved. The former will have an 'absolute' quality, the latter will have a

'relative' quality. The choice of method affects the nature of understanding derived and the nature of initial assumptions drives the choice of method. Foucault makes the distinction between the domain of knowledge and the method of investigation.

The domain of the modern episteme should be represented rather as a volume of space open in three dimensions. In one of these we would situate mathematical and physical sciences, for which order is always a deductive and linear linking together of evident or verified propositions; in the second dimension there would be the sciences (such as those of language, life and the production and distribution of wealth) that proceed by relating discontinuous but analogous elements in such a way that they are then able to establish causal relations and structural constants between them. ... The third dimension would be that of philosophical reflection, which develops as a thought of the Same. (Foucault, 1970, pp. 346, 347)

Feyerabend (1975) offers the caution that all methodologies have their limitations. He illustrates how method determines knowledge and in particular how rigid systematic epistemology can impoverish understanding.

Now it is, of course, possible to simplify the medium in which a scientist works by simplifying its main actors. The history of science, after all, does not just consist of facts and conclusions drawn from facts. It also contains ideas, interpretation of facts, problems created by conflicting interpretations, mistakes and so on. On closer analysis we even find that science knows no "bare facts" at all but that facts that enter our knowledge are already viewed in a certain way and are, therefore, essentially ideational. This being the case, the history of science will be as complex, chaotic, full of mistakes and entertaining as the ideas it contains, and these in turn will be as complex, chaotic, full of mistakes, and entertaining as are the minds of those who invented them. Conversely, a little brainwashing will go a long way in making the history of science duller, simpler, more uniform, more "objective", and more easily accessible to treatment by strict unchangeable rules. (ibid. p. 11)

These extracts raise some of the major issues of epistemology.

- The part played by existing knowledge in the creation of new knowledge

- The part played by tacit assumptions in the creation of existing knowledge
- The use and effects of reductionism
- The integral role of interpretation in the process of developing knowledge
- The impoverished 'state' of much that passes for knowledge
- The qualitative relationship between method and knowledge

Bohm (1987) too, has some of these concerns and illustrates them with reference to interpretation in physics.

Some (physicists)...take what they believe is a totally pragmatic view and argue that quantum theory is no more than an algorithm for predicting experiments and that to attempt to interpret such an algorithm is a waste of everyone's time. Yet these thinkers too, have been strongly affected by considerations that lie outside science, such as the opinions of the positivists, operationalists and empiricist philosophers who were fashionable in the early days of quantum theory. In essence all the available interpretations of the quantum theory, and indeed any other physical theory, depend fundamentally on implicit philosophical assumptions, as well as on assumptions that arise in countless other ways from beyond the field of physics. (ibid. p. 102)

The method explored in this chapter is fundamental to the aims of this thesis because of the nature of the notion under investigation. There is too deep an irony in the idea of 'analysing' holism to unquestioningly engage in a positivist form of inquiry.

The irony

The traditions of science are deeply rooted in processes that reduce phenomena to independent elements that can be explored in isolation. Splitting and separating have been seen as central activities in the pursuit of understanding and irrefutably they have yielded results in some domains. However, the reliance on analysis has placed some areas of human experience beyond investigation or distorted them in order to render them analysable. Understanding the nature of wholeness is an example of a human experience which has been avoided or over simplified in the scientific paradigm.

A cursory review of the literature concerned with holism in health care reveals the following nuances of meaning of the word holistic:

- A global view/approach
- Inclusion of 'alternative' or complementary ideas
- A complete/comprehensive understanding
- Acknowledgement of connectedness

These rough distinctions reveal a discernable common thread; an appeal to 'wholeness'. Wholeness, in general usage refers to an undiminished state, a presence of all the constituent parts, something entire, something complete, something undivided. Wholeness would seem to be inscrutable if the only tools available are those of 'normal science'. What is inscrutable to 'normal science' has, in the western tradition, been ignored. That is, until the work of Capra (1975), Bohm (1980), Briggs & Peat (1989), and Bohm & Peat (2000), which revealed the interconnectedness of reality and sought to extend this

understanding to challenge the worldview that treats things as inherently separate. This challenge has remained to some extent subversive, but it has not been silenced.

The metaphor of paradigms illustrates how fixed and often unconscious rules of method intended to deepen understanding, serve to delay the emergence of the connections and destroy the contexts that facilitate understanding. According to Kuhn, (1970) over time, a tacit infrastructure of ways of dealing with the challenges of understanding reality is developed and vigorously maintained. While this has benefits of a kind, it also ensures that questions not soluble in the paradigm accumulate and lead to increasing confusion. By devaluing the status of these questions, by describing them as outside the paradigm, these apparently peripheral ideas are effectively discarded. Mainstream thinkers continue as if these outcast ideas have no power. However, for others disquietude increases, and tension develops between those inside and those outside the paradigm. In response to this tension, the established paradigms are rigorously defended ensuring that context and outlying information is further pared away. The subversive function of covert erosion continues from beyond the paradigm. According to Kuhn, at some point the challenging ideas will usurp control, overturning the dominant paradigm only to become the hegemony of the new era. This metaphor clearly reveals a bias towards confirming evidence that is paradigm congruent and resistance to entertaining evidence that is not. It also demonstrates the way in which certain kinds of thinking preclude the integration of knowledge. If ideas like wholeness are to be explored, even recognized, there is a need for new ways of facilitating the development of understanding.

Now it would seem foolish to respond to the call for new ways of thinking with a battery of old ways, but do we have any option? How are we to overcome the limitations of tacit knowledge and thinking crippled by demands of rigid, objective rules? Bohm (1980) proposes a radical look at language and the use of a new experimental form, *the rheomode* which rejects the view of reality

produced by nouns as one of essentially static abstractions and favours focussing on verbs as basic or primary to communication in order to reflect the truly fluid nature of reality. Feyerabend (1975) proposes a radically plural approach in which weak arguments are strengthened rather than eliminated and in which hypotheses that are inconsistent with the prevailing understandings are introduced in a process of counter-induction. Others may have additional suggestions and each may have merits but what are the core properties of a constructive methodology when the aim is revelation of complex connectedness rather than analysis of components?

The resolve

A kind of antecedent frolic is essential as the answer to this question. All investigations ultimately depend for their effectiveness on vigorous but playful images and associations. Premature censoring of ideas by zealous rationality could eliminate the very creativity that will bring clarity. Feyerabend quotes Bacon:

Another ...error is the ...peremptory reduction of knowledge into arts and methods, from which time the sciences are seldom improved: for as young men rarely grow in stature after their shape and limbs are fully formed, so knowledge, while it lies in amorphisms and observations, remains in a growing state; but once fashioned into methods, though it may be further polished, illustrated and fitted for use, it is no longer increased in bulk and substance. (ibid. p.117, 118)

Koestler (1969) describes this phase as rather more uncomfortable a time, particularly when attempts at objective problem solving have proved fruitless.

When all hopeful attempts at solving the problem by traditional methods have been exhausted thought runs round in circles in the blocked matrix like rats in a cage. Next the matrix of organized, purposeful behaviour itself seems to go to pieces and random trials make their appearance, accompanied by tantrums and attacks of despair – or by the distracted absent- mindedness of ...single-mindedness; for at this stage – “the period of incubation”- the whole personality, down to the un verbalized and unconscious layers, has become

saturated with the problem, so that on some level of the mind it remains active, even while attention is occupied in a quite different field ...until chance or intuition provides a link to a quite different matrix, which bears down vertically, so to speak, on the problem blocked in its old horizontal context, and the two previously separate matrices fuse...The creative act is not an act of creation in the sense of the Old Testament. It does not create something out of nothing, it uncovers, selects, reshuffles, combines, synthesizes already existing facts, ideas, faculties, skills. (ibid. p.120)

This description of a way towards clarity is significantly different from the systematic application of rules that constitutes the methodology of science or even empirical philosophy. However, it is the creative part of all investigation whether it is acknowledged or not. It is the preliminary work so necessary for the emergence of clear questions and justifiable propositions that lead to (useful) knowledge. It is also this preliminary work that avoids the confusion and illusion of shared meaning that abounds when unexamined notions, such as holism in health care, are forced through a paradigm grid that effectively strips away essential understanding. The aim of this study is not to pare down the meaning of holism or to construct a definition of holism with exact rules for use in every application; this would be a travesty of the pursuit of understanding. But rather to

- remove obstacles to clarity, by asking questions,
- reveal inconsistencies,
- identify mutually exclusive assertions and
- demonstrate limits.

Seedhouse (1986) quotes Wittgenstein (1974):

Philosophy aims at the logical clarification of thoughts.

Philosophy is not a body of doctrine but an activity.

A philosophical work consists essentially of elucidations.

Philosophy does not result in “philosophical propositions” but rather in the clarification of propositions.

Without philosophy thoughts are, as it were, cloudy and indistinct: its task is to make them clear and to give them sharp boundaries. (ibid. p.11)

These extracts form a basis of an argument for a particular approach to method in order to bring clarity to the notion of holistic health care. This approach can be described as an elucidation of connections, a relational approach to knowing: one which facilitates the creative process, enables associations to emerge and countenances the existence of plurality in what is supposed to be true. However, there must be limits to this plurality. There would be no purpose to this investigation if holistic health care were to continue to have no core theoretical understandings. A certain conceptual structure is necessary. The conceptual domain of holistic health care must have both inclusion and exclusion criteria notwithstanding the complexity of the internal structure and its external connections.

Questions about metaphysical reality and scientific reality render down to the problem of matter and mind and any investigation into ideas of holism must explore these relationships with tools and techniques that show elucidatory promise. As part of developing a repository of such tools, it is reasonable to expect that those that are capable of revealing relatedness, connection, even possible unity, will be useful. A method of investigation that acknowledges both the role of the observer and the loss inevitable in reduction, will avoid the pitfalls of the ‘objective knowledge’ methods. This places the idea of knowledge further from the ‘assured rational conviction’ end of a spectrum of meaning towards the ‘cumulative culture of understanding’ end.

What are the obstacles to clarity?

What are the particular obstacles to the pursuit of clarity of understanding of holism?

1) Difficulties presented by the notion itself: what makes holism resistant to clarification?

Initial attempts to grasp what is meant by 'holism' reveal its nature to be like quicksilver: its meaning slips from one form to another without trace of its movement. It looks one moment to be describable as one idea (albeit a complex one) and the next to be composed of many discrete ideas whose relationship defies explanation. In current usage, holism is commonly called upon as an antidote to the damage that analytical science has inflicted on our understanding of 'wholeness'. However, it has been an ineffectual/weak opponent of science.

There is an enormous body of literature on holism but a student of any one field of study...is unlikely to encounter it in any ordered way. He is almost certain to meet at least a few holistic theses and probably some arguments against them; but he is likely to remain ignorant of the full scope of holism. (Phillips, 1976, p. 2)

Thus holism influences many disciplines but its exact nature is not clear. Is this because it is an extremely complex and esoteric idea, or a very poor one in disguise, sustained by expedience in a power struggle against the biomedical empire? Mystery can be a powerful foil but a vague appeal to wholeness is not a sufficient or worthy adversary to mechanistic science.

Phillips continues:

He (sic) may not realize that the debates over methodological individualism

or the place of psychological explanations in sociology are related to those over systems theory, over organicism in biology, and over internal relations in philosophy. And he can easily become confused: the difficulty in finding a clear central statement of the central ideas of holism in the literature is notorious, and there is a corresponding difficulty in evaluating them. (ibid. p. 3)

Holism is thus both an opaque notion and, for reasons yet to be fully explored, it is resistant to attempts at clarity.

2) Difficulties presented by the effect of analytical investigation.

Not only is holism a mercurial word, but the methods traditionally available in academic investigation rely heavily on analysis as a path to clarity. As discussed, many feel that analysis has cost humanity a sense of wholeness. However, the concept of analysis is not unequivocal. The word 'analysis' is used to mean a variety of techniques of discovery or methods of approaching inquiry. Commonly, analysis as a style is piecemeal and particular, eliminative and convergent. It has been seen as synonymous with reduction, the idea that facts about a subject x can be construed from facts about other, usually more 'basic' phenomenon y. There are obvious tensions between this view of analysis and the notion of wholeness.

Firstly, the common analytical idea that 'thought' is about 'reality' and that there exists between them a separation that ensures objective (therefore more accurate) knowledge, is challenged by the common holistic idea that thought is *part of* reality in an intricate feedback relationship. Secondly, the process of isolating variables for investigation renders information about these variables *in isolation* and it is not clear that this information remains 'true' even if the variables are summarily returned to their context. A third tension between techniques of analysis and understanding holism is about survival. Analysis is seen by some to entail a tacit acceptance of *competition* as an operating principle of reality. Intellectual acumen assesses the comparative robustness of

various competing theories or interpretations and chooses a victor. The process of paring is assumed to reveal the 'strongest' idea as the remainder. Just as Darwin assumed that successful competing was the major mechanism that ensured survival, the analytic process assumes the most robust idea to hold more 'truth'. Just as Darwinism has led to the neglect of the pervasive and extremely successful cooperative relationships that ensure survival, so analysis has led to the neglect or negation of that which cannot be ranked or quantified. Allegiance to rigour has become confused with allegiance to precision, and has led to *singling out* what is 'most true' rather than mapping the context of what is contributing to the sense of being 'true'. Rather than ignoring or explaining away those ideas that challenge 'established' understanding, investigative energy can be profitably invested in revealing the relationship between an idea and that which seems unable to coexist with it.

3) Difficulties presented by the limitations in our modes of thinking.

Thought is powerfully influenced by the perception of differences and distinctions and these are useful guides to a particular kind of understanding. However, if these distinctions are taken to be separate entities *in reality*, perception of the world as fragmented is inevitable.

What prevents theoretical insight from going beyond existing limitations and changing to meet new facts is just the belief that theories give true knowledge of reality...our modern way of thinking (is) blinkered by the notion that theories give true knowledge about "reality as it is"...this confusion is of crucial significance, since it leads us to approach nature, society and the individual in terms of more or less fixed and limited forms of thought, and thus apparently, to keep on confirming the limitations of these forms of thought in experience. This sort of unending confirmation of limitations in our modes of thinking is particularly significant with regard to fragmentation...every form of theoretical insight introduces its own essential differences and distinctions. ...if we treat our theories as "direct descriptions of reality as it is", then we will inevitably treat these differences and distinctions as divisions, implying separate existence of the various elementary terms appearing in the theory. (Bohm, 1980, p.7)

Thus our thinking is an obstacle to understanding the notion of holism. It has been suggested that the supra-cultural structure of our thought conceals the knowledge of an original unity with the whole of nature, which modern human kind has irretrievably lost. This is not impossible to imagine, particularly when attention is focussed on the role of language in this process.

4) The use of language.

Language has much in common with the Atomism of Democritus. It consists of meaning that can be broken down to elementary units. Pursuit of meaning can be in the form of searching for the elementary 'particles', the crisp definition or the exact synonym. These meanings are seen as separate even if they have the same meaning. Language in the form of words enhances the snapshot experience of thought. Another feature of language that facilitates this separateness is the subject-verb-object structure of sentences which implies that action arises separately from, and in fact links, subject and object. Bohm (1980) considers the following example.

"It is raining". Where is the "I" that would, according to the sentence be "the rainer" that is doing the raining? Clearly, it is more accurate to say: "Rain is going on". Similarly, we customarily say. "One elementary particle acts on another", but, ...each particle is only an abstraction of a relatively invariant form of movement in the whole field of the universe. So it would be more appropriate to say, "Elementary particles are on-going movements that are mutually dependent because ultimately they merge and interpenetrate". (ibid. p. 29)

Unless attention is focussed on what assumptions language facilitates, it is not possible to avoid the resulting obstacles that in turn limit our capacity to contemplate ideas about wholeness.

What are the ways to overcome these obstacles?

A commitment to exploration in context is an initial step to the kind of

understanding that is necessary if holistic health care can be a useful idea. This firmly places this part of the work in the realm of 'discovery' rather than 'justification'. Even before starting a rigorous investigation into the notion of holism in health care, there are obvious features that can be pointers to effective method. These of course are assumptions that will need testing in time but initially they serve as footholds from which exploration can begin.

The most obvious characteristic of holism is that it is context dependent. Core understandings are then likely to be revealed by exploring context. How is this to be achieved?

Firstly, the context must be preserved. This can be done in the following ways.

1) It must be established that gaining clarity is not equivalent to 'stripping bare'. The general method of science has been to analyse phenomena into independent elements, to limit dependent variables, to abstract ideas and to make claims to objectivity in order to achieve clarity. These processes, while giving power to predict, are destructive to context and ultimately to understanding, particularly to ideas that have qualities of the numinous. Moore (1992) cautions that by applying rigorous analysis in the pursuit of understanding, we risk

... replacing the common bonding of humanity and its shared wisdom, with bites of information that have no way of getting to us deeply, of nourishing and transforming our sense of selves... We have a spiritual longing for community and relatedness and for cosmic vision, but we go after them with literal hardware instead of sensitivity of heart. (ibid. p. 208)

2) A view of clarity as 'removing the fog' to reveal complexity, rather than clarity as 'simplification' is necessary if context is to be preserved. This entails exploring ambiguities, challenging contradictions, being prepared to tolerate contradictions and a willingness to recognize pluralism as an essential part of rational inquiry.

3) Preservation of context involves both valuing it and maintaining a nurturing environment for it. Keeping the context rich means wide-ranging investigation, including not only various contributing fields but also various forms and sources of connecting information. Feyerabend (1975) describes the development of knowledge.

Knowledge...is not a series of self consistent theories that converges towards an ideal view; it is not a gradual approach to the truth. It is rather an ever increasing ocean of mutually incompatible alternatives, each single theory, each fairy-tale, each myth that is a part of the collection forcing the others into greater articulation and all of them contributing, via this process of competition to the development of our consciousness...Experts and laymen, professionals and dilettanti, truth – freaks and liars – they all are invited to participate in the contest and to make their contribution to the enrichment of our culture. (ibid. p. 21)

4) Thoughts that are labelled as ‘facts’, give an illusion of separateness. They have been lauded as triumphs of the abstract intellect but have also led to understandings of reality that are fragmented and divested of their context. Whitehead (1938) reminds us how babies and animals are immersed in their contexts, their needs ‘embedded in externality’ and draws this metaphor for thought. He describes what he calls the ‘myth of finite facts’.

A single fact in isolation is the primary myth required for finite thought, that is to say, for thought unable to embrace totality. This mythological character arises because there is no such fact. Connectedness is of the essence of all things of all types. It is of the essence of types, that they be connected. Abstraction from connectedness involves the omission of an essential factor in the fact considered. No fact is merely itself. The penetration of literature and art at their height arises from our dumb sense that we have passed beyond mythology; beyond the myth of isolation. It follows that in every consideration of a single fact there is the suppressed presupposition of the environmental coordination requisite for its existence.... In this way the finite intellect deals with the myth of finite facts. There can be no objection to this procedure, provided that we remember what we are doing. (ibid. pp. 9, 10)

Illuminating this connectedness is a way of gaining understanding. Bohm (1980) concerned at the effect of treating things as inherently separate, points to the

inevitable world view that develops without this understanding.

I would, in this connection, call attention to the general problem of fragmentation of human consciousness...It is proposed...that the widespread pervasive distinctions between people (race, nation, family, profession, etc., etc.), which are now preventing mankind from working together for the common good, and indeed, even for survival, have one of the key factors of their origin in a kind of thought that treats things as inherently divided, disconnected, and broken up into yet smaller constituent parts. Each part is considered to be essentially independent and self-existent. (ibid. p. xi)

For context to be preserved, emphasising connections is a fundamental requirement.

5) A sustained period of intimate engagement between thinker and thoughts that is both playful and passionate will ensure the preservation of context. Starting with unspecified images and feelings and toying with varieties of combinations maintains a fertile medium that enables unexpected or unlikely connections to become manifest. Maintaining a kind of wonderment and awe or at least a deep respect prevents this playfulness from becoming a careless or desultory enterprise. Cultivating what has been called “the sensitive response of awareness” (Bohm & Peat, 2000) ensures the quality of this engagement.

...(T)he word attention means literally “stretching the mind toward something”. This implies the inner activity that is needed to grasp the object of interest mentally....The mind is thus able to “take hold” of this content and grasp it as a kind of whole, at a higher and subtler level. This is the beginning of attention within the mind, which can move, if necessary, to indefinitely subtler levels. (Bohm & Peat, 2000, pp. 214, 215)

These authors stress the free movement of the mind, the awareness, that is necessary for proper attention and describe the inadequate or limited scanning patterns of thought that emanate from rigid assumptions.

6) Employing contrasts is another way of increasing understanding that circumvents the need for shedding context. What is considered incompatible

with an idea or experience can be useful in highlighting its characteristics. Feyerabend (1975) illustrates this view.

...(S)ome of the most important formal properties of a theory are found by contrast, and not by analysis. A scientist who wished to maximise the empirical content of the views he holds and who wants to understand them as clearly as he (sic) possibly can must therefore introduce other views; that is, he must adopt a pluralist methodology. He must compare his ideas with other ideas...and he must try to improve rather than discard the views that have failed in the competition. Proceeding in this way he will retain the theories of man and cosmos that are found in Genesis, or in Pimander, he will elaborate them and use them to measure the success of evolution and other "modern" views. He may discover that the theory of evolution is not as good as is generally assumed and that it must be supplemented, or entirely replaced, by an improved version of Genesis. (ibid. p.21)

Feyerabend thus sees an extremely valuable role for confounding evidence. (He also reminds us that "there is not a single interesting theory that agrees with all the known facts in its domain.") The dynamic tension of juxtaposed opposites feeds a creative process in which new understandings emerge.

7) Honing awareness of total systems is a very powerful way of maintaining context. This entails becoming receptive to the perception of organization. In the manner of the hermeneutic circle, there is a movement back and forth between what is designated individual and what is designated whole. Senge (1990) has applied the ideas of the original systems thinkers to organisations. He describes systems thinking as a sensibility for the subtle connectedness which gives wholes their unique character.

Systems thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships, rather than things, for seeing patterns of change rather than static "snap shots". It is a set of general principles – distilled over the course of the twentieth century ...a discipline for seeing "structures" that underlie complex situations, and for discerning high from low leverage change. (Senge, 1990, pp. 68, 69)

Secondly, the context must be used. This can be accomplished in various ways.

1) *Emphasize* relations. 'Seeing connections' will be a fundamental part of this project, not only because it is a generally useful philosophical activity, but particularly because it is appropriate for an exploration of holism. Gaining understanding of certain kinds of ideas demands a way of thinking that examines without dissection, explores without plunder and pursues clarity by resolving what obscures it. Limits to the meaning of holism in health care must be set by 'making connections' that allow certain core ideas to emerge. This project requires deliberation, and the widest possible 'conceiving'.

Seedhouse (1986) explains conceiving as:

...(T)he capacity that people have which enables us to form concepts and theories. It permits choice, decision and assessment. It is the basic ability by which we understand anything... (C)onceiving is the act of assessing, weighing up, entertaining ideas, playing with inconsistencies, appealing to personal experience, fitting theories with perceived states of affairs and inventing analogies. (ibid. p. 23)

2) Recognize that contexts are seldom linear: use mapping. Forming categories is a kind of perceptual mapping and according to Gilbert Ryle, philosophical trouble arises from attempting to process an understanding within a category to which it does not belong. The radiant thinking described by Buzan (1995) and the mapping he advocates brings both extension and order to very complex ideas and is useful for exploring possible categories. The representation of all the contributing ideas and the relationships between them, ensures the context is vividly drawn. Recording the dynamic processes of thought in this way itself stimulates thought. Context is a system of interrelationships: effects flow in multiple directions. Mapping or systems diagrams enable the complexities of cause and effect to be explored: they make visible structures which are not revealed by linear thought.

3) Highlight tensions. The identification of tensions is an important step in the process of understanding context. Paradox, dynamic equilibrium,

counterbalance, are 'the stuff' of relationships. Rosen (1994) uses the example of the Moebius strip to illustrate the place of dynamic tension in being whole.

...(T)he distinctiveness of the sides is not simply negated when the Moebius structure is taken as a whole; the Moebius surface is not "one-sided" in the simple, undifferentiated sense of the single side of a cylindrical ring. The paradox is that, although opposing sides of the Moebius are fundamentally identified, they maintain their difference as well; the Moebius is one-sided while also being two-sided.... Thus, in the Moebius transformation, reflexive self-reference and reference to other are thoroughly blended. (Rosen, 1994, p.14)

4) Consider ideas that run counter to reason and/or experience but that resist refuting. Counterintuitive ideas challenge what we do not even realize are assumptions. Feyerabend encourages researches to explore ideas that are refuted by their natural interpretations. "Ideological ingredients of our knowledge and, more especially, of our observations are discovered with the help of theories which are refuted by them. They are discovered counter inductively." (Feyerabend, 1975, p. 61)

5) Recognize the limits of reasoning. Despite the privileged place of reason in the establishment of knowledge, if the full context of an idea or concept is to be explored there are other human capacities that play a part. Evidence, proof and logic are only part of understanding and place of experience, memory, interpretation, feeling, intuition, belief, and even faith must be countenanced if the idea of context is to be fully honoured. Acknowledgement must be made that ultimately thought is limited and that even complex cognitive understandings fall short of the richness of reality.

6) Identify incongruence in the use of language. Philosophical investigation is inextricable linked to language, both receptively and expressively. It is aimed at identifying confusion and developing clarity. Wittgenstein says that what is

required is “a clear view of our use of words”.

A main source of our failure to understand is that we do not command a clear view of the use of words – our grammar is lacking in this sort of perspicuity. A perspicuous representation produces just that understanding which consists in “seeing connections”... The concept of perspicuous representations is of fundamental significance for us. It earmarks the form of account we give, the way we look at things. (Wittgenstein, 1958, PI 123, in Savickey, 1999, p. 49)

If I had to say what is the main mistake made by philosophers of this generation I would say that it is when language is looked at, what is looked at is a form of words and not the use made of the form of words. (Wittgenstein’s Lectures. Cambridge. Quoted in Savickey, 1999, p. 67)

Philosophical investigation congruent with gaining an understanding of holism

It has been established in this chapter that certain techniques of analysis are antithetical to the notion of holism. However, there remain ways of gaining understanding that are careful, detailed and rigorous but which do not dissect and expect no remainder, which illuminate, render clear, and focus on inter-relatedness and connection and which emphasise the potential for thought to be a stream or process rather than a fixed image or bite of information.

Whitehead (1938) makes the distinction between logical understanding and aesthetic understanding. Whereas logical understanding is based on ‘the difference between different things, conceived as alternative factors in a composition’, aesthetic understanding applies ‘beyond’ this to appreciation of what Whitehead calls ‘self evidence’. His examples are the enjoyment of proportion in art and architecture and music, the excitement engendered by the beauty of mathematical proofs.

In the first place, they are both concerned with the enjoyment of a composition, as derived from the interconnections of its factors. There is one whole, rising from the interplay of many details. The importance arises from

the vivid grasp of the interdependence of the one and the many. If either side of this antithesis sinks into the background, there is trivialization of experience, logical and aesthetic. (ibid. p. 60)

Whitehead is making a case for balance. The degree of abstraction required in logic is contrasted with the relatedness of aesthetic understanding.

In his view, logic starts with discrete ideas and explores what fits together, while at the other extreme, aesthetic enjoyment, the beauty of the whole precedes the details. He is appealing for the utilisation of both kinds of understanding because complex systems have characteristics of entirety, wholeness, oneness and they have characteristics of components, parts, inter-related constituents. It requires some consideration to bring both these contrasting views to light.

Strawson (1992) differentiates the “more or less systematic reflection of the human situation which one finds in the work of, say, Heidegger, Sartre, and Nietzsche ...- a kind of reflection which can sometimes lead to a new perspective on human life and experience”, a new and revealing vision (p. 2) and the work of the analytical philosopher for whom conceptual analysis is a favoured activity. He proceeds to examine three metaphors used to understand the idea of conceptual analysis.

The most common metaphor is that of dismantling. In this understanding, conceptual analysis is thought to be no more than the breaking down or decomposing of something... “a kind of intellectual taking to pieces of ideas or concepts: the discovering of what elements a concept or idea is composed and how they are related”(ibid. p. 2). This kind of analysis always aims in the direction of greatest simplicity and terminates only when reaching pieces too small to be analysed further. In assessing the outcome, the verdict of circularity is fatally damaging.

The second metaphor is that of the chart: the drawing up of the elements

involved. In this distinction, representation of a domain of thought or conceptual mapping, for example Ryle's 'conceptual geography', is the predominant method. This view of philosophical enterprise declares the representational nature of conceptual mapping and hence its interpretative nature. It acknowledges the influence of the mind of the thinker. It makes no claim to objective 'truth'.

The third metaphor Strawson offers is the image of,

...the analytical philosopher as "a kind of therapist, who undertakes to cure certain characteristic kinds of intellectual disorder". He (sic) offers no doctrine, no theory; rather, he brings to bear a technique. When we try to think at a philosophical level, we are apt, according to this view, to fall into certain obsessive muddles or confusions; to see ourselves as led by reason to conclusions which we can neither accept nor escape from; to ask questions which seem to have no answers or only absurd answers; to become unable to see how what we know very well to be the case can possibly be the case; and so on. The role of the analytical philosopher is then to straighten us out, or help us straighten ourselves out; to free us from the obsessive confusions, the false models which dominate our thinking and to enable us to see clearly what is in front of us. Thus Wittgenstein says: "The philosopher's treatment of a question is like the treatment of an illness". We are to go to him, it seems, somewhat as a neurotic goes to an analyst. (Strawson, 1992, p. 3)

The important questions in this view of philosophical analysis are: How did this philosophical impasse come about and how can it be resolved? Strawson claims that these conceptual muddles arise when we let ideas become detached from the theoretical or practical conditions from which they draw their significance. When ideas are ill-used by idle or disengaged thought processes all kinds of confusion and distortions result. Barriers are created against understanding. Seedhouse (1997) identifies three types of statement that lead

in varying degrees to these conceptual muddles. Each contributes to the illusion of shared meaning. Each is an obstacle to clarity.

- Statements of limitless meaning: vagueness leaves endless opportunity for legitimate but completely different interpretation
- Meaningless statements: absence of specificity prevents understanding
- Statements of limited meaning: give some sense of shared understanding but require justification and elaboration

Philosophical investigation reveals these barriers to meaning. What Strawson calls “the wildly racing, but idle intellectual engine”, must be engaged.

The first of Strawson’s metaphors is clearly inappropriate as the dominant method of approaching the notion of holistic health care, although all thinking necessarily entails some focus on ‘the elements’, the parts, the constituents. The mapping and the therapeutic metaphors, with their emphasis on the role of context in meaning are more suitable to an investigation of the kind undertaken in this study. They go some way to describe the *activity* carried out in a philosophical investigation.

The understanding of philosophy as an activity is one embraced by Seedhouse, who in the second edition of Health: The Foundations for Achievement (2001) makes a clear distinction between professional philosophy and philosophy as a form of thinking. He advocates “philosophy as a form of thinking that everyone can and should do” and describes the process of philosophical inquiry.

Philosophical activity is more concerned with retaining awareness that clarifications are incomplete than it is with obtaining “the right answers”. ...It demands an intense personal involvement with fundamental questions which

cannot be let go and which must be pressed as far as possible. Philosophy involves asking questions... which perhaps seem too obvious to ask. Yet nevertheless a philosopher must ask them repeatedly and rigorously. Philosophy is a personal fight for clarity, a personal struggle – a wrestling match in which you are never certain that you have an opponent other than yourself. (ibid. p. 17)

Whitehead (1938) too described philosophy as a resolute intention to inquire, a refusal to accept 'the obvious' without challenge.

Philosophy is an attitude of mind towards doctrines ignorantly entertained. By the phrase "ignorantly entertained" I mean that the full meaning of the doctrine in respect to the infinitude of circumstances to which it is relevant, is not understood. The philosophic attitude is a resolute attempt to enlarge the understanding of the scope of application of every notion which enters our current thought. The philosophic attempt takes every word, and every phrase, in the verbal expression of thought, and asks, What does it mean? It refuses to be satisfied by the conventional presupposition that every sensible person knows the answer. As soon as you rest satisfied with primitive ideas, and with primitive propositions, you have ceased to be a philosopher. (ibid. p. 171,172)

This kind of philosophical analysis is very different from scientific analysis. It is rigorous but it does not involve establishing explanations based on the smallest identifiable element nor does it insist on linear progression of cause and effect. Strawson (1992) describes this alternative process.

Let us imagine, instead, the model of an elaborate network, a system of connected items, concepts, such that the function of each item, each concept, could, from the philosophical point of view, be properly understood only by grasping its connections with others, its place in the system - perhaps better still, the picture of a set of interlocking systems of such a kind. If this becomes our model, then there will be no reason to be worried if, in the process of tracing connections from one point to another of the network, we find ourselves returning to, or passing through, our starting point. (ibid. p. 19)

While there are those who believe that a thorough understanding of holism and hence by inference, holistic health care, is inaccessible through philosophical analysis, Strawson is describing a way of thinking that eminently suits such an investigation. This study is about exploring the connections, the network of

ideas that coalesce to communicate understandings of wholeness. This chapter has examined the possible obstacles and has described ways in which philosophical investigation can be justifiably employed in the exploration of holism. It has shown that analysis has more than merely a destructive face, and has identified the value of context in understanding. These ideas will be developed in future chapters and the value of using the philosophical techniques described above will be demonstrated.

Chapter Three

Leucippus' legacy: Atomism

...for the world, which seems

To lie before us like a land of dreams

So various, so beautiful, so new,

Hath really neither joy, nor love, nor light,

Nor certitude, nor peace, nor help for pain

And we are here as on a darkling plane

Swept with confused alarms of struggle and flight

Where ignorant armies clash by night.

From: Dover Beach. Mathew Arnold. (in The Norton Anthology of Poetry. Eastman, 1970, p. 833)

The previous chapter established an argument for the conservation and use of the context of an idea, to develop understanding. Therefore, in attempting to capture the essence of holism, it important to explore its sometime antagonist atomism. The nature of the relationship between holism and atomism will emerge as this exploration develops. Superficially these appear to be mutually exclusive approaches and many have pitted them against each other. As a central metaphor of modernism, atomism has influenced all aspects of western culture for centuries. As the dominant conceptual view of science, atomism has become the lens through which the phenomena of life are examined. Originally

perceived by Leucippus and his pupil Democritus as a way of describing the constituents of reality, notions of the value of the smallest possible units became central to attempts to understand everything. Virtually every aspect of our cognition, of our conceiving the world around us has been saturated with atomistic metaphor.

Edge (1994) has identified atomism as one of the four assumptions contributing to the cognitive style of the modern era and thus as one that is challenged by postmodern thinking. Atomism is described as being both an understanding of the constituents of reality and a way of pursuing knowledge. Complex ideas are seen as simply aggregates of smaller bits of knowledge. Methods of understanding these complexities involve a breaking down to constituent parts and investigation of each of these parts individually: a form of reductionism.

Atomism as culprit

Evidence of the fragmented and disharmonious world around us points to some of the consequences of the thought habits of modernity.

Faced with the various crises before us, from ecological to social, in which pollution, crime and schizophrenia mushroom, we hesitate at the gravity of our contemporary situation. It is a predicament, many would argue, that is due largely to our loss of a basic sense of who we are as individuals as well as a certain growing barrenness of vision that occludes our very understanding of what it means to participate in the human enterprise. Thus one of the primary problems in contemporary American life, the root of our growing inability as individuals to express a commitment to something larger than the self, to the community, is that we have lost sight of self as part of the community. In fact, we view ourselves as atomistic, as cut off from the community, and this has left a great void. (Edge, 1994, p. 16)

The twentieth century ended with sombre commentaries on the alienation and sense of futility consuming humankind. Many of these make reference to the disconnection between the individual and a greater reality or even to the

destruction of a sense of a greater reality. Spretnak (1991) links the denial of the sacred with atomistic thinking. Essentially, this is a 'part-whole' problem.

Because modern Western culture has enthroned science (or rather an arrogant notion of that mode of enquiry) and "scientific" scepticism towards anything that cannot be quantified, religion has been pushed to the cultural periphery in Eurocentric societies; except for occasional exploitation by politicians. The sense of the sacred – our human perception of a larger reality, ultimate mystery of creativity in the universe – has become so diminished that we lack the richly nuanced spiritual vocabulary of language and visual arts that is the birthright of everyone born in to a traditional culture... Even among people with a rudimentary knowledge of the major religions of our country, or at least the one in which they were born, spiritual concerns are experienced as increasingly incongruous with the dynamics of a relentlessly orchestrated consumer society in which "you are what you buy". Perhaps "you are what you experience" in which case our ontological range of possibilities may continue to shrink as marketing manipulation increases and our authentic sense of relatedness to other beings decreases. (Spretnak, 1991, p. 3)

Warnings about this alienation had been made earlier in the century.

Primitive man (sic) believed the world was full of unseen forces: the orenda (spirit force) of the American Indians, the huaca of the ancient Peruvians. The Age of Reason said that these forces had only ever existed in man's imagination; only reason could show man the truth about the universe. The trouble was that man became a thinking pygmy and the world of the rationalist was a daylight place in which boredom, triviality and "ordinariness" were ultimate truths. But the main trouble with human beings is their tendency to become trapped in the "triviality of everydayness" (to borrow Heidegger's phrase), in the suffocating world of their personal preoccupations. And every time they do this, they forget the immense world of broader significance that stretches around them. And since man needs a sense of meaning to release his hidden energies, this forgetfulness pushes him deeper into depression and boredom, the sense that nothing is worth the effort. In a sense the Indians and Peruvians were closer to the truth than modern man, for the intuition of "unseen forces" kept them wide open to the vistas of meaning that surround us. Goethe's Faust can be seen to be the greatest symbolic drama of the West, since it is the drama of a rationalist suffocating in the dusty room of his personal consciousness, caught in the vicious circle of boredom and futility which in turn leads to still further boredom and futility. (Wilson, 1979, p. 25)

These writers are lamenting the loss of our capacity for community, even the loss of our capacity to be aware of reality.

Koestler (1978) on the other hand laments humankind's eroded sense of individual wholeness, our lack of self assertion in the face of what he calls the "excessive capacity and urge to become identified with a tribe, nation, church, or cause, and to espouse its credo uncritically and enthusiastically, even if its tenets are contrary to reason, devoid of self interest and detrimental to the claims of self-preservation". (ibid. p. 14)

The crimes of Caligula shrink to insignificance compared to the havoc wrought by Torquemada. The number of people killed by robbers, highwaymen, gangsters and other asocial elements is negligible compared to the masses cheerfully slain in the name of the true religion, the righteous cause. Heretics were tortured and burned alive not in anger but in sorrow, for the good of their immortal souls. The Russian and Chinese purges were represented as operations of social hygiene, to prepare mankind for the golden age of the classless society...the ravages caused by excesses of individual self-assertion are quantitatively negligible compared to the numbers slain ad majorem gloriam out of a self-transcending devotion to a flag, a leader, a religious faith or political conviction. (Koestler, 1978, p. 77)

This illustrates a central malaise of humanity to be confusion between the tendency to wholeness and the tendency to partness. The extremes of the manifestations of this malaise mask their common origin. Exploring this confusion is one step towards the clarification of the relationship between wholeness and health.

Atomism as choice

The loss of a sense of connectedness that characterises modern human experience (and which may paradoxically be responsible for the over-zealous loyalty to causes that Koestler bewails) can be contrasted with the ancient view of the relationship between people and their context. For example, Edge (1994)

contrasts the ideas of Socrates and Thomas Jefferson. The difference between the understanding of personhood as citizen, as a part of and inseparable from the notion of state, and of personhood as individual with inalienable rights, could be no more distinct.

To (the Greeks) one could only be a person within a state: indeed one must define part of what it means to be a person as being a member of a community. Aristotle admonishes that to live apart from the state you have to be either a god or a beast. Another way of understanding the Greek view point is to note that their word "idiotes", from which we get the word idiot, meant a purely private person, i.e. one not participating fully in public life. (Edge, 1994, p 18.)

In defiance of this extreme expression of humankind's place in context, as modern western people, we remain at a loss to make sense of our longing for connectedness. We resist the realization that we are constituted by our relationships to our context, placing great value on individual striving and achievement. We have a culturally acquired distaste for a contextual prescription for 'personhood'. We choose the Jefferson way: the inalienable rights, the status of the group being the service of the individual. Our choice has profound influences on our views of health and on our experience of wholeness.

Atomism's offspring

1) Individualism

The dominance of individualism is a remnant, perhaps a tacit one, of the positivist view of the philosophy of science. The quest for the most fundamental explanation, the plea for a unification of knowledge and for the universal language of science, are mere shadows of a past epoch but their power is still evident. The status of physics has meant that its preoccupation with the smallest units of matter has been extended to the social world where individualist explanations are seen as more powerful than social ones. The

assertion that social wholes are incomprehensible and that claims about them are untestable, illustrates the way the positivist ethic negates their value. From this view, wholes are not real, or are in some way less relevant than individual phenomena because they are not accessible with the use of the scientific tools.

Scholars through the ages have used the word 'individualism' in a variety of different ways, some with fiercely positive and some with unfavourable connotations. Indisputably it is a value laden notion, one that has entire political philosophies woven around it (Munro, 1985). The notion of individualism is a modern phenomenon, and a peculiarly western one.

It can be seen to have at least these facets:

- proclaiming the self as the dominant factor in social life,
- a rights-based claim to freedom from undue influence,
- the self centred pursuit of the goodlife,
- affirmation of uniqueness,
- characteristic attributes of independence, self sufficiency and autonomy.

In this instance, it is the nuances that can be seen to have their origins in atomism that are of interest. It is thus the 'separateness', the self-sufficiency, the primacy of the self as a basic unit of society, which characterise the individualism that is frequently seen as opposed to holism.

The claims of Reason, as the singular and sufficient way of gaining understanding of the world, has fed this experience of separateness, of

independence which, via thinkers like Descartes, Hobbes and Locke, we have entrenched in our sense of ourselves.

Hobbes declared ‘the covenant’ whereby individuals agree, (or ought to agree), to the authority of a sovereign body to be the only way to preserve the individual from the consequences of their natural inclination for liberty for the self and domination over others. “In a state of nature, before there is any government, every man desires (not only) to preserve his own liberty, but to acquire dominion over others; From their conflict arises a war of all against all, which makes life ‘nasty, brutish and short’” (Russell, 2000, p. 535). Locke saw civil involvement as a chosen, (even if tacitly) discretionary act with individual gain as motive: autonomy from the state is human nature, voluntary association with community is chosen when required. Account of the development of human nature in a state of freedom from external authority came to mean ‘in a state of freedom from outside influence’. Western society has come to associate individuality with freedom and thus to defend it vigorously, perhaps unaware of Newton’s influence on the understanding of what it is to be a person.

Locke was writing in a time when the influence of Robert Boyle and Isaac Newton was immense. Both described the physical world as composed of atoms in otherwise empty space – separate and indivisible chunks of matter, having no internal relation to one another, each defined in terms of itself alone and existing independently of other atoms. When these atoms happen to combine, they created objects in the world, and it was the job of science, in this view, to describe how atoms associated with one another. According to this viewpoint, all of reality could be adequately described merely in terms of atoms in space. It is the natural state of the world...to be composed of atoms, having external, contingent, spatial relationships. (Edge, 1994, p. 20)

Ideas of freedom were, in the enlightenment centuries, associated with escape from the dominion and authority of the powerful group, whether political or religious. Attaining freedom meant distancing oneself, politically, doctrinally or even geographically from this dominant group, which was commonly the only one sanctioned. Thus separation became a prerequisite for freedom and became valued as such. It is not a big step to the conclusion that self-

sufficiency is a tool for freedom, a manifestation of autonomy.

This in turn is fertile ground for extremes of individualism and to the hegemony of individualist theories. Traditional ideas of community are lost in the pursuit of individually fulfilling lives. As Wilson (1979) describes, a notion of selfhood that has its roots in separateness, thus becomes dominant in western culture, leaving people “trapped in the ‘triviality of everydayness’, in the suffocating world of their personal preoccupations”, to borrow Heidegger’s phrase.

This was not what the fathers of individualism had foreseen. The notion was initially proclaimed in an entirely more positive way. Friedrich Schleiermacher, in revolt against the view that the common capacity to reason ensures a common view of a good life, proposed that individual uniqueness of thought and conduct were defining features of personhood. Other German Romantics took up the cause of the uniqueness of the individual and maintained that pursuit of this uniqueness was a primary moral value. Schlegel describes this value as *individuality*. In a study by Randall (1965, cited in Munro, 1985) Schlegel’s view is described.

In the fullness of individual differences Schlegel sees a new moral law. Universal sympathy is too narrow a principle for the moral Gemut. “The truly spiritual man (sic) feels something higher than sympathy”. He feels the individuality of the other, which is sacred to him not because it is the other’s but because it is individuality. For him every infinite individual is God. For “it is just individuality that is the original and eternal in man; mere personality is not so momentous. To pursue the cultivation and development of this individuality as one’s highest calling would be divine egoism. (ibid. p. 3)

The single-minded nurture of individuality was seen as a moral duty and a path to inner fulfilment. History has shown these to be hollow words.

Edge (1994) however, has made an important distinction between individualism and individuality. In support of this he quotes Geerts.

...(I)t is altogether possible for us to reject our atomistic notion of individualism and still retain the vital concept of individuality, of self as unique and inviolate. "Culture provides the link between what men (sic) are intrinsically capable of becoming and what they actually, one by one, in fact become. Becoming human is becoming an individual under the guidance of cultural patterns, historically created systems of meaning in terms of which we give form, order, point and direction to our lives". (ibid. p. 26)

This distinction allows the possibility that robust individuality is a major part, but only a part, of the emergence of personhood and the wholeness of which humanity is in search. The tension between the assertion of the self, the individual, and the integration of the self with a greater community, is the characteristic struggle of humankind and the source of the experience of wholeness (Koestler, 1978). Jung describes the same kind of struggle within the individual.

*Conscious and unconscious do not make a whole when one of them is suppressed and injured by the other. If they must contend, let it at least be a fair fight with equal rights on both sides. Both are aspects of life. Consciousness should defend its reason and protect itself, and the chaotic life of the unconscious should be given the chance of having its way too –as much of it as we can stand. This means open conflict and open collaboration at once. That, evidently, is the way human life should be. It is the old game of hammer and anvil: between them the patient iron is forged into an indestructible whole, an individual. (Jung, *Conscious, Unconscious and Individuation*, in Storr, 1983, p. 225)*

The individualism against which holism is pitted is not that which values uniqueness such as that proposed by the German Romantics and later by John Dewey. Nor is it the spirit of individualism that rises up against totalitarian states where individual citizens are held powerless and unable to manifest their individuality. It is the individualism that proclaims the individual to be the fundamental unit of humanity in the same way as atoms were perceived to be fundamental units of reality – separate, wholly self sufficient and self interested entities. It is in this individualism that humans experience the loss of connectedness that is claimed to undermine health.

2) Dualism

The propensity to see and contrast opposites has been a human thought pattern manifest since early philosophical enterprises. As the simplest form of making distinctions, deriving two categories is the first step to making sense of the world – what is and what is not? These distinctions need to be supported by argument, as noted differences may not be universally accepted. Deliberation about the validity of these categories is at the heart of much philosophical thinking. Parmenides took the Pythagorean question, ‘Is it or is it not?’ as a basis for his contemplation of the nature of reality as uncreated, immovable, indivisible and indestructible.

What is, is therefore a finite, spherical, motionless, continuous plenum, and there is nothing beyond it. Coming into being and ceasing to be are mere “names”, and so is motion and still more colour and the like. They are not even thoughts; for a thought must be a thought of something that is, and none of these can be. (Burnet, 1968, p. 54)

It is impossible to give an intelligible account of the world if we acquiesce to this understanding. Subsequent philosophers realised this monism was untenable in the face of the irreducible differences in the world and that the idea that all that *is*, is one, had to be reconsidered. For example, the Pythagoreans offered an early example of overcoming the unification of everything idea by the notions of the Limit and the Unlimited. They distinguished ‘number’ from matter or substance, stating that pattern or number is what limits matter and gives it its shape. Empedocles proposed that Love and Strife were fundamental causes of motion in reality and these opposing ‘fluids’ caused mixtures that made coming into being apparent in the four ‘roots’, fire, air, earth and water. Plato’s opposition of the world perceived by the senses, and the world of forms was preceded by Anaxagoras of Klazomenai’s ideas of elemental ‘seeds’ which were the traditional opposites wet and dry, hot and cold, etc.: “...the things in one world are cut off from one another with a hatchet” (cited in Burnett, 1914, p. 63). Aristotle too, distinguished matter and form but considered them as

interdependent; form had no separate existence from matter which in turn could not exist separately from form. The potential of matter was seen to be realised by means of form.

By means of form this essence becomes real, or actual. The process of self-realisation of the essence in the actual phenomena is by Aristotle called entelechy ("self completion"). It is a process of development, a thrust toward full self-realization. Matter and form are the two sides of this process, separated only through abstraction. (Capra, 1996, p. 18)

This view of interwoven mutual thriving between mind and matter was lost and the medieval world was characterised by various manifestations of radical dualism, both political and theological:

There is the dualism of clergy and laity, the dualism of Latin and Teuton, the dualism of the kingdom of God and the kingdoms of this world, the dualism of the spirit and the flesh. All these are exemplified in the dualism of the Pope and the Emperor. (Russell, 1946, p. 394)

The practise of distinguishing between two entities was called dualism by Heyde about 1700 (Urmson 1976) and has been applied to various ontological views but most famously to Descartes' division of the world into 'extended substance' and 'thinking substances'. In search of a criterion for certainty, Descartes distinguished doubt, a kind of thought, as unquestionably certain.

But what then am I? A thing which thinks. What is a thing which thinks? It is a thing which doubts, understands, conceives, affirms, denies, wills, refuses, which also imagines and feels... Is there nothing in all this which is as true as it is certain that I exist, even though I should always sleep and though he who has given me being employed all his ingenuity in deceiving me? (Descartes, Meditations, in Chavez-Arviso, 1997, p. 143)

As a subject of conscious thought and experience, Descartes argued for the existence of more than spatially extended matter. He asserted that the separate existence of mind and body is conceivable and therefore it is possible. This distinction has evolved into the perennial mind-body problem that is

fundamental to the philosophy of mind. There can be no adequate exploration of this conundrum in this work, but since holism is so commonly posited as an antidote to dualism and in particular the mind-body split, some attention to it is useful.

Substance dualism holds that the mind or soul is a separate, non physical entity, but there is also a double aspect theory or property dualism, according to which there is no soul distinct from the body, but only one thing, the person, that has two irreducibly different types of properties, mental and physical. Substance dualism leaves room for the possibility that the soul might be able to exist apart from the body, either before or after death; property dualism does not. Property dualism allows for the compatibility of mental and physical causation, since the cause of an action might under one aspect be describable as a physical event in the brain and under another aspect as a desire, emotion or thought; substance dualism usually requires causal interaction between the soul and the body. (Honderich, 1995, p. 207)

Descartes' distinction between bodies as machines governed by the laws of physics and devoid of feelings or consciousness and minds as souls, is perhaps at the heart of the problem of the mechanistic view of what it means to be a person. Edge (1994) describes this view as the pragmatic response of the Renaissance inquirer to the relationship between Science and Church. Having seen Galileo castigated by the Church for his scientific views that encroached on the territory of the dominant theology, Descartes who was as much a mathematician as a philosopher, recognized the advantage of dividing the world into two realities. In this way, science could progress unencumbered by the dogma of religion. The Cartesian worldview gave birth to a 'legitimate and free science'.

Whether Edge is correct in asserting that Descartes' unannounced agenda was the freeing of science from the tyranny of theological dogma or not, it is relevant to the present work because the technique is one which is deeply rooted in the health care strategies of today. One consequence of the arguments against mind-body separation has been the 'disappearance' of mind.

Separation of body and mind enables the 'scientific method' to be applied in a mechanistic way. The mind cannot be fully explained by science and there is no room for transcendence in the scientific world. Issues about boundaries, professional or intra personal, and ideas about whether these are distinct or permeable, fixed or negotiated, are crucial to ideas about holism and health care. These are however often separated from clinical issues which are seen as the kernel of health care. Bodies as machines can legitimately be treated in a particular way, whereas bodies as aspiring wholes cannot legitimately be treated in this same way. Descartes' dualism was one of the influences on thinking that steered the development of science towards the mechanistic worldview that has been so criticized by, among others, the postmoderns.

There is an irony here. In order to defend a position for Mind at all, arguments in support of Descartes' distinctions and against what is known as the identity theory of mind which equates mental events merely with physical biological processes in the brain, are proposed. Kripke for example, states that if two things can be said to exist separately, they cannot be identical. While what happens in the mind is clearly dependent on what happens in the brain, the physical counterparts do not add up to the entirely private affair of subjective experience.

As the eye does not see or "have" intelligence or talents – ...so neither do the optic nerve, the optic radiation, the lateral geniculate, the primary visual cortex, or the now up to forty or more claimed visual protection or integration areas. And the same is true of all the senses. The anatomy does not solve sensory-rational puzzles, though it supplies nourishment for that puzzle. The mind does that solving. And it is the mind which continues to strive to draw informational nutrition from the senses, despite peripheral and even central-cortical injuries to their anatomy.... No modern science of psychology can maintain... that the integrity of the brain is irrelevant to such things: that would be rank nonsense. However, no modern neurophysiology has shown, nor I think can ever show, that brain integrity is all that is relevant. (Shipley, 1995, p. 36,37)

Clearly Shipley thinks that Descartes was correct to state that the mind is not

'in' the brain.

The relationship between consciousness and matter has been examined in multiple different ways yet the *generation problem* (Seager, 1999), the problem of explaining how the physical workings of the brain generate or underlie conscious experience remains enigmatic. And while dualistic theories at least acknowledge the serious difficulty of locating consciousness in a conception of the physical world, they give metaphysical expression to the problem, rather than a solution to it. Bohm (1980) explores the idea of unbroken wholeness as a characteristic of reality but defers to Descartes' assertion of the manifest difference between states of matter and states of mind. Bohm goes on to draw similarities between the 'thinking substance' of Descartes, which does not have existence in space, with his idea of *the implicate order*, (from the Latin root meaning 'to fold inward').

In terms of the implicate order one may say that everything is enfolded into everything. This contrasts with the explicit order now dominant in physics in which things are unfolded in the sense that each thing lies only in its own particular region of space (and time) and outside the regions belonging to other things. (Bohm, 1980, p. 177)

By using the term "thinking substance" in such a sharp contrast to "extended substance" he was clearly implying that the various distinct forms appearing in thought do not have their existence in such an order of extension and separation (i.e. some kind of space), but rather in a different order, in which extension and separation have no fundamental significance. The implicate order has just this latter quality, so in a certain sense Descartes was perhaps anticipating that consciousness has to be understood in terms of an order that is closer to the implicate than it is to the explicate. (Bohm, 1980, p. 196, 197)

It is not necessary to elaborate on the nature of Bohm's theory at present but it serves to demonstrate that whenever wholeness is being explored, the distinctions of mind and matter remain perennial considerations.

3) Reductionism

This term is used in a cavalier fashion in reference to various thought strategies that involve a search for a fundamental truth or a unit of validity and which tend to forfeit context and competing ideas in order to achieve the simplest explanation.

Theory reduction is a controversial procedure that entails the belief that a particular theory can be shown to be a deductive consequence of another. For example, reductionism in philosophy of mind is the claim that facts about mental events can be reduced to physical facts. The quest for a single unifying theory of science was fuelled in the 1930s by the possibility of reducing all theories to one overall (probably physical) theory. Kuhn argues however, that established paradigms are overturned by new paradigms, rather than reduced by them. Few argue for the possibility of actually reducing one theory to another, particularly across disciplines but a remnant of the reductionist legacy remains in the form of greater status for theories of physics. Ontological reductionism refers to the assertion that the whole of reality consists of a minimal number of entities or truths and that all other phenomena are reducible to descriptions of these. This claim in extreme is a form of monism; all is reducible to one substance that is material (or less commonly, consciousness).

The scientific revolution of Copernicus, Galileo, Descartes, Bacon and Newton quantified reality and enthroned measurement as technique for understanding the universe.

The Aristotelian tradition of the poets, philosophers and artists of the eighteenth century Romantic movement was overshadowed by the metaphor of the machine as scientific triumphs of the nineteenth century were lauded. The triumph of 'the part' over 'the whole' was however a pyrrhic victory with the impoverishment of the self, the loss of God and the atrophy of the ability to

consider the whole. Those who appreciate the loss this process incurred are vociferous in their comment.

Galileo's program offers us a dead world; Out go sight, sound, taste, touch and smell, and along with them have since gone (a)esthetic and ethical sensibility, values, quality, soul, consciousness, spirit. Experience as such is cast out of the realm of scientific discourse. Hardly anything has changed our world more during the last hundred years than Galileo's audacious program. We had to destroy the world in theory before we could destroy it in practice. (Laing, cited in Capra, 1996, p.19)

Of course reductionism has been useful. Methodological reductionism has been the strategy of some of science's greatest successes. But even these require replacement in context if they are not to lead to impoverished understandings. The discovery of the gene as the unit of heredity is an example of specialised knowledge at a sophisticated level able to sustain the role of explanatory theory for the human phenotype. But if reductionism means claiming this to be all there is to being human, understanding can be said to be impoverished and the prophecies of writers like Wilson (1965) will be vindicated.

It may well be that future generations will describe the first half of the twentieth century as "the age of meaninglessness"; the sense of lack of meaning, of purpose, dominates our literature, art and philosophy. There is a general feeling that the certainties provided by religion have been lost and can never be replaced: science, by solving our practical problems, can only make this inner void more painfully obvious. It seems self-evident that in this sense of purpose, inner direction, Western culture has been running at a heavy loss for at least a hundred years; it is a matter for speculation how long it can go on before becoming completely bankrupt. (Wilson, 1965, p.16)

The costs

Many people have deep concerns about the extent to which humanity has been dwarfed by 'reductionist thinking' and by scientific scepticism towards anything that cannot be quantified. It is these concerns, for loss of meaning and context that are the context for the revival of appeals to holism. There are three costs

that can be identified as having significance for the notion of health.

1) *The impoverishment of Self.*

This cost manifests in two paradoxical ways. Firstly the idea of self has been narrowed by an overemphasis on individual autonomy as its prime constituent. Mainstream psychological and indeed the common sense understanding of a mature personality is a robust ego. The self, from a western view, has become associated with individualism and autonomy which are deemed to arise from self assertion. An argument for the notion of self to include more than a strong ego, has already begun earlier in the chapter. Koestler's ideas about the equilibrium between the tendencies to self assertion and to integration with a greater whole being a fundamental characteristic of health, reveal a more relational notion of self. This is a challenge to the view that whatever relationships a person has to others, the environment, a cause, some greater whole, are merely contingent and that the self is a more or less atomic unit. It is a challenge to the idea implicit in some views of health that individuals have health problems that can be addressed in isolation.

The second way the idea of the self has been diminished is by attempts at reduction of mental states to physical states.

For as reductionism was successfully employed to analyse nature, and then human nature as well, man (sic) himself was reduced. With science's increasing sophistication, it seemed likely, perhaps even necessary, that the laws of physics were in some sense at the bottom of everything. The phenomena of chemistry could be reduced to principles of physics, those of biology to chemistry and physics, and, for many scientists, those of human behaviour and awareness to biology and biochemistry. Hence consciousness itself became a mere epiphenomenon of matter, a secretion of the brain, function of electrochemical circuitry serving biological imperatives....Man's future, his very essence, appeared to be as contingent and unmysterious as an engineering problem. (Tarnas, 1996, pp. 331, 332)

This attenuated, simplified, impersonal view of humanness has gained a

stronghold as if the reduction idea that caused it were more than a proposal up for debate. The consequences of this view to our understanding of the complexity that is 'the self' are evident in the sense of meaninglessness expressed above by Wilson (1965).

2) *No place for God.*

The greater the domination by science has become, the greater the effects of its reductionist methods. With the dualism of the body mind split, the ideal of objective knowledge and the emphasis on rationality as the only route to knowledge, the world assumes the appearance of something entirely secular. Van Inwagen (1994) describes this process and its results in what he calls the Enlightenment's Creed.

There is no God. There is, in fact, nothing besides the physical cosmos that science investigates. Human beings, since they are part of this cosmos, are physical things and therefore do not survive death. Human beings are in fact, animals among other animals and differ from other animals only in being more complex. Like other animals, they are a product of uncaring and unconscious physical processes that did not have them, or anything else in mind. There is, therefore, nothing external to humanity that is capable of conferring meaning or purpose on human existence. In the end, the only evil is pain and the only good is pleasure. The only purpose of morality and politics is the minimization of pain and the maximization of pleasure. Human beings, however, have an unfortunate tendency to wish to deny these facts and to believe comforting myths according to which they have an eternal purpose. This irrational component in the psyches of most human beings – it is the great good fortune of the species that there are a few strong minded progressives who can see through the comforting myths – encourages the confidence game called religion. ...Fortunately, they are gradually but steadily being exposed as frauds by the progress of science and they will gradually disappear through the agency of scientific education and enlightened journalism. (ibid. p. 49)

Perhaps it is simplistic to claim a direct link between the ascendance of modern science and the secularisation of society but certainly the popular interpretation of modern science has rendered the claims of a god beyond this world

incredible The idea of a mechanistic universe has led to views of humans as gene machines, economic units, consumer units. Emphasis on measurement as truth criterion has ensured that all that is spiritual has been ignored or condemned as pseudo science. “To the Enlightenment, that which does not reduce to numbers, and ultimately to one becomes illusion; modern positivism writes it off as literature...The destruction of gods and qualities alike is insisted upon” (Horkheimer & Adorno, 2002). Reductionism’s view of organisms as nothing but complex sets of atoms and molecules renders ideas transcendence impossible.

3) *The cost to ways of thinking.*

Bohm (1980) explores the effects of atomistic thinking:

In essence, the process of division is a way of thinking about things that is convenient and useful mainly in the domain of practical, technical and functional activities...However, when this mode of thought is applied more broadly to man’s (sic) notion of himself and the whole world in which he lives (i.e. to his self world view), then man ceases to regard the resulting divisions as merely useful or convenient and begins to see and experience himself and his world as actually constituted of separately existing parts. (Bohm, 1980, p. 2)

Bohm is conceding a limited use for ‘the process of division’ but lamenting both its application beyond its viable limits and the transformation of insights gained into conclusions about how reality ‘is’. Bohm is saying that the notion of fragment exists only ‘in a particular view of the word’ not in reality, which is ‘in fact’, whole. A reification of categories and an obsession with boundaries has fragmented our thought and led to our mistaking the abstract for the concrete, in what Whitehead (1925) has called “the fallacy of misplaced concreteness”. He contrasts this misplaced concreteness with thinking that is free from an excessive mechanical rigidity, that does not fix reality in abstractions, but is able to explore the ever-changing relationships between objects and their contexts and to see the meaning that generates from these relationships.

Concluding remarks

The legacy of the atomists is paradoxically both boon and burden. What is celebrated is access to understanding of the components of reality, what is lamented is the fragmentation this has wrought. This focus on ever smaller parts has been diminishing to personhood, to ways of thinking and to ideas about transcendence. However, as this chapter has established, there are many who recognize the effects of this focus and who have challenged the hegemony of the part. These challenges take various forms but each has as common thread, an appeal to wholeness: the malaise caused by the ministry of the atomists is said to be cured by the balm of wholeness. But what is wholeness? How are we to recognize it? What is the essence of its healing power? These questions must be addressed in this quest to understand the notion of holistic health care.

Chapter Four

Wholeness: The adventures of a concept

The whole is a riddle, an enigma, an inexplicable mystery. Doubt, uncertainty, suspense of judgement, appear the only result of our most accurate scrutiny, concerning this subject. But such is the frailty of human reason, and such the irresistible contagion of opinion, that even this deliberate doubt could scarcely be upheld. (Hume, cited in Jay, 1984, p. 21)

Throughout history, ideas about *wholeness* permeate discourses in fields as varied as theology, politics, science, philosophy, linguistics, social sciences and the arts. There is in human thought an abiding fascination with this notion. This has manifest in centuries of struggle to formulate or capture its essence.

As established in chapter one, the persistent need to invoke *wholeness* to fully express notions of health is ubiquitous. As Hume has declared, the absence of a solution to the riddle, the enigma, the mystery of the whole, has not dimmed the fervour of its acolytes. There have been many attempts to distil the spirit of wholeness and none has been universally fruitful. But few have been summarily barren. Themes that illuminate the realm of wholeness will be examined in this chapter. What we have is a heuristically powerful concept with multiple affirmative connotations, many of which are themselves chimerical: completeness, harmony, order, plenitude, fulfilment. In order to progress towards some useful clarity about the relationship between wholeness and health, and avoid the obfuscating and ideologically saturated jargon documented in the first chapter, the following strategy is proposed.

- Clarify the notion of an essentially contested concept.
- Examine historical ideas of wholeness.
- Make distinctions of the concept of wholeness.

Concepts

It is important to tease out the various uses of the word 'concept' because it will help to identify the kinds of understandings that it is possible to reach about 'wholeness' and 'parts' and 'wholes'. The word 'concept' is often used to imply that meaning is vague and that greater precision is unlikely or not desirable. It is even used to obscure inadequate thinking or to infer connection when none is established. This is not the use of the word 'concept' in this context. It is used here as a *means* of gathering meaning, as a complex web of understandings that generates meaning.

Because they are abstractions of some kind, describing the understanding of 'parts' and 'wholes' as 'concepts of...', is significant: it would be inappropriate to be seeking 'definitions' of 'parts' and 'wholes' and premature to speak of 'theories' at this stage.

What is a concept?

"Concepts allow richer understandings than definitions and involve 'underlying abilities, notably those of a broadly recognitional or discriminatory character.'" (Honderich, 1995, p.146). Concepts are preliminary to knowledge and meaning: before we can understand a proposition, we must have a concept. A concept is not directly equivalent to meaning. Rather, understanding meaning involves, even requires, concepts. Throughout history there has been debate about the possibility of innate concepts, so fundamental do they seem. The Empiricist's claim that concepts arise from experience has been juxtaposed to the Rationalist view that concepts arise in thought that provides a source of *a priori* knowledge of a wide variety of truths. Leibniz, in response to Locke's *Essay Concerning Human Understanding* stated:

Our disagreements concern points of some importance. There is the question whether the soul itself is completely blank like a writing tablet on which nothing has yet been written – a tabula rasa – as Aristotle and the writer of the Essay maintain, and whether everything which is inscribed there comes solely from the senses and experience; or whether the soul inherently contains the source of various notions and doctrines, which external objects merely rouse up on suitable occasions, as I believe and as do Plato and even the schoolmen. (New Essays, Preface a VI.vi, RB 48, cited in Jolley, 1995, p. 176)

For example, it was thought that because a concept of God could be said to exist in language without primary experience, this was seen to imply some innate concept. The argument against, posits this to be an amalgamation of more basic concepts like power, love and joy that *can* be experienced. But as Musgrave (1993) remarks, in support of Popper's 'bucket theory of mind', any innate concepts must be of an extremely general nature in order to be usefully matched with the variety of language structures which they are said to facilitate. This debate iterates through theories of epistemology, philosophy of mind, psychological theory, and theories of language acquisition and rests only due to the lack of either proof of innate knowledge or an adequate explanation of how for example children learn the intricacies of language well before they have rich experiences of the world. This is merely a cursory glance at these issues, sufficient only to flag the diversity of possible understandings of the origin of a concept. Of course, it is quite reasonable to combine elements of both these arguments and to maintain that while there may be natural tendencies of the mind that guide or constrain mental input, concept formation requires sensory experience of some kind. This debate is significant when thinking about wholeness because, as will be discussed later, there are various views of wholeness that appeal to a beyond sensory phenomenon or to a Platonic understanding of concepts as *remembering*. Wordsworth expressed this idea, common in Romantic literature.

Our birth is but a sleep and a forgetting:

The soul that rises with us, our Life's star,

Hath had elsewhere its setting

And cometh from afar.

Not in entire forgetfulness,

Nor in utter nakedness,

But trailing clouds of glory do we come.

(From: Intimations of Immortality from Recollections of Early Childhood, in The Norton Anthology of Poetry. Eastman 1970. p. 580)

A concept is not just an idea, or image of something. It involves sense data both from the external world and inner sense data (of pain, excitement and fear, etc.), and *images* that remain when the object is no longer present. Concepts are combinations of sensory data and of ideas that coalesce as a result of experience of and deliberation about the world around us. They are internal representations, in a sense, personal possessions, that are achieved through a process of assessment: by evaluation, by comparison, contextual analysis and synthesis that occurs in a matrix of personal experience. For example, an individual's concept of an apple will be some combination of past experience and present sensation of shape, taste, texture etc. So concepts of an apple will be found to differ in content depending on subjective combinations of sense data and past experience. Abstract concepts such as 'slavery' and 'wholeness' do not have set images. Rather, a range of different images are possible and understanding of the concept is enhanced by communicating these images. It thus requires language to compare concepts and to establish 'core properties'

which may remain disputed. In the case of concepts that have no material existence, for example 'mercy' and 'fairness' and 'hope', the role of language becomes more intimate and the potential for dispute wider. The range of impressions and images may be so wide that common ground seems unreachable, but for productive debate, it surely has to be present.

The philosopher of history, W.B. Gallie, has argued that certain "concepts" are "essentially contested"...that there are some words about whose meaning people with different sets of values will never be able to agree. The meanings of these words must be sufficiently complex, ambiguous and adaptable to allow the formation of various schools of thought about their proper meaning. The meanings of these words must remain disputable in order that competing schools of thought can persist. (Seedhouse, 1986, p.19)

Wholeness clearly qualifies as essentially contested: it is of complex character, it can be viewed from different paradigms and can sustain multiple revisions dependent on particular contexts. To redeem this idea from total relativism, Gallie would have at least a core example of meaning that is not disputed as a requirement of 'concept'. This requires that:

(E)ach "concept" must possess some historically based core of meaning which is recognized as part of the "concept" by all who use it...that each school of thought about the correct meaning of a word will agree about an "exemplar" – an example that will knit together and organize the many competing positions. (Seedhouse, 1986, p. 19)

The process of developing a concept may be partly subconscious but requires conscious cognition to transform vague sensations and impressions into a loosely woven net. It is not *the meaning* in any exact sense. It is a means whereby ideas are approximated, brought together, perhaps briefly, for examination so that meaning can emerge. It is therefore unhelpful to talk about a definition of a concept in the narrow sense of establishing exact distinguishing features. Clarity of meaning of concepts is often achieved through the use of metaphor, analogy or by explanation that has some common thread. So if in developing a concept, the variety of ways of possible understanding are laid

bare and superimposed, some core meaning will emerge.

This may be in the form of an exemplar as Gallie asserts but this is a very stringent requirement. It may be apparent when similarities are unmasked by using simple language or illusions of shared meaning are dispelled by commitment to reasoning. There will always be aspects of a concept that are clearer than others.

...(W)e find that round every luminous point in experience there is a gradual shading off into haziness and obscurity. A "concept" is not merely its clear luminous centre, but embraces a surrounding sphere of meaning or influence of smaller or larger dimensions, in which the luminosity tails off until it disappears. Similarly a "thing" is not merely that which presents itself as such in clearest definite outline, but this central area is surrounded by a zone of intuition and influences which shade off into the region of the indefinite. The hard and abrupt contours of our ordinary conceptual systems do not apply to reality and make reality inexplicable, not only in the case of causation, but in all cases of relations between things, qualities and ideas. (Smuts, 1926, p. 17)

What understandings exist for the concept 'wholeness'?

Attempting to identify an exhaustive set of all possible understandings of wholeness is indisputably impossible, and may not necessarily advance the cause of clarity. This is an obvious but important point with practical and theoretical aspects. Advocates for holism are frequently associated, or associate themselves with the idea that the concept of wholeness is necessarily beyond investigation, beyond comprehensive deliberation and that any attempt to fathom its depths is conceptually destructive. This argument was explored in chapter two but it bears restating that the idea of examining wholeness only at the level of the whole (or above, whatever this may mean) is nonsensical. Exploration of the designated whole as 'the universe and everything' trivialises the idea of holism and obscures the other, useful ideas that comprise the (loosely coined) anti-mechanistic approach to discovering knowledge.

The complex nature of the relationship between 'part' and 'whole' that symbiotically exists within the concept of wholeness can best be appreciated by making distinctions that identify qualities of wholeness. This method of abstraction is blatantly artificial and holds particular irony when applied to 'wholeness'. However, the abstraction is a thought about the concept, a fleeting, useful view. It is not the concept itself. Distinctions are theoretical constructs, not 'the thing itself'. Bohm (1980) reminds us that the word 'theory' derives from the Greek 'theoria', which has the same root as 'theatre': a word meaning 'to view' or 'make a spectacle'. Theoretical constructs are thus a way of seeing, of gaining insight, " a way of looking at the world, and not a form of knowledge of how the world is." (p. 4). Distinctions are thoughts to facilitate understanding, not the internal structure or skeleton of the concept. They are used only temporarily to explore possible meaning, not to entrench division, or to claim reducibility of complex ideas. Quite the contrary, they serve to highlight the depth of meaning by identifying clearly the contributing ideas. Far from applying the 'nothing but...' lens, the questions are, 'what else could be an aspect to this and how are its limits determined?'

All distinctions of ideas about wholeness concern natural and social *explanation*. Ideas about wholeness are intrinsically part of understanding reality: they are attempts to grasp 'the state of things', 'the relation of things', 'the potential of things', even, as will be discussed later, 'the purpose of things'. Any one of the above distinctions is an attempt at an explanation of 'how the world is'.

Four major ideas of wholeness emerge from the literature:

- wholeness as unity of everything, oneness:
- wholeness as an ideal end state, an aspiration, a condition of perfection:

- wholeness as a complex entity, with certain characteristics or properties:
- wholeness as a creative process.

These are not mutually exclusive; they have fuzzy boundaries. As they are explored in turn, the particular uniqueness of the distinction will be emphasised and the possibility of a common thread entertained.

A second level of distinctions that cross weave the four above can also be made. These are derived from the *function* that wholeness is assigned in usage.

- Wholeness as the sacred:
- Wholeness as the prescriptive:
- Wholeness as the restorative:
- Wholeness as the rebellious:

These sets do not necessarily correspond one to one. Two or more distinctions about the nature of wholeness might be directed towards the same function or have multiple functions. For example, wholeness as unity with everything may have a sacred function or a secular one, as may wholeness as an ideal state. Exploring the relationships between these distinctions deepens the understanding of the range of meanings of wholeness.

The first set of distinctions concerns *identity*, what wholeness can be seen to be. The second set of distinctions centre around the *function* that each idea of wholeness is employed to perform. They form the context of the identity distinctions and so will be examined first.

The functions of wholeness

Wholeness as sacred

From their common root in language, in Old English (hAlig – holy, hAl – whole) ideas of wholeness and what is holy have a close association. This association extends back to the beginnings of philosophical thought. As early as Parmenides' attempt to consider the aggregate of all that exists as having no beginning and no end, as having no gaps but being a coherent whole, as not deficient, as immutable, as perfectly formed, ideas about the nature of Reality have contained within them ideas about the numinous. Holy as being morally perfect, of being one with God is a theme from early Christian thought. Spinoza's tendering of proof that there is only one substance (albeit an extended notion of substance), identifies God with Nature, and Hegel's Absolute Spirit, which combined the Greek Logos and the Christian divinity and which served as a unifying ground of all being, are examples of the nearness of ideas of wholeness and the sacred. Wholeness as sacred has been claimed as both immanent and transcendent: the 'unmoved mover' of Aristotle and the natural God of Spinoza, contrasted with the wholly other, of the Abrahamic religions. There are resonances of both immanence and transcendence in ideas about wholeness today.

...(I)t can be established, with a sufficient degree of probability, that there is in the unconscious an archetype of wholeness which manifests itself spontaneously in dreams, and a tendency, independent of the conscious will, to relate other archetypes to this centre. Consequently, it does not seem improbable that the archetype of wholeness occupies as such a central position which approximates it to the God-image. (Jung, From Answer to Job. Collected Works 11, pars 579- 608, in Storr, 1983, p. 329)

Jung grapples with a theoretical understanding of wholeness as sacred. Rachel Remen, a paediatrician, specializing in the care of families facing life

threatening illnesses, has a more experiential perspective.

Healing is also the leading forth of wholeness in people. Sometimes people heal physically and they don't heal emotionally or mentally or spiritually....I am not sure I have gotten rid of my loneliness. I've just invited a lot of people into it, to be there with me. I think ultimately, being human is a very lonely thing. But powerful things happen in the midst of that loneliness. It's not what we do that makes a difference, but what we let happen. There is a natural process that moves towards wholeness in me and in every human being. (Moyers, 1995, pp. 344, 346)

In various understandings of healing there is a robust tradition of calls to wholeness as represented by this distinction. Healing is said to be making whole.

Wholeness as prescriptive

References to wholeness commonly entail exhortations to behave or think in a particular way. In order to perceive and enjoy the harmonious order of the true whole, for example, the metaphor of the body politic has historically been exploited. For the development of Western Marxism, aspirations towards totality were crucial but such aspirations have an ancient pedigree. Aquinas' pupil and Dante's teacher, Florentine Dominican Remigio di Girolemi wrote:

If you are not a citizen you are not a man, because a man is naturally a civil animal...the whole is more fully united to the part than the part to itself. (cited in Jay, 1984, p. 26)

Aristotle's metaphor of the state as an organism has been an enduring one that has been used to prescribe particular roles in society and to legitimise social differentiation. The notion that wholeness or at least a sense of community is dependent on individuals accepting their 'place' has been a powerful one throughout history. The Enlightenment belief in the fundamental unity of mankind and that progress is dependent on this unity brings the prescription full

circle. Linking the unified state with the pure and principled state has been a generic political ploy.

There has been the methodological prescription too, albeit not a powerful one in the face of empiricism. The insistence that adequate understanding of complex phenomena is dependent on appreciation of the whole, has echoed as a condition of sufficiency in social science since Durkheim. The foundations of sociology can be said to be laid much earlier with the expansion of the idea of what constitutes 'history' from a commentary on the succession of powerful individuals like kings and queens, to understanding the life and times of the community as a whole. A new style of history writing insisted that societies be studied with respect to the interrelated elements and to the coherence of the whole. Admonitions to this end are part of the investigative discourse of the social sciences today.

The calls of health promoters amount to prescriptions too. Particular life styles are claimed to ensure health, which is defined as 'a state of complete physical, mental and social wellbeing'. (WHO, Ottawa Charter, 1986)

Wholeness as restorative

Appeals to wholeness frequently centre around nostalgia: a 'lost-age' before the destruction of community, to a time when people understood a moral collectivity. This is apparent in current literature but has been a feature of various nostalgic writing throughout history. From Romantic writers' appeal to the values of Sparta as an antidote to social fragmentation, to current calls for return to wholesomeness in diet and the lifestyle of bygone times, the restorative power of what is perceived to have been a lost wholeness, is called upon.

Freud's description of the quest for wholeness as regression to the infantile

oneness with the mother or the neo-Platonic appeal to recover lost unity with the universe, the undifferentiated whole, formalize the ubiquitous feelings of alienation that haunts the mind of humankind. Appeals to wholeness are nowhere more common than after massive defeat or disaster: post revolutionary France, post industrial Europe, and post war Germany are notable examples. These calls are made as political solutions to societal fragmentation but wholeness as restoration has a robust past as a solution to personal fragmentation too. Jean Jacques Rousseau is perhaps an exemplar of this appeal. The possibility of escape from personal alienation through emersion in the collective moral community is a recurrent theme in philosophy that found expression in the work of Victor Frankl and other existentialist writers.

Wholeness as restorative is clearly a major influence on the calls for holistic health care.

Wholeness as rebellion

A feature of much writing about wholeness has a defiant tone or at least one that takes an uncompromising stand. This may be because of what is perceived to be at stake – nothing less than ‘the whole’. As discussed above this can have sacred connotations, be essential to a ‘good life’ or be the way out of alienation. Epitomizing all three are the monastic traditions, which while overtly unassuming, have through history been seen as powerful threats to individuals and to individualistic tenets.

Perhaps because the dominant paradigms have since the Enlightenment been reductionist, appeals for the status of the whole have necessarily been seen as subversive and have bred a rebellious spirit. Bitter denunciations of shallowness, of lack of integrity, of inauthenticity are characteristic of much rhetoric in praise of wholeness. Denouncing the society of his day, Rousseau saw the only way to personal integrity and wholeness was through rebellion

against the empirical self, with its petty desires and through allegiance to a collective whole.

A claim to defend wholeness is a theme of much of the rebellion against reductionism that has characterized methodological debate in the twentieth century. As discussed in chapter two, opposing entrenched paradigms is labelled rebellion and certainly entails strategy and strong argument.

In the Germany of the 1920s, the Weimar Republic, both organismic biology and Gestalt psychology were part of a larger intellectual trend that saw itself as a protest movement against the increasing fragmentation and alienation of human nature. The entire Weimar culture was characterised by an anti-mechanistic outlook, a “hunger for wholeness”. Organismic biology, Gestalt psychology, ecology and, later on, general systems theory all grew out of this holistic zeitgeist. (Capra, 1996, p. 32)

There is a rebellious tone to much of the literature on holistic health as it stands outside the gamut of orthodoxy.

The above distinctions relate to the functions that wholeness is called on to fulfil but wholeness has been thought of in variety of ways. For the purposes of this study the following distinctions of the nature of wholeness have been made.

The nature of wholeness

Wholeness as unity of everything

Wholeness as unity, as unfathomable coherence, as an inarticulate fusion that underlies all material evidence to the contrary is a powerful heuristic: a coherence that inextricably holds ‘everything’ is one enigma of wholeness. The

nature of this unity has been explored in various ways. The idea that there existed one fundamental substance arose with the birth of philosophical thinking.

Thales, ...thought everything made of water; Anaximenes thought air the primitive element; Heraclitus preferred fire. At last Empedocles made a statesmanlike compromise by allowing four elements, earth, air, fire and water. (Russell, 1946 (2000), p. 61)

Clearly, the perceivable differences in the world required accounting, and for Heraclitus, this was due to perpetual flux. In the endless changing, was the mingling of opposites.

Men do not know...how what is at variance agrees with itself. It is an attunement of opposite tensions, like that of the bow and the lyre,...Couples are things that are whole and things not whole, what is drawn together and what is drawn asunder, the harmonious and the discordant. The one is made up of all things and all things issue from the one. (cited in Russell, (1946) 2000, p. 62)

The mystical tone does not conceal the role of 'part' in this unity and there are a number of distinct nuances about wholeness in this quotation.

- There is 'whole' and 'not whole'.
- There is 'apart' and 'together'.
- There is 'one' and there is 'all'.

All is said to be in constant flux; therefore everything is in a state of becoming, nothing is fixed, all is flowing. This idea of flowing as a metaphor for the nature of reality, is central in Eastern philosophical thought and in the ideas of Bohm (1995). The metaphor of flux accounts for the observable differences in the world, but for Heraclitus, fire was the underlying element. Fire was omnipresent

in some form: *something* persisted through time, despite change. This clearly introduces the paradox of reality - changelessness and change: Parmenides, thought that nothing changed: that reality is 'the One' which is an indivisible, and infinite and immutable and omnipresent whole, that cannot come into being and has no end.

These properties of wholeness, imbued with metaphysical pathos are strikingly different from the properties stipulated in other distinctions, for example the idea of wholes as analogous to living organisms.

The ideas of wholeness that involve the infinite, the changeless change, the absolute idea have been accepted and refuted by successive philosophers. What is important for this discussion is to identify how ideas of unity and oneness are related to the concept 'whole'. As has been demonstrated, ideas of 'oneness' as 'one' substance, do not satisfy the variety observed in the world and are quickly followed by the idea of 'unity of all' which returns the idea of 'oneness'. Monism is an example of this circular thinking. It distinguishes the number of fundamental properties that constitute something as one, and evokes unity of all, to comprise this 'one'. Wholeness does not preclude the presence of constituents but is deemed to require some unifying property, function or meaning to create the whole.

Pantheism involves both ideas of oneness and unity: everything (i.e. the whole set) constitutes a unity and that unity (i.e. one) is divine. Spinoza's work, *The Ethics* sets out to prove that there is only one substance and that this substance of infinite attributes, is eternal and of infinite essence, thus is God. Perceivable objects are 'modes' of one substance in a particular state.

Nothing exists but God. God is one, that is, only one substance can be granted in the universe.[L. 14]

Whosoever is, is in God, and without God nothing can be, or be

conceived.[L15]

God is the indwelling and not the transient cause of all things. All things which are, are in God. Besides God there can be no substance, that is, nothing in itself external to God.[L17]

God is the force preserving things in existence. Although each particular thing be conditioned by another particular thing to exist in a given way, yet the force whereby each particular thing perseveres in existing follows from the eternal necessity of God's nature.[ii45]

Individual things are expressions of the attributes of God. Individual things are nothing but modifications of the attributes of God, or modes by which the attributes of God are expressed in a fixed and definite manner.[i25]

(translated by R. H. Elwes, <http://members.aol.com/Heraklit1/spinosa.htm>)

Attempts to describe 'reality' or 'God' or the 'nature of the universe', are doomed in some way but they illustrate the intensity of humankind's need to search for permanence or what Bohm calls our deepest urges towards wholeness. From Aristotle's idea of the universe as a single organism, echoed in Lovelock's Gaia hypothesis, to Hegel's concept of 'Geist' as an active force throughout history, the quest for unity is evident.

Wholeness as an ideal end state

There are threads of this idea in various views of 'wholeness'. This ideal-ness has been thought of in both hallowed and humanistic ways. References to 'wholeness' are common in spiritual writings of all kinds. Spinoza's thinking about God links the idea of 'oneness' with that of ultimate or perfect being. St Thomas Aquinas, in his proof that God exists, insisted there must be an ultimate source of all necessity and the various perfections in the world must have their source in something perfect. Hegel's notion of 'The Absolute', wholeness in all its complexity, perfection in a cohesive whole is spiritual in nature too.

These understandings raise the question of whether the concept of 'whole' is,

- a) 'whole' as all that exists was given at the 'beginning', even if only as a kind of metaphysical plan, leaving only rearrangement as a medium of change, or
- b) 'whole' as a point to which all is progressing, some perfect end state of evolution.

Both these distinctions involve ideal states of some kind and have influenced thinking through the centuries. This is significant because a worldview emanating from a perception of paradise lost is very different from one inspired by paradise to come. There is a view of the worth of the end time whole, perfection, drawn by both secular and sacred schools of thought that embraces present suffering of individuals (parts) for the ultimate attainment of wholeness. Points a) and b) refer to first and final causes which are implicitly ideal. These causes have been ignored by science that is mindful of the absence of empirical tools to capture understandings of them.

From the level of the individual, Jung describes personality as a psychic whole. He equates wholeness with integration and sees the attainment of it as a spiritual quest: not a creed specific quest but a journey nonetheless with an *ideal* as destination. Wholeness is achieved when the person comes to a realization that ego and will are not paramount and when he/she is able to be guided by an integrating force which is not of his/her making.

The goal toward which the individuation process is tending is "Wholeness" or "Integration": a condition in which all the different elements of the psyche, both conscious and unconscious, are welded together....This integrating factor, expressed by the emergence of quaternary or mandala symbols, is named the Self: An archetype which not only signifies union between the opposites within the psyche, but is a God-image or at least can not be distinguished from one.(Jung. Confrontation with the Unconscious. Cited in Storr, 1983, p. 229)

The Self is defined by Jung as the essence of human wholeness. It consists partly of the conscious and partly of the unconscious and has an indeterminate and indescribable nature. The concept of psychic wholeness necessarily implies transcendence. Jung describes a striving towards unity within every individual, where opposites are reconciled or balanced and divisions are replaced by consistency. These ideas resonate with both Koestler 's (1978) self assertive/integrative tendencies and Smuts' (1926) ideas about the development of personality as a drive toward wholeness which will be discussed later.

Wholeness as an ideal, an aspiration, has a history in political philosophy, for example, Western Marxism placed an emphasis on totality both as a character of human life and as a desirable goal of society. Many spiritual traditions too embody aspirations to states of connectedness, ultimate being, heightened awareness, that serve to draw adherents towards an ideal of wholeness.

Wholeness as a complex entity with certain characteristics

Wholeness as an achievable state with particular properties is a less ephemeral notion than the ideal state and it has had secular appeal. In this view, a 'whole' is ascribed certain characteristics: it is complete in some identifiable way, undivided, unbroken, intact, has all necessary constituents present, has all constituents entering into combination or unity, makes up a total. That these characteristics are pliable to some extent, enables boutique type understandings of wholeness to evolve. The conditions for wholeness are set and then measured by an agency and may be disputed by others. For example, the notion of 'a whole person' will be drawn differently cross culturally or over time.

The analogy of wholeness with organicity, an Aristotelian idea, is an example of this distinction. The state was likened to a living organism: its differentiated parts subordinate to the whole. This idea has been one of the dominant theses

about wholeness and has been influential in the anti-reductionist arguments. (Not always justifiably, as will be discussed in the next chapters). Changing ideas about what constitutes a living organism have inevitably influenced the declared characteristics of wholeness and these have been both scientific and mystical. Traditional cultures invoking notions of Mother Earth, the Great Spirit, contrast with assertions that organisms are nothing but a collection of atoms and molecules, the mantra of scientists like Francis Crick.

Biology and more specifically evolution theory, has been a source of influence on the notion of wholeness that has seen organicism pervade discourses in social science, politics, philosophy and psychology. The qualities of biological wholes that bear resemblance to wholes in other disciplines can be seen as:-

- Certain internal organization
- A measure of self direction
- Individual specific character of its own
- A dependency on the greater whole that is its context

What is not generally recognised is that the conception of wholes covers a much wider field than that of life, that its beginnings are traceable ...in the inorganic order of Nature, and that beyond the ordinary domain of biology, it applies in a sense to human associations like the State, and to creations of the human spirit in all its greatest and most significant activities. Not only are plants and animals wholes, but in a certain limited sense the natural collocations of matter in the universe are wholes; atoms, molecules and chemical compounds are limited wholes; while in another closely related sense, human characters, works of art and the great ideals of higher life are, or partake of, the character of wholes. (Smuts, 1926, p. 98)

So in this view, 'wholes' are fundamental to reality; the transformation to wholeness is a tendency of things. The formation of increasingly complex

wholes is a characteristic inherent in the universe. From the simplest inorganic wholes to the most highly organized thoughts and ideal, the process of whole-making is operative.

With its roots in the inorganic, this universal tendency attains clear expression in the organic biological world, and reaches its highest expression and results on the mental and spiritual planes of existence. Wholes of various grades are the real units of Nature. Wholeness is the most characteristic expression of the nature of the universe in its forward movement in time. (Smuts, 1926. p. 99)

Wholeness is achieved progressively as levels of internal organization and thus function and meaning are reached. This is directly parallel to Koestler's (1978) view of hierarchy or holarchy of part-wholes or holons. Wholes are found at all levels of complexity and are described by Koestler as forming a multi-levelled, stratified holarchy of sub-wholes. A whole in Koestler's terms is that which is considered complete in itself: a relatively stable structure, with integrated components, capable of some self regulation and thus exhibiting a degree of autonomy, something which does not require further explanation. This is another way of saying that wholes have achieved some particular potential for structure, function, meaning or aesthetics.

So Smuts and Koestler are agreed that hierarchical organisation is a fundamental principle of reality. They also agree that everything has qualities of partness and wholeness. The holons which comprise this holarchy have two opposite tendencies, a self assertive tendency to develop their own autonomy (a dynamic expression of a holon's wholeness), and an integrative tendency to function as part of a larger whole (a dynamic expression of a holon's partness). An equilibrium between these forces ensures a stable entity. But each writer then makes a unique contribution to this view of whole as complex entities. Koestler blurs the distinction between parts and wholes contending that wholes do not in fact exist. On the other hand, Smuts is clear about the characteristics of wholes and introduces the idea of emergent properties.

Wholeness as a creative process

The doctrine of organicism has embedded in it the idea of a process of generation. In the opinion of Smuts, the characteristics of 'wholes', as listed above, do not capture the truly defining feature of 'wholes'. In his view, the power of the concept has been untapped, both by philosophy and science.

It is curious that, while the general view-point of philosophy is necessarily holistic, it has never made real use of the idea of the whole. The idea runs indeed as a thread all through philosophy, but mostly in a vague and intangible way. The only definite application of the idea has been made by the Absolutists, who have applied the expression of "the whole" to all of existence, to the cosmic whole, to the tout ensemble of the universe, considered as a unity or a being. (Smuts, 1926, p.100)

Smuts makes a particular point of the difference between parts and wholes whereas Koestler, and to some extent Bohm, initially at least, emphasises the double characteristic of holons as part-wholes.⁵

The doctrine of Emergence, first proposed by George Henry Lewes in 1891, in his book *Problems of Life and Mind* and developed by Lloyd C. Morgan in the publication *Emergent Evolution* (1923) and by Smuts in *Holism and Evolution* (1926) states that at each higher level of organization new irreducible properties appear which were not present in, nor predictable from, lower levels. This provides a fundamental defining feature of wholes. It accounts for the special nature of wholes. It is when considering the emergent properties of wholes that the distinction between parts and wholes becomes valuable. That wholes

⁵: Smuts does concede that in practice, the intense relationship between parts and wholes makes differentiation difficult (p.126).

consist of parts but are not merely conglomerates of parts, their togetherness being more than mere proximity, is a crucial distinction. The parts are in active relation with each other, yet it is not a mere mechanical system. A 'whole' is more than the sum of its parts. Close examination of the nuances of meaning of the phrase 'more than the sum of the parts' is useful as there is more than one possible interpretation. It could mean:

- The 'whole' is not just a collection of 'parts'. The 'whole' is something additional to the 'parts' (i.e. outside).
- The 'whole' has some characteristic that is not present in the 'parts'.
- The 'whole' has some inner structure, function, meaning or aesthetic quality that the 'parts' do not have.

The last statement most accurately reflects the creative nature of wholes as described by Smuts.

A whole, which is more than the sum of its parts, has something internal, some inwardness of structure and function, some specific inner relations, some internality of character or nature which constitutes that more. And it is for this inquiry to establish what that more is. (Smuts, 1926, p. 103)

A 'whole' is a synthesis of parts that affects the activities and interactions of the parts, producing changes that would not have occurred if these constituents were in mere proximity. Thus the parts are influenced by the whole. They are not lost in the new structure but their role will be different from that which they had as a 'part'.

This then, is the primary and most important element in the concept of the whole: the synthetic unity of structure and its functions which affects the parts and their functions or activities without their loss or destruction. (Smuts, 1926, p. 123)

Emergence theory is a complex set of ideas which will be placed in the larger

context of holistic thought in the next chapter. It is controversial when applied beyond the confines of biological evolution but offers intriguing possibilities in speculative scholarship (Morowitz, 2002).

Gallie's requirement

Within the aspects of the notion 'wholeness' that have been drawn above, scattered as they are over the span of human thought and over the range of phenomena explored, a common thread is apparent. Each distinction made in this study involves purpose: purpose in the sense of condition to be attained, the idea of continual change in the direction of creation.

- Wholeness as unity with everything: the cohesion of constant flux in the state of becoming
- Wholeness as an ideal end state: the quest for perfection
- Wholeness as an entity with certain characteristics: the move towards achievement or attainment of coherence
- Wholeness as a creative process: the emergence of novelty, the fulfilling of potential

Wholeness as teleological is the common theme to have emerged from the process of exploring distinctions but some discussion is required to make this evident. Teleological arguments involve a number of tenets.

From the Greek word for goal, task, completion, or perfection. Teleological explanations attempt to account for things and features by appeal to their contribution to optimal states, or the normal functioning, or the attainment of goals, of wholes or systems they belong to. (Honderich, 1995, p 868)

There are substantial philosophical obstacles confronting this proposition, not least the disdain science has shown towards it. Teleological explanations have been unpopular whether immanent or transcendent. The need to avoid the possibility of having to accept an immanent purpose in nature, to contemplate a final cause, establish a purpose, or consider an intelligent creator, has been driven by the 'beyond the evidence' nature of teleological arguments. When criteria for knowledge became exclusively the sequence of observation, deduction, hypothesis and falsification and rational thought the only path to understanding, questions of purpose had to be dismissed. The dearth of adequate tools for processing these questions became equivalent to asserting the patent absurdity of the proposition. The domain of teleology was left to Creationists and conspiracy theorists. But the notion of purpose has an ancient pedigree.

Like Plato, (Aristotle) believed that a philosophy such as Democritus's atomism, based solely on material particles and lacking a decisive concept of form, was unable to account for the fact that nature, despite constant change, contains a visible order with distinct and lasting formal qualities. Also, like Plato, Aristotle believed the deepest cause for things must be sought not in the beginnings of things but in their end – their telos, their purpose and final actuality, that to which they aspire. (Tarnas, 1996, p. 61)

Aristotle took Plato's transcendent Forms and united them with matter, enabling the notion of a vital composite entity.

Unless a form is incorporated in a substance – as a form of a man is found in the individual person Socrates – that form cannot be said to exist. Forms are not beings, for they possess no independent existence. Rather, beings exist through forms. Aristotle's form thereby took on several roles – as intrinsic pattern, as intelligible structure, as governing dynamic, and as end or purpose. (Tarnas, 1996, p. 62)

In this view every substance not only possess a form, but is in some way governed by that form: it naturally moves towards realizing its inherent potential. The acorn becomes an oak because that is the form it bears. This is an example of the Aristotelian idea of 'potentiality'. Being and becoming is placed

in the context of the natural world as actuality and potential. A striving for fulfilment is a characteristic of being. Aristotle's universe was 'not randomly mechanical'. His understandings were based on the perception that nature draws on forward each individual thing to its formal realization. Aquinas was influenced by this idea but introduced (as Plato had done) a transcendent cause. He declared that within human nature lay the potential for actively moving towards perfect communion with the infinite ground of human being, God. God became the supreme Form drawing nature forth. For both these thinkers Form was an active force, not a structure.

With the 'scientific revolution' came a cleansing of these abstract speculative tendencies in philosophy and the imperative to constrain theory to objectively valid observations. Bacon in particular denounced the idea that nature possessed teleological purposes or some kind of archetypal essence. With this cleansing came the division of understandings of reality into realms of faith and reason, theology and science kept rightly separate. But somehow this shift in worldview did not entirely put paid to the idea that there is some manifestation of purpose in the world. It was Hegel who revived the idea of an unfolding reality. Nature was again perceived to be progressing towards a fulfilment goal: Hegel called this the Absolute.

All of nature's processes and all of history, including man's (sic) intellectual, cultural, and religious development, constitute the teleological plot of the Absolute's quest for self-revelation. ...All struggle and evolution are resolved in the realisation of the world's telos, its goal and purpose. In this great dialectic, all potentialities are embodied in forms of ever increasing complexity, and all that was implicit in the original state of being gradually becomes explicit. Man (sic) – his thought, his culture, his history – is the pivot of that unfolding, the vessel of God's glory. Hence theology for Hegel was replaced by the comprehension of history: God is not beyond creation but is the creative process itself. (Tarnas, 1996, p. 381)

So teleological ideas are complex. They include at least the following possibilities;

Purpose is transcendent:

- purpose is determined by God. (i.e. a transcendent being)
- purpose is the revelation of God's self

Purpose is immanent:

- purpose is contained in form, a pattern of potential and unfolded inevitably.
- purpose is manifest in the actualisation of potential

For either of these possibilities it can be said that:

- purpose accounts for the order and organization of reality
- purpose governs outcome or achievement of potential.
- purpose draws evolution towards fuller expression.

These ideas are, of course, in contrast to those proclaiming

1) the randomness of reality.

The prevailing view of evolution is that life has no direction, no predictable outcome, no purpose. Hedged in by circumstances and coincidence, the course of life lurches from one point to another. It is pure chance that 3 billion

years of evolution on Earth have produced a peculiarly clever ape. (Morris, 2002, p. 26)⁶

2) the mechanism of reality.

...today we have discovered order from the deepest recesses of the atom to the distant galaxies. But science has also provided its own reasons for this order. No longer do we need theological explanations for snowflakes, or even for living organisms. The laws of nature are such that matter and energy can organise themselves into the complex forms and systems that surround us. Though it would be rash to claim that scientists understand everything about the self-organization, there seems to be no fundamental reason why, given the laws of physics, all known physical systems cannot be satisfactorily explained as the product of ordinary physical processes. (Davies, 1992, p. 194)

However, it is claimed in this thesis that there is more to understanding reality than mere physical laws. The distinctions of wholeness reveal a common notion of purpose. Four important features of the concepts of parts and wholes have been identified.

- Their place in a hierarchy of progressive wholeness
- The reciprocal nature of their existence
- The 'leap' to wholeness that accompanies realized potential
- The identification of emergent properties as integral to this leap

⁶ This is not an opinion that Morris endorses. He is phrasing it as introduction to his opposing argument that the deep structure of reality ensures that for any particular problem there can be only a few possible outcomes. The result is what is called evolutionary convergence

Understanding the relationship between parts and wholes seems to hold promise of making clear the purposive aspect of function as contribution to a greater state, a state in the future. It is this relationship that must be investigated further: the idea that purpose is manifest in the actualisation of potential must be explored. In order to do this, a greater understanding of partness is required.

Chapter Five

Parts: Fragments or Creative Constituents?

Today we have naming of parts. Yesterday

We had daily cleaning. And tomorrow morning,

We shall have what to do after firing. But today

We have naming of parts. Japonica

Glistens like coral in all of the neighbouring gardens,

And today we have naming of parts.

From: Naming of Parts. Henry Reed.

(in The Norton Anthology of Poetry. Eastman, 1970, p. 1100)

What understandings exist for the concept of 'Part'?

The most essential understanding of 'part' is one of relation. Exploration of the concept 'part' involves examination of three sets of relationships.

- The relationship between 'part' and 'whole'. (This is about potential of the part or the state of incompleteness of the part.)
- The relationship between 'part' and 'part'. (This is about what is present and what other entities belong with the part.)

- The relationship between ‘part’ and ‘nothing’. (This is about how small a part can be and still exist.)

These relationships do not exist in any sense as separate entities, but the use of the word ‘part’ indicates differences in dominance of combination of these relationships. For example:

“ Part of the problem, is that certain ...” - Primarily ‘part-whole’ relationship.

“It depends on which part is...” - Primarily ‘part-part’ relationship

”No part is conceded by them in...” - Primarily a ‘part-nothing’ relationship.

It is impossible to draft these ideas into neat groups. However, to explore the nuances they convey in any detail requires temporary isolation of core properties. The assertion that exploring the nature of parts contributes to depth of meaning of wholeness is a significant statement in this thesis. It appears to oppose the ‘holistic tradition’ or worse, to be a compounding flaw in any argument for ‘holism’. However, neither is the case, as will be shown after careful examination of the ‘theories’ proffered about holism, examined in the next chapter.

The ‘part-part’ relationship

The ‘part-part’ relationship has not attracted as much contemplation as the notion of ‘part-whole’, which has occupied thinkers for centuries, or the relationship between ‘part’ and ‘nothing’ which provided the impetus of philosophy and science to identify the smallest building blocks of reality.

Nevertheless, or rather consequently, a close examination of the concept of 'part' in its relationship to other parts is a fruitful exercise to undertake.

'Part' is frequently followed by 'of'. This suggests that a 'part' can only have meaning in relation to some other elements in a greater configuration consisting of other objects or ideas. To name something a 'part' gives no information about size, form, position, structure or function but it does indicate the presence (near or far) of other constituents to which it 'belongs' in some way, to which it has some relationship. These other constituents may be identical, as in tenths of a circle, or unrecognisably different in structure and function, such as any parts of a microscope. The only assertion is that they are relevant to each other in some complementary way. This relationship is relevant because it can be said to enhance the function, meaning or aesthetics of the part. The combination is in some way an enhancement of one or more of these attributes.

This is not to say that parts do not have certain autonomous functions, meanings or aesthetic qualities of their own, but asserts that, in general, these are enhanced by realizing the relationships *between* parts. It is an assertion of this work that the experience of enhancement that occurs when parts come together to form wholes, is a fundamental driving force or motivation responsible for development of any kind. This idea, suggested by Smuts (1926), will be explored and gradually expanded throughout this thesis. For the present, it is sufficient to say that *a part has unfulfilled potential* that can be unleashed by synthesis with other parts. A part is no longer a part when its potential for enhancement of structure, function, meaning or aesthetics is fulfilled. A diversion to explore the nature of potential is warranted. Potential is a complex idea. It can mean:

1) what is possible but not actual or as yet manifest.

2) having capacity for existence but not yet existing.

'Having capacity' refers to an inner resource or capability while 'what is possible' is the outcome of internal and external considerations. For example, the potential (capacity) to be good dancer can be enhanced by the potential (possibility) to have a good teacher. However, if a child lives in a ghetto or on a farm in the outback, the potential (possible) access to good dancing teachers is limited. The lack of the latter potential does not necessarily destroy the former but will inhibit the expression of it. One kind of potential can enhance or inhibit another and the frustration of one potential may stimulate the expression of a different one entirely.

To take a simple example: a small metal washer lies on the floor. Is it a 'part'? Does it have potential either possibility or capacity? It has the physical appearance of separateness, and has a durable structure independent of its surroundings. The washer can be said to be pleasingly round. The roundness involves the idea of completeness in an aesthetic sense: it is not broken or partially round. Its potential for roundness is exhausted i.e. fulfilled. So there is an aspect of this part under examination that is not a part – it is a complete (whole) circle. However, without a relationship with some other object/s or idea/s, what can be said about its function is very limited. It is reasonable to say that it evokes the possibility of further potential if brought into relation with something else. As it lies, the functional potential of the washer is unextended, (other than that it is being used as an example of partness). Closely related to function is the idea of meaning. By fulfilling the washer's functional potential by approximating it to other objects (like a nut and bolt), its meaning as an object increases. So there can be aspects of completeness in parts but what keeps them parts is *untapped potential for function, meaning and/or aesthetics*.

Clearly the knowledge and abilities of the observer play a significant role in (i.e. are a part too) the nature of realizing the untapped potential of the washer.

Whether a mechanic or a philosopher picks up the washer will affect the way in which its potential for enhancement of function, meaning or aesthetics will be realized. The washer may become part of an engine or a member of a group of circular things used to illustrate Socrates' ideas of roundness. Either way, something of its potential is realised.

Of course a metal washer is a concrete and relatively simple example. It demonstrates that the concept of 'part' can be developed by considering potential, that which is not yet realized. Does this hold for more complex notions? 'Part truth', 'part share' and 'part completion' also infer that there is more of 'something' somewhere. In each example, unrealised potential is implied. Nothing much can be concluded about the missing 'stuff' but its potential presence is what contributes to the understanding of the concept 'part'. The more information there is about the missing 'stuff', the greater will be the knowledge of the nature of 'the part', either about its physical characteristics, its function or its meaning. Truth can be said to be enhanced by being approximated with more truth, more of the same, or by insight, understanding or information that makes the truth, as first envisaged, more evident or more compelling. Reciprocally, more information about *the* 'part' gives more information about what might constitute the missing *other* parts. The relationship between parts can vary in nature. Parts may have no more relationship than approximation, for example, grains of sand in a pile of sand. Some parts relate by 'a kind of fit', for example, a puzzle. Others parts, for example, an engine, require synchronization or parts of an organism which in addition requires a dynamic organization and a regime of internal control. For example, interdependence, complementary function and synchronization are needed for the potential of parts of a cell to be realised in a way that enhances overall function, meaning and/or aesthetics. As will be established in the next chapter, it is only those wholes that have realised inner tendencies, capacities for homeostasis and relations that are the manifestation of the principle called holism. For the present it is important to note that what is common to both kinds

of examples, mechanistic and organic is what could be called 'the leap' from partness. Approximation and integration can occur for some time with limited change in meaning or function but at some crucial point some potential is realized and an aspect of partness ceases: the puzzle becomes a picture, the engine roars to life, or in the organic world, internal organization complexifies, self direction increases and novel properties emerge. Potentials have been realised, the characteristics of wholeness become apparent. This inevitably leads to a need to explore the 'part-whole' relationship.

The 'part-whole' relationship

Exploring this relationship is extremely complex and there are widely differing ways of viewing it. One view, as has already been suggested, is that parts and wholes do not exist as fixed descriptions but that most entities have characteristics of both partness and wholeness. Another view contends that partness can be differentiated from wholeness as parts characteristically display unrealised potential for greater meaning, function and/or aesthetics. The extent to which an object or idea is a 'part,' is dependent on understanding its potential to be more. 'Partness' is diminished by adding other parts that enhance function, meaning or aesthetics. It is not always possible or necessary to say *exactly* what is 'deficient' in order to recognize 'partness', but essential to recognize that there is the potential for more. If no potential for more is evident, its partness is exhausted and it must be considered whole in a limited sense. This kind of wholeness is a dead end as it does not have potential to be part of a greater whole. An example: If Tom believed he knew the whole truth about an event, this is a dead end or limited whole. Shelagh, his neighbour, has evidence of more to the occurrence but because Tom is not able to/prepared to concede the potential for more information, what Tom has is limited 'whole truth'. There is no way for his truth to grow, no potential for enhancement, it will have limited characteristics of wholeness. Shelagh on the other hand actively pieces together her information and that of a witness Gary, which leads to new

realisations and insights that enhance the meaning of her facts and brings her closer to a richer sense of 'the whole truth'.

A more remarkable phenomenon occurs when the potential for meaning aesthetics or function is realised or exhausted in some way. At this point some greater autonomy is created, some degree of independence or self direction, which decreases the attribute of 'partness' abruptly. Because the extent to which an object or idea is a 'part' is dependent on the potential to be more, once that potential is fulfilled, another quality becomes apparent: this is the quality of 'completeness' which becomes apparent when the phrases 'sufficient for', or 'enough to' can be usefully applied, indicating the fulfilment of potential. What is achieved when 'partness' is lost is generally called 'wholeness'. The inevitable question then is, what aspects of the 'new' whole have potential for relationship with other objects and/ideas and it immediately assumes a new 'partness' with fresh potential for further enhancement of function, meaning and/or aesthetics. So, in this view, objects and ideas flick through states of 'partness' and 'wholeness' as their potential becomes realized. Differentiating between parts and wholes may be no more than naming perceived states of being, but it does,

- 1) highlight the existence of potential and
- 2) allow appreciation of emergent properties

But is it possible to differentiate between 'partness' and wholeness' without reference to each other? Is it possible to identify potential if no purpose is identified?

Even if detailed knowledge of the whole or possible whole is unavailable (and this could be commonly the case) the concept of part *can* exist on the basis of *perceived* incompleteness or unfulfilled potential. It is only possible to see potential if some idea or perception of purpose is present. If no potential is

perceived at all, it may be impossible to say whether something is a part or not. However, if no qualities of completeness (i.e. 'sufficient for' or 'enough to') that demonstrate function, meaning or aesthetics can be identified, it is likely that the object or idea is a 'part' and that further consideration would reveal potential of some kind. Establishing purpose reveals potentials.

There are, of course, objections as to the usefulness of distinctions between parts and wholes. Koestler (1978), in his vigorous attack on reductionism, dismissed the value of the concepts 'part' and 'whole'.

...(C)ontrary to those deeply ingrained habits of thought and their reflection in some philosophical schools, "parts" and "wholes" in an absolute sense do not exist anywhere, either in the domain of living organisms, or in social organizations, or in the universe at large. (Koestler, 1978, p. 27)

The argument above does not dispute this statement, but holds that as 'states of being', 'partness' and 'wholeness' are useful concepts. Koestler (1978) coined the term 'holon' to denote 'part-wholes' which he believes constitute reality. A hierarchy of holons, each drawing from those below them and contributing to those above, form the framework of reality. Each holon is a sub-whole, it has some autonomous function and meaning. The idea of holons demonstrates the connectedness or relatedness of things, and at the same time avoids the mire of distinguishing between 'part' and 'whole': everything has qualities of both and can be referred to by one term.

"A good terminology", someone said, "is half the game." To get away from the traditional misuse of the words "whole" and "part", one is compelled to operate with such awkward terms as "sub-wholes", or "part-whole", "substructures", "sub-cultures", "sub-skills", "sub-assemblies", and so forth. To avoid these jarring expressions, I proposed... a new term to designate those Janus-faced entities on the intermediate level of any hierarchy, which can be described either as wholes or as parts, depending of the way you look at them from "below" or from "above". The term I proposed was the "holon", from the Greek holos = whole, with the suffix on, which, as in proton or neutron, suggests a particle or part. (Koestler, 1978, p. 33)

This view emphasises the connectedness of all things in a hierarchical lattice that Koestler calls a holarchy. Koestler sees these sub-wholes as compelled in the direction of individual autonomy *and* in the direction of integration with the greater whole of which it is inevitably part.

We thus arrive at a basic polarity between the self-assertive tendency and the integrative tendency of holons on every level, and, as we shall see, in every type of hierarchic system. This polarity is ...not a product of metaphysical speculation, but is in fact implied in the model of multi-levelled holarchy, because the stability of the model depends on the equilibration of the dual aspects of its holons, as wholes and parts. This polarity or coincidentia oppositorum is present in varying degrees in all manifestations of life. (Koestler, 1978, p. 58)

A significant implication of this idea of 'holons' is that it emphasizes both the characteristics of wholeness and those of partness that can be held simultaneously. "The self-assertive tendency is the dynamic expression of the holon's wholeness, its integrative tendency the dynamic expression of its partness" (ibid. p.58). In favourable conditions these tendencies are equally balanced in a dynamic equilibrium. However, if this balance is disturbed, self-assertion or integration becomes dominant and pathology of some kind results. While this is a useful interpretation, it has at least two limitations.

- 1) The relationship between partness and wholeness is more complicated than Koestler would have it. It can be maintained in contradiction to Koestler's assertion above, that integration with a greater whole is a form of transcendence and as such, is a tendency to wholeness, and that extreme focus on self as an individual end leads to a form of alienation that precludes wholeness and results in fragmentation of partness. Both self-assertion and integration have aspects of wholeness and partness. It is perhaps more helpful to understand wholeness as arising from the balance of self assertion and integrative tendencies rather than to assign wholeness to either one of them.
- 2). The word holon masks the difference between the characteristics of

partness and those of wholeness possessed at any one time. This obscures the 'leap' from 'partness' to 'wholeness' which is in the view outlined above, a significant event. It is the realization of potential, which is accompanied by a greater capacity for autonomy, and new potential for enhancement in directions that may have just become apparent, that distinguish this event. In his enthusiasm to refute the mechanics of reductionism by denying existence of 'parts' to which reality can be reduced, Koestler's 'holons' obscure the subtle but significant part-whole relationship. It seems a pity to obscure this transformation as, it will be argued later in this work, its recognition is fundamental to resolving the limits to holistic health care.

The significance of this 'part-whole' relationship is derived from the work of Smuts (1926) who, like Koestler, refutes the value of a mechanistic view of reality and argues in support of a hierarchical, connected, progression of increasing complexity. Unlike Koestler, who started from the premise that: "(P)art conveys the meaning of something fragmentary and incomplete, which itself has no claim to autonomous existence" (Koestler, 1978, p.26), Smuts enters the discussion by asking how matter, life and mind are related. He, like Koestler, demonstrates that even the smallest units of matter are 'limited-wholes' with certain internal organization, individual specific character of their own and a measure of self direction. However, Smuts focused on the latency of parts, their potential to be more. A whole is something, "in which all the parts appear in a subtle indefinable way to subserve and carry out the main purpose or idea". (Smuts, 1926, p. 98) The apparently teleological aspect of this statement resonates with the distinctions of wholeness discussed earlier: the important point at present is the role of 'parts' in the creation of wholes. This is the touchstone of the idea that the transition of the 'part' to a 'whole' involves some significant change that is qualitatively different from a simple coalescing of parts. The notion of emergent properties, those qualities of a whole that are not traceable to the characteristics of their constituents, becomes comprehensible.

So it is useful to differentiate between 'part' and 'whole' in order not to miss the qualitative change that occurs at the transition to wholeness. But because these states can be fleeting and an object or idea can have features of both 'partness' and 'wholeness', there are obvious difficulties with this distinction, as Koestler points out. The problem remains even if 'part' is redefined using Smuts' understanding, as that which shows no emergent properties, because these are not identifiable unless the part and the whole are compared. For example, oxygen atoms demonstrate emergent properties (i.e. is a 'whole') when two constituent atoms come together as atmospheric oxygen. (The qualities of oxygen are not present in the characteristics of separate two oxygen atoms). After apparent progress in the clarity of understanding 'part', differentiation between 'part' and 'whole' remains controversial. Explanation for the mercurial nature of the concept 'part' can be found in the work of Bohm who, like Koestler, sees 'fragmentation' as the opposite of wholeness and similarly attributes the pathological divisions in society to this fracturing.

The notion that all these fragments are separately existent is evidently an illusion, and this illusion cannot do other than lead to endless conflict and confusion. Indeed, the attempt to live according to the notion that fragments are really separate is, in essence, what has led to the growing series of extremely urgent crises that confront us today. Thus, as is now well known, this way of life has brought about pollution, destruction of the balance of nature, over-population, world wide economic and political disorder and the creation of an overall environment that is neither physically nor mentally healthy for most of the people who have to live in it. (Bohm, 1980, p. 2)

While this relationship between fragmentation and pathology is not disputed, there are a number of differences between this idea of 'fragmentation' and the concept 'part' which has been developed so far in this chapter.

The concept of 'part' has so far involved:

- 1) parts as having identifiable potential.

2) parts as semi-autonomous or incipient wholes.

3) the relational characteristics of parts as 'whole-makers'.

'Fragment' and 'part' are not equivalent ideas. Fragmentation, as Bohm describes it, has as defining feature 'separateness' from the whole (or other parts). It is this division that is the culprit in the modern malaise: alienation, isolation, entrenched abstractions. A fragment of something is a 'part' but a 'part' is not necessarily a fragment. Fragmentation has another dimension of meaning, broken, damaged, even ruined. A fragment is a result of some destruction of a whole; the whole has to have existed before the fragment. A 'part' however, while also less than a whole in some ways, can exist before or after the whole and contributes to the idea of the whole by way of its potential.

Bohm agrees with Koestler that fragmentation is an illusion (albeit an extremely effective one). This illusion arises from confusion between what are thought processes and what is reality: a very old confusion indeed.

In essence, the process of division is a way of thinking about things that is convenient and useful mainly in the domain of practical, technical and functional activities... However, when this mode of thought is applied more broadly to man's (sic) notion of himself and the whole world on which he lives (i.e. to his self world view), then man ceases to regard the resulting divisions as merely useful or convenient and begins to see and experience himself (sic) and his world as actually constituted of separately existing parts. (Bohm, 1980, p. 2)

Bohm is conceding a limited use for the process of division but lamenting both its application beyond its viable limits and the transformation of insights gained into conclusions about how reality 'is'. The distinction between descriptions of reality as it 'is' and 'how we make sense of the world' around us, is one that is deeply relevant to this thesis. Bohm is saying that the notion of fragment exists only 'in a particular view of the world' not in reality, which is 'in fact', whole.

...(W)hat should be said is that wholeness is what is real, and that fragmentation is the response of this whole to man's action, guided by illusory perception, which is shaped by fragmentary thought. ...man, with his fragmentary approach, will in inevitably be answered with a correspondingly fragmentary response. (Bohm, 1980, p. 7)

This involves two views:

- 1) that knowledge of/perception of reality is illusory i.e. something different from our experience is real, (we perceive and think fragmentation but wholeness is real).
- 2) that a particular understanding of reality (gained presumably from beyond our physical perception) is real i.e. reality *is* whole.

Bohm's plea appears to be that if only people could 'see the truth', that their thinking is fragmenting reality, which is in fact an undivided flowing movement, the negative results of fragmentation will end and reality will be revealed. This view can be contrasted with the assertions that reality consists in the movement between 'partness' and 'wholeness' It is in fact, driven by a move towards wholeness: it is this process of ever increasing wholeness that is clearly evident in the natural world.

So the notion of partness can be seen as either:

- 1) one of potential for wholeness: as a real characteristic of objects or ideas or
- 2) an illusory perception that exists only in the way humans think and which perpetrates some damage to wholeness, or at least masks it.

It is possible that both have truth value. It illustrates the capacity for the label 'part' to be either creative or destructive of wholes. This distinction is important

for the discussion about wholeness and health and will be elaborated in chapter eight.

The 'part-nothing' relationship

The ardent search for the smallest part or particle of the universe appears to have been driven by a need to establish an understanding of reality, of what constitutes the difference between something and nothing, a need to establish what 'is'. Formal questions about the fundamental constituents of reality became a western preoccupation during the fifth century BC. The Ionians searched for an elemental substance that could constitute the material world: a simple fundamental principle that both governed reality (nature) and composed its basic structure. But it was Parmenides of Elea who, more than a century later, grappled with the traditional religious world view and the emerging secular explanations that entailed deductive logic, to ascertain what is 'real' and what is 'apparent'. Declaring the superiority and autonomy of reason as judge of what is real, he concluded that sensory information was not to be trusted and that by logical necessity, reality was changeless and unitary. So this ancient discussion starts from a declaration of 'oneness'.

Obliged to reconcile the conflicting demands of sensory observation with the new logical rigour, Empedocles, Anaxagoras and finally the atomists attempted to explain the world's apparent change and multiplicity by reinterpreting and modifying Parmenides' absolute monism – reality as one, motionless and changeless – in terms of more pluralistic systems. Each of these systems adhered to Parmenides' view that what was real could not ultimately come into being or pass away, but interpreted the apparent birth and destruction of natural objects as being the consequence of a multiplicity of fundamental unchanging elements, which alone were truly real, and which moved into and out of various combinations to form the objects of the world....Empedocles posited four ultimate root elements – earth, water, air and fire – which were eternal, and which moved together and apart by the primary forces of Love and Strife. Anaxagoras proposed that the universe was constituted by an infinite number of minute, qualitatively different seeds. But instead of explaining matter's movement in terms of blind semimythic forces, (such as Love and Strife) he postulated a transcendent primordial Mind (Nous), which set the universe in motion and gave it form and order. (Tarnas, 1991, p. 21)

Leucippus, and later Democritus, reviving the Ionian quest for the elemental material substance that constituted the universe and retaining Parmenides' requirement that this substance be changeless and unitary, proposed the existence of atoms. 'Atom' means uncuttable'. (Musgrave, 1993, p. 108)

Their point of view was remarkably like that of modern science. They believed everything to be composed of atoms, which are physically but not geometrically indivisible; that between atoms there is empty space; that atoms are indestructible; that they have always been and will always be in motion; that there are an infinite number of atoms and even of kinds of atoms, the difference being as regards shape and size. (Russell, 1946 (2000), p. 83)

The quest for the indivisible, from this early stage influenced, even contaminated, the concept of 'part'. Ideas about reality which had initially been of pervasive flux, Heraclitus' universal Logos, were set aside in pursuit of what made matter, the uncaused and indestructible. The split between matter and mind can be seen to emerge from this early period of western philosophy, poised to be fully expanded by Descartes nearly 2000 years later. Other splits were asserted, notably that between atoms and the space they occupied. The concept 'part' was developing. Reality was part material and part space.

The relevance of this historical sojourn is identification of some of the properties of the concept 'part' as it developed alongside understandings of what 'is'. The concept of 'part' was initially informed by the quest for the indivisible, the separate, the immutable. Combinations of these parts had to be a mechanical process of collision and overlapping which gave the appearance of change. Mechanistic explanations of nature as composed of parts, reducible without residue are thus ancient ones. Another important derivative of these early thoughts was that of determinism. Atoms (or parts of reality) were subject to natural laws. Democritus in particular, saw nothing occurring due to chance. No account was rendered about first or final cause, no purpose defined, but all change was seen to be servant to natural laws. A third influence that has survived from atomism into modern times is that of the existence of primary and

secondary characteristics. The questions regarding which properties of things are real and which are apparent, remained pressing. Democritus' idea that the sour taste of lemons was not due to sour atoms, but to the particular shape of the atoms that precludes a smooth surface when they amass as a collection of atoms, put 'sourness' in the role of a secondary characteristic or an apparent property.

The idea that all material things are made up of smaller things became a pervading one. Inevitably, even though the initial pursuit was to find the elementary substance constituting the material world, very early in the deliberations, the properties of collections of atoms, i.e. the relationship between parts, became important. It was Parmenides' contention that if something exists, the next step is to consider the aggregate of all that exists. Speculation about the possible parts of reality has influenced the concept of 'part'. It has raised and lowered the status of 'part' as theorists have come and gone.

The modern physicist, while he (sic) still believes that matter is in some sense atomic, does not believe in empty space. Where there is not matter, there is still something, notably light waves. Matter no longer has the lofty status that it acquired in philosophy through the arguments of Parmenides. It is not unchanging substance but merely a grouping of events. Some events belong to groups that can be regarded as material things; others such as light waves, do not. It is events that are the stuff of the world, and each is of brief duration. In this respect, modern physics is on the side of Heraclitus as against Parmenides. But it was on the side of Parmenides until Einstein and quantum theory. (Russell, 1946 (2000), p. 87)

For a substantial time, the status of the atom (or 'part') was such that it saturated methods of inquiry and spawned what has become known as reductionism. While this worldview is discussed elsewhere in this thesis, the role of the concept 'part' in reductionist thinking is worthy of summary here.

Briefly this would be:

Ontologically: reality consists of parts, entities of a particular identifiable kind: these are fundamental. Higher level entities i.e. complex phenomena are epiphenomenal.

Epistemologically: explanations of complex phenomena are made in terms of ever smaller entities, this being a legitimate and useful way to understand complexity: knowledge about higher level organization can be construed from knowledge about lower level organisation.

It is opposition to these assertions that has inspired the movement to 'wholeness' described in the introduction. It is not denied that useful and varied benefits have accrued from this manner of inquiry but its status as hegemony, its pervasiveness and its application beyond its limitations are justifiable objections.

Inquiry into the nature of 'part' has illustrated two different views on the status of the 'part': Koestler's and Bohm's assertion of the limitations of the use of 'part' and its status as fragment and Smut's view of 'part' as that with potential. The latter is less dismissive of the notion of 'part' and this maybe because its conception predates what Koestler and Bohm see as the ravages of reductionism, in which the status of 'part' was elevated beyond its viable limits and its relationship to whole obscured. These views, however, share common ground when the objections to reductionist thinking, outlined above, are articulated. The common ground is the assertion that in the analysis of complex phenomena into their constituent elements (one understanding of parts) something essential is lost: that the whole is more than the sum of the parts. This is not incompatible with either the assertion that parts have unrealised potential for wholeness or that parts are, in someway, mere fragments of wholes.

Concluding remarks

The exploration undertaken in this chapter could be said to have achieved no more than a laying bare of the possible characteristics of parts and their relationship to wholes. It is not possible to draw specific conclusions about which of these is more probable or more accurate. What it does achieve is illustrate the complexity of the concepts and the enmeshed relationship that these concepts have. This will be useful in the following discussion on the meaning of holism. Perhaps the most significant insight is, however, the identification of an idea common to the understandings of 'whole' and 'part' as explored in this and the preceding chapter. This is the understanding of partness as potential to be more, the idea of tendency towards wholeness, of process. Whitehead (1938) sees the role of logic and aesthetics as being the modes of understanding parts and wholes respectively, emphasizes the interdependence of them both.

...(T)hey are both concerned with the enjoyment of a composition, as derived from the interconnections of its factors. There is one whole, arising from the interplay of many details. The importance arises from the vivid grasp of the interdependence of the one and the many. If either side of this antithesis sinks into the background, there is trivialization of experience, logical and aesthetic....In the greatest examples of any form of art, a miraculous balance is achieved. The whole displays its component parts, each with its own value enhanced; and the parts lead up to the whole, which is beyond themselves, and yet not destructive of themselves. (Whitehead, 1938, pp. 61, 62)

The idea of balance is ubiquitous in explorations of wholes and parts but so too is the idea of parts leading to wholeness in some purpose fulfilling way. Even in the understandings that claim these concepts to be 'states', either appeal is made to the fleeting nature of the state, wholes are themselves parts too, or to the artificiality of thought *about* reality as contrasted with how reality *'is'*. Flux or process is evidently a central property of these concepts.

Chapter Six

Holism explored

The force that through the green fuse drives the flower

Drives my green age; that blasts the roots of trees

Is my destroyer.

And I am dumb to tell the crooked rose

My youth is bent by the same wintery fever.

The force that drives the water through the rocks

Drives my red blood; that dries the mouthing streams

Turns mine to wax.

And I am dumb to mouth unto my veins

How at the mountain spring the same mouth sucks.

From: *The Force that through the Green Fuse Drives the Flower*. Dylan Thomas
(in The Norton Anthology of Poetry. Eastman, 1970, p. 1104)

Holism is immediately identifiable as a word belonging to the group of impenetrable words that defy exact verbal explanation. Shipley (1995) identifies these words with 'unverbalizable' meanings that nonetheless have a strong presence in

experience or intuition.

Many important ideas now current in science have had a very long history, and often (one) that is well described and accepted. Other ideas, however, while frequently underlying much of the thinking and experimentation, have remained largely undocumented. Perhaps because of their indistinctness they dwell unsuspected under the surface of even deliberate science; or perhaps because they are so subtle and obscure they have escaped conscious formulation. An illustration of the former is the idea of gravity which, being absolutely everywhere, remained long hidden anywhere in particular. An example of the second is the idea of emergent evolution, or of evolution itself, which grew up confronting a great amount of prejudice against any concept that challenged the mythopoetic idea of special creation. (Shipley, 1995, p. 6)

This is illustrious company for holism but no less than it deserves in the view of many. The word holism was coined to account for a perceived direction of evolution and it is with this grand function that we begin exploring its meaning. Unlike gravity and evolution, however, the idea of holism has not been followed by pure theory of its own either mathematical or biological or social. Rather it has been used as if such theory were assumed. It has been employed in the theory of many disciplines, linguistics, social science, politics, psychology, philosophy, administrative science, medicine and healthcare, and most effectively in ecology and biology. To some extent each of these has overlaid its own hue giving discipline specific tones to the meaning of holism.

So to discover something of the 'theory' of holism, it is necessary to examine the uses which it has been assigned. This will be the task of this chapter. Holism is a vast topic and by its very nature one that has hazy limits. This thesis is about giving holism crisper boundaries by focusing a lens on its sphere of influence so that those holistic tenets that are useful in the pursuit of health, can be embraced by health care workers in a congruent and defensible manner.

So what is holism?

'Holistic' describes something. But it is not a simple adjective: we don't talk about holistic apples, or cars. It is an adjective that is used to describe abstract nouns: a way, a view, a style, a particular kind of method, a system, a whole. It is used to clarify a particular vantage point from which, or within which, actions follow, so it seems to be used as an adverb too (holistic care). It is used to give information about the way ideas will be related to each other. But use as a descriptive word entails understanding of the meaning of the noun from which it derives. The meaning of the word holism is equivocal. From extensive reading the following distinctions of *the use* of the word holism are evident: (The *use* is not the same as the *definition*).

Distinction One:

It is a fundamental process in nature.

This is the view proposed by Smuts (1926), and Koestler (1978) and others who suggest that evidence from biology, evolution and, more recently, modern physics, leads us to the conclusion that holism is an operating principle of the universe/reality. Very closely linked is the extension of this idea:

It is a way of accounting for the emergence of complex phenomena.

This is an idea developed by Lloyd Morgan (1923) and independently by Smuts (1926) but one that has been refined in the fields of ecology and biology. (Looijen, 2000; Morowitz, 2002) The recognition that the whole is more than the sum of the parts has been usefully applied in social science (Phillips, 1976; James 1984) and in the understanding of the relationship between mind and body (Esfeld, 2000) and has been applied to psychology by the Gestalt School

of Psychotherapy. (Hjelle & Ziegler, 1976)

Distinction two:

It is a way of establishing meaning.

Holism is seen by some (Lormond, 1996; Block , 2000) to be the doctrine that states that the meaning of a word, sentence or idea (i.e a part) can only be determined by reference to the rest of language (i.e. the whole). Similarly, a belief system has meaning only in relation to other belief systems. This is the “context generates meaning” declaration of Hermeneutics and of Radical Constructivism. The debates about internal relations fall here too. Very closely linked is the extension of this idea:

It is a certain way of thinking.

Holism is sometimes used as a call to a certain way of thinking: an injunction to be thorough, comprehensive, to consider all possible contributing phenomena, all consequences. For example in healthcare, the call to look at the whole person, to think broadly, or to use ‘alternative’ methods. It is also a call for contextual thinking and for recognition that distinctions made in thought as rational exploratory tools, are mere tools and not evidence of real boundaries.

‘Definitions’

In definitions of holism a wide range of phrasings is used. The confusion seems to be about which assertions to place as core assertions and which are auxiliary or derivative ones. There are subtle but important differences in these definitions (loosely coined). Some involve ontology, some epistemology and some methodology. For example, the following are a selection of typical

statements.

“Holism is the fundamental factor operative towards the making or creation of wholes in the universe” (Smuts 1926, p. 98). This makes ‘wholes’ a fundamental feature of *reality*. Holism is a tendency in the universe.

“Holism is (a philosophical doctrine) the theory that nature tends to synthesize units into organized wholes.” http://www.newciv.org/ISSS_Primer/seminar.html

This statement calls holism *the theory* that reality has a tendency to forms ‘wholes’ which have some particular organization.

“Holism is the theory that the determining factors in biology are its irreducible wholes.” (ibid.) A methodological restriction has been added: the specification of irreducibility and holism is associated with a specific discipline. Wholes are said to be influential in an unspecified way.

“Holism may be defined by the statement that the whole is more than the sum of its parts” (Koestler, 1978, p. 26). This statement can be read in two ways.

1) Wholes have (an) additional characteristic/s over and above the characteristics of their constituent parts.

2) More than an aggregate of parts is necessary to form a whole.

“Holism is the theory that living matter or reality is made up of organic or unified wholes that are greater than the simple sum of their parts.”

<http://www.dictionary.com> Holism is the *theory* that ‘wholes’ are unified and have a special characteristic/s.

“Holism (is) the tendency in nature to form wholes that are more than the sum of their parts by ordered grouping.” (Concise Oxford Dictionary) Holism is a

tendency to form wholes which have additional characteristics by an ordering process.

“Holism is the approach to the study of a psychological phenomenon through the analysis of the phenomenon as a complete entity in itself.” (ibid.) Holism is a method of investigation in a particular discipline that precludes analysis.

“Holism is the view that parts of a system have significance mostly by virtue of their inter-relatedness with other parts”. <http://www.artsci.wustl.edu/philos>
Holism is belief that meaning of a part of a system is derived from other parts.

“Holism is the principle that an organism, or one of its actions, is not equal to merely the sum of its parts but must be perceived or studied as a whole.”
<http://cancerweb.ncl.ac.uk> This could mean that holism is a *real* operative factor or a *theoretical* one or a *methodological* one, that precludes analysis of wholes, which have additional properties not possessed by their constituent parts.

These statements are not very helpful. A simple substitution illustrates this.

What is partism?

Partism is the fundamental operative factor towards the making or creation of parts in the universe.

Partism is the tendency of matter to form parts.

Partism is defined by the statement that lots of parts are more than the sum of a few parts.

Partism is the tendency in nature to form parts which are more than a

combination of lesser parts, by ordered grouping.

Partism is the approach to psychological phenomena through the analysis of these phenomena as parts themselves.

Partism is the view that parts have significance mostly by virtue of their inter-relatedness with other parts.

Do these statements give clarity to the word 'partism'? Can we now imagine what 'partistic' healthcare would be like? Evidently, recourse must be sought to other ways of understanding holism. What was the context of the need for this word?

Holism and Evolution

The wake of Darwin's theory of evolution eroded more than simply the Creation idea. It exposed questions about the origin of Matter, Life and Mind: questions about the purpose of these and questions about the driving essence or force evident in the progress of the universe, but it did not address them. Jones (1999) notes that Darwin's theory had nothing to say about the beginnings of life or the development of consciousness. The evidence Darwin gathered led him to believe that evolution is driven by the simple, slow and potent mechanism known as natural selection of chance mutations. There have been many challenges to Darwin's ideas and subsequent discoveries have filled in gaps that he himself was aware of, for example the mechanisms of inheritance and the nature of the randomness of mutation. However, the questions about how life emerged from matter and how consciousness emerged from life are unanswered.

There have been great minds engaged in sustained reflection about these questions. They come from areas of speciality and from the ranks of writers and

thinkers of a more general nature.

Jan Christiaan Smuts, as an undergraduate at Cambridge before the end of the nineteenth century, became interested in the development of personality. His early writings, "Walt Whitman: a Study in the evolution of Personality" and "An inquiry into the Whole" were not published but formed the foundation of his ideas about the existence of wholes and the tendency towards wholes and wholeness in nature. It is this tendency that he termed Holism in the publication Holism and Evolution (1926). There were others synchronically addressing the same questions and from the vantage of present times, a plethora of writing on possible explanations for the march of the universe: Samuel Alexander (1920) Space, Time and Deity; Lloyd C. Morgan (1923) Emergent Evolution; C.D. Broad (1926) The Mind and its Place in Nature. However, as it was Smuts who coined the term Holism from the Greek (*holos*), it is with his work that a careful exegesis of holism should begin.

In the early decades of the twentieth century Smuts listed the following problems in the process of developing understanding about the world.

- The great divisions between fields of knowledge: the study of matter, life and mind are engaged by separate specialities.
- The urgent need for revision of our concepts in the light of new ideas about matter: if matter holds the potential for life and mind, then it is not the 'old' matter of the materialists.
- The way information is transformed into fixed dogma: for example ideas about causation: 'there can be no more in the effect than in the cause'.
- The lack of understanding of the 'fluidity' of thought about nature and understanding of the 'fluidity' of nature itself: the resistance to the

concept of 'fields' in which things and ideas intermingle creatively.

- The rigid outlines and contours of science: the simplification to render problems operational.

No doubt specific aspects of some of these problems have changed but evidently (as discussed in previous chapters) the same categories of problems dog our thinking to the present. Smuts called for new vantage points from which to view accumulated knowledge and pointed to Copernicus, Newton, Darwin and Einstein as leading revolutions, not in the acquisition of new knowledge, but in fresh vision of the already known. He pointed too, to the hurried and shallow conclusions often drawn from fragments of new knowledge in order to expedite the next, often more specialized research project. How, he asked, could a retreat to a profoundly mechanistic position result from the claims that life emerged from matter? How had the impact of Mind on evolution been so dwarfed? Why had the depth and calibre of reflection about the 'knowledge' acquired been relatively limited? Why had the decimating effects of abstraction and generalisation, which deny access to an interrelated understanding of the universe, been so lauded as pathways to knowledge? Almost one hundred years later these questions are still pertinent and are echoed in the writings of Bohm and others referred to in chapter two.

In response to his own call, Smuts develops new vantage points from which to view the assertions of evolution theory. He reviewed the qualities of concepts of space and time, of matter and of the emergence of the cell and the organism. He deliberated on the *implications* of the discoveries of his time with the expressed intention of avoiding the constricting styles of the Victorian age. He set out to explore the 'fluid and creative plasticity' of Nature. He recognized the impact that the discoveries of Darwin, Becquerel and Einstein could have on every province of human thought. He rejected 'fixity' and searched for 'fluidity'. The exact content of some of his conclusions now seem dated. However, it is the manner of his thinking which is so important. It enabled him to see novel

connections, movement in the form of processes, patterns and even direction when others were seeing 'static facts'. As a non-physicist he took time to understand Einstein's General Theory of Relativity, the concept of Space-Time, the physics of radioactivity. As a non-chemist he understood the impact of 'isomers' on the intelligibility of organic chemistry and the connection between the physics of atoms and their chemistry. As a non-biologist he was familiar with the structure and function of the cell and contemplated the implications of these for evolutionary theory. He lived in interesting times, Rongen's X-rays (1887), J.J. Thompson's electron (1899), Max Plank's quantum (1900) and other discoveries already mentioned, but the salient point is that he asked the question, 'what does this mean?'

In acknowledging Smuts' contribution, it may seem that a new breed of super-experts is being called for, a specialist in every area. This is not the case. Smuts himself and others who have contributed in the same way, (Teilhard de Chardin, 1955; Koestler, 1978; Popper, 1972; Briggs & Peat, 1989 and others) express both reverence for specialised knowledge and the conviction of the value of 'outsiders' engaging with this knowledge at the level of 'what implications does this have for the world, the universe and everything?'

People become frightened when they are invited to consider Einstein's theory. Its refined abstractions, its abstruse mathematical form, its complete novelty and reversal of ordinary common-sense view-points makes it a terror to the uninitiated. And yet I believe the Einstein point of view can be quite simply and intelligibly put. Indeed it must be so put if it is ever to become part and parcel of ordinary educated thought. We must distinguish between the simple clear view itself, and the recondite mathematical processes by which it is reached, and the technical mathematical form in which it is expressed, and from which for all ordinary purposes it can be separated. The understanding and appreciation of the Relativity view-point are not dependent on knowledge of the process by which Einstein reached that point of view. The result is quite distinct from the process. (Smuts, 1926, p. 24)

Smuts' idea of holism

Smuts' thoughts about the implications of the discoveries he explored and his

astute observations about the natural world led him to see Mind (and beyond) as the direction of evolution: the domains of Matter, Life and Mind inexorably processing towards greater complexity. This was not a unique point of view and as will be described later in the chapter some substantial thinkers were grappling with this post-Darwinian challenge to ontology. For Smuts, this view raised the spectre of a deeper principle.

The question now arises whether there is not something still more fundamental in the universe, something of which they (matter, life and mind) are but the developing forms and phases, something out of which they crystallise at the various onward stages of its progress. And if there is this more fundamental principle, can it be formulated into a definite concept, and will it account for the specific concrete character of our universe? (Smuts, 1926, p. 88)

Smuts reviewed the contributions of various thinkers, Hegel and Leibniz among them. He was concerned with the questions about the origin, constitution and unfolding of the universe. There seemed to be a choice between, 1) the truth of assertions about the presence of everything at the beginning, and 2) the truth of the assertions about the progressive, creative nature of reality which is constantly becoming. The understandings at the time made a distinction between the 'old view' of static reality and the 'new view' of a creation process in progress: the creation of new materials and new forms, the nature of which are not obviously present in the constituent matter. Smuts saw the creative capacity of matter expanded in life and still larger in mind. The emergence of practical reasoning and from this, the capacity for ethical deliberation, marked some pinnacle in the process of creation. He claimed evolution to be an 'epigenesis not an explication'.

As we find life on the one hand encroaching on the domain of matter, so again we find mind encroaching far beyond its own proper domain on that usually assigned to life. Is life implicit mind, mind asleep and almost waking? Is life latent in matter, and is Mind latent in life? What is the answer to these questions, and how have we to conceive matter, life and mind to explain this over flow into each other's domain? Is it possible to have a concept which will embrace all these facts as phases of its own creative development. (Smuts,

1926, p. 97)

Any principle that may underlie these overlapping phases would need to apply to physical, biological and mental states. In addition such a principle would need to show account of a second level assertion by Smuts, that this process of creative evolution is punctuated by the successive achievement of wholeness: a certain internal organisation, a measure of self direction and an individual character specific to itself. He saw wholes as fundamental to at least observable reality, not mere constructs of thought. Smuts saw 'wholeness' in every place along the process of complexification: "whole(s) in which all parts appear in a subtle and indefinable way to subserve and carry out the main purpose or idea."

...The creation of wholes, and ever more highly organised wholes, and of wholeness generally, is an inherent character of the universe. ...And the progressive development of the resulting wholes at all stages – from the most inchoate, imperfect, inorganic wholes to the most highly developed and organised – is what is called Evolution. ...Wholes of various grades are the real units of nature. Wholeness is the most characteristic expression of the nature of the universe in its forward movement in time. (Smuts, 1926, p. 99)

The term Smuts coined for this fundamental operative tendency in the universe towards the making of wholes, was Holism. Holism was defined by Smuts as:

....the ultimate synthetic, ordering, organising, regulative activity in the universe which accounts for all the structural groupings and syntheses in it, from the atom and the physico-chemical structures, through the cell and organisms through Mind in animals, to Personality in man (sic). (ibid. p. 317).

So Matter, Life and Mind, apparently so different from each other, are seen to be part of a holistic process. Like the existence of wholes, Holism was not to be seen as a chimerical or vague concept or as even just a heuristically potent mental construct but as an evident and definite tendency of the cosmos. Emphatically he claimed that the evidence of holism is everywhere to be found, inferring that if science had not been so vigorously mechanistic and analytical, an understanding of holism would not have become subliminal following the Enlightenment.

Philosophy too, had failed to develop a clear view of 'the whole' reserving for it a vague thread-like presence through many ideas or assigning it the straight-jacket nature of being total unity, unity with 'everything.' (One of the distinctions of wholeness made in the previous chapter) While there may be such an ultimate Whole at some endpoint cosmic terminus, what Smuts was addressing was the creation of wholes in everyday life and experience and the principle underlying them, of which they are an expression. It is this inner capacity for progressive development, creativity, which Smuts considered invalidated a merely mechanical view of the universe. The possible nature of wholes was explored in chapter four in the context of ideas about wholeness down the ages. Some of the ideas are associated with holism by Smuts and some are not.

Smuts' understanding of wholes

Wholes are composites and have the following characteristics.

- Wholes are composites, not simple, unique, indivisible entities but dynamic entities in which all parts appear in a subtle indefinable way to subserve and contribute to the whole. The mutability of wholes in nature is fundamental to their creative potential, the antithesis of the static 'absolute' wholes of Parmenides.
- Wholes are composites but are more than mechanical systems. While some may call a complete engine a whole, a full set of cards a whole, this was not the kind of whole underlain by holism. Smuts distinguishes mechanism as "the absence of all inwardness, of all inner tendencies and relations and activities of the system of parts". (p. 102) This led Smuts to make the 'greater than the parts' assertion. "A whole, which is more than the sum of its parts, has something internal, some inwardness of structure and function, some specific inner relations, some internality

of character or nature which constitutes that more.” (p. 103)

- Wholes are composites, but have no existence separate from their parts. Wholeness is not something over and above its parts, not some immaterial essence; it arises from the specific structure and function of the parts, from a creative synthesis of them but remains in essential unity with them.
- Wholes are composites that exist on a progressive scale of complexification. From an arrangement or simple organization of energy, as in a chemical compound, to groups of parts co-ordinated in structure and function and demonstrating a co-operative character, in plants, to the emergence of consciousness, personality and the capacity for value systems in humankind. Holism is the operating principle behind this process of deepening complexity. In other words, wholes are expressive of an inner general tendency of nature.
- Wholes are composites that have fields. Deeply influenced by the concept of space-time, Smuts exhorts his readers to develop an awareness of even sensible objects as events, as active energy systems in space-time, as centres of happening. He laments the limitations of our senses as he laments the distortions in thinking processes that exaggerate the separateness of things. Applauding the instruments designed to extend human perception, he insists that “the activities which constitutes the thing go beyond (its) sensible contours.”

The material part which we popularly call the thing is merely the concentrated sensible focus which discloses itself to our limited sensibility and selective intelligence ; beyond that is the dark “field” which is formed by the activities and properties which constitute its sensible focal centre. ...The essential point is that the physical field is an extension of the active energy system of the thing beyond its sensible outlines, an extension which shows the same properties and has the same effect on other things within that field as the thing itself, though with ever diminishing force or strength as the field recedes

from the thing. (Smuts, 1926, p. 112)

Even more relevant, is the impact of this idea of fields on the notion of organism and as previously discussed, on the notion of concept. The question to ascertain the extent of a field is simply, “in order fully to understand the nature, functions and activities of an organism (idea), what more is necessary to its concept beyond its sensible data?” The fact asserted is that the sensible structure is not the whole structure.

According to this view the sensible structure is a narrow concentrated sensible focus beyond which is indefinitely extended an insensible structural field as the carrier of organic properties....The organism, much more than the physical body, is an historic event, a focus of happening, a gateway through which the infinite stream of change flows ceaselessly. ...the organism and its field, or the organism as a “whole”...contains its past and much of its future in its present....It is impossible to over estimate the importance of this time factor in the development and consequently in the explanation of organism. An organism is in continuous autogenesis. (Smuts, 1926, p.114)

Smuts describes causation, creativity, direction and purposiveness, ‘individuality’, freedom (autonomy), unity of action as essential features and functions of wholes.

Causation.

There are important implications of Smuts’ understanding of holism and one of the most significant and, as will be seen later in the chapter one, of the most controversial, is causation.

A whole is a synthesis or unity of parts, so close that it affects the activities and interactions of those parts, impresses on them a special character, and makes them different from what they would have been in a combination devoid of such unity or synthesis. That is the fundamental element in the concept of the whole. It is a complex of parts, but so close and intimate, so unified that the characters and relations and activities of the parts are affected and changed by the synthesis....It is not mere addition and composition of the unaltered composing functional elements....

Both the individual functions of the parts (cells, organs etc) and their composition or correlation in the complex are affected and altered by the synthesis which is the whole. (Smuts, 1926, p. 122)

It is represented by Smuts:

x = mixture

x_1 = whole

$a+b+c+d = x$ (mixture): but in the synthesis which results in x_1 , the functions and parts themselves are changed to $a_1+b_1+c_1+d_1$. Not only does the synthesis of the parts create the whole, the instantiation of the whole means that the parts are themselves changed. Smuts saw a connection between the assertions that the whole is caused by the specific synthesis of the parts and the assertion that, by being parts of a whole, the parts themselves are changed. This reciprocal causation shows itself in the power the whole possesses to regulate the parts, either structurally or functionally and thus maintain balance and equilibrium. Coming into wholeness affects the properties of the parts. This idea has been interpreted by some as 'downwards causation' which will be discussed later in the chapter in relation to current thinking about holism.

Popper (1979) describes the influence of the whole, (higher level functions) on the parts (lower level functions) as one of a kind of plastic control.

Take for example, a discussion at a scientific conference. It may be exciting and enjoyable, and even give rise to expressions and symptoms of it being so; and these expressions in their turn may release similar symptoms in other participants. Yet there is no doubt that ... these symptoms and releasing signals will be due to, and controlled by, the scientific content of the discussion...the lower functions will be controlled by the higher ones. (ibid. p. 239).

The influence of wholes on parts is a fundamental tenet of holism, because if

the parts were not affected by becoming parts in a whole, then the whole would be merely a mechanistic one. Bohm (1985) describes this relationship as relevant in physics.

There is another point we can bring in this connection, which is that the state of the whole may actually organise the parts, not merely through the strong connection of very distant elements, but also because the state of the whole is such that it organises the parts. (ibid. p. 7)

Direction.

The implication that the universe is progressing in a particular direction, towards some state of wholeness is incipient in the idea of holism as Smuts proposed it. He describes the creative movement of reality as advancing towards a fuller measure of wholeness and as continuous growth towards complexity and organisation, self-regulation and interdependence with context. He asserts that this is evidenced in nature and is not mere speculative metaphysics.

The freedom is limited, the movement is slow, the character of the universe is essentially conservative...(but) it does not go like a clock, completely manufactured, and once and for all wound up at the beginning to mark a time fixed and predetermined for it. It is slowly making itself. It is slowly winding itself up, it is slowly making its own time. (ibid. p. 132)

Darwin had cited this direction of the process of evolution as the role of natural selection (Gould, 2002) and called natural selection a positive force for the creation of this direction. Smuts is presenting an auxiliary idea that the formation of wholes, or a progression towards wholeness, is part of this process.

This understanding of the direction of evolution is not substantially different from that emerging from modern views on complex systems.

Any interaction takes place in the larger system and the system as a whole is constantly changing, bifurcating, iterating. So the system and all its "parts" have a direction in time. Time thus becomes an expression of the system's holistic interaction, and this interaction extends outwards. Every complex system is a changing part of a greater whole, a nesting of larger wholes leading eventually to the most complex dynamical system of all, the system that ultimately encompasses whatever we mean by order and chaos – the universe itself. (Briggs & Peat, 1989, p. 148)

It is difficult to avoid the evidence of a persistent trend, some sense of movement towards complexity. The question arises whether there is an Absolute Whole to which all wholes aspire. Smuts is clear that he is not addressing the possibility of 'absolute wholeness'. His focus is on the evidence of increasing wholeness which he sees as proof of the creativity of reality, 'the progressive advance in respect of the character of wholeness.' Together with increasing independence and greater self direction of wholes as they are found in matter and then life, comes greater freedom until the conscious mind takes control of itself and even further, to the full freedom of spirit. However, Smuts argues (in agreement with Kant) that in no part of evolution is it possible to argue from the parts to the whole: the whole is always something utterly different, a new creation. The whole is always transcendent in relation to its parts. It is the transcendence of an organic field, much like the influence of social fields on human behaviour. There is inner direction and control but this is the limit of purpose or teleology in Evolution: for Smuts it is not possible from nature, to make inference of God.

In contemplating the possibility of a greater whole in the sense of the progression of wholes, Smuts refers to the characteristic field of wholes and the complex effects of overlapping fields which change and grow, contributing to ever greater wholes of which all other wholes are part.

When we come to consider a group of wholes we see that, ...their fields overlap and penetrate and reinforce each other, and thus create an entirely new situation.

Thus we speak of the atmosphere of ideas, the spirit of a class or the soul of a people. The social individuals as such remain unaltered, but the social environment of field undergoes a complete change. There is a multiplication of force in the society of group owing to this mutual penetration of the conjoint fields, which creates the appearance and much of the reality of a new organism. But as a matter of fact there is no new organism: the society or group is organic without being an organism: holistic without being a whole. (Smuts, 1926, p. 339)

In the same way nature is perceived as alive, as organic, but in fact it is a creation of overlapping fields of wholes which create a new ineffable spirit or atmosphere. Smuts describes nature as holistic without being a whole.

Koestler's notion of hierarchies of holons, a multi levelled stratified hierarchy of subwholes goes some way to explaining the tendency to wholeness without committing to an ultimate destination of 'the perfect whole'. Smuts talks of the 'creativity' of evolutionary holism as its most fundamental character, from which all the particular forms and characteristics of the universe flow. He has however, this caution to offer.

Nature or the Universe is sometimes metaphorically spoken of as a Whole or The Whole. Sometimes it is even personified, and the trend of Evolution then becomes the Purpose of some transcendent Mind. All this is, however, unwarranted by the facts and unnecessary as an explanation of Evolution. Holism as an inner evolving principle of direction and control is enough; it underlies the variations which arise and survive in the right direction, and it creates in the "field" of Nature a general environment of internal and external control. (Smuts, 1926, p. 318)

Creativity/emergence.

Deliberating about causation raises the closely linked notion of creativity. Smuts makes a distinction between causation that is creative and causation that is mechanical. Wholes are creative in two ways.

- 1) In making wholes, new property is made and

2) In responding to stimuli or external 'causes', wholes transform themselves and become new in some way incorporating the stimulus.

In the first instance the phenomenon of emergence is manifest, in the second, wholes demonstrate their capacity to respond transformatively to external causes: they respond creatively to stimuli. It is as if external influence is metabolised and put to the use of the whole.

In other words, organism is not an effect of external causes; nor are its states and characters effects of external causes; it is in a large measure its own cause – causa sui –and the cause of its own states and functions. External environmental influences are merely the rough material with which it builds up its own system. (Smuts, 1926, p.137)

This capacity of 'creative mastery' increases with complexity of the organism, rendering evolution a continuous movement towards independence and self-regulation.

Creativity involves newness: the inevitable question is newness derived from what? 'Something from nothing', an idea that has perplexed humans since the beginnings of thought, is one facet of this complex phenomenon. Smuts considered this 'absolute creation' as beyond what is knowable to the human mind but saw holism as a very clear explanation for the creative process of the universe once there was 'something'. Fundamental to this process is the emergence of novel properties of wholes from the relation of their parts.

A mere mechanical aggregate is nothing new, and is no more than the sum of the mixed ingredients, while a chemical compound is new in the sense that out of the constituent materials another qualitatively different substance has been made....In the same way a new structure and substance is made in the atom out of the qualitatively different electrons and protons. It was on this account and in this sense that we called matter creative; creative that is to say, of structures and substances different from their constituent elements or parts. (Smuts, 1926, p. 128)

Smuts considered one of the most fundamental questions about reality to be “How do elements or factors a and b come together, combine and coalesce to form a new unity of entity x different from both of them?” (ibid. p. 147). If elements a and b are in what Smuts calls a mechanical combination, their properties will be a mere sum of their properties in isolation, if, however, they are in a chemical or even a social combination an entirely new creation emerges.

Smuts describes the process of emergence in the process of creating new properties but does not single out this aspect of the process above any other aspect. He specifically distinguishes between the emphasis placed on emergence by Lloyd Morgan (1923) in his work Emergent Evolution and his own emphasis on wholeness and holism as the operative factor in creativity, emergence being merely a phenomenon exhibited by wholes. However, emergence has been usefully applied in various disciplines. Emergent properties have been recognized as integral to the creative process of thinking.

The process has been described by Popper (1972) in the following schema.

$$P_1 \rightarrow TT \rightarrow EE \rightarrow P_2$$

That is, we start from some problem P_1 , proceed to a tentative solution or tentative theory TT , which may be (partly or wholly) mistaken: in any case it will be subject to error-elimination, EE , which may consist of critical discussion or experimental tests; at any rate, new problems P_2 arise from our own creative activity; and these new problems are not in general intentionally created by us, they emerge autonomously from the field of new relationships which we cannot help bringing into existence with every action, however little we intend to do so. (Popper, 1972, p. 119)

Growth of knowledge occurs with this feedback process.

The autonomy of the third world, and the feed-back of the third world upon the second and even the first, are among the most important facts in the growth of knowledge. Following up our biological considerations, it is easy to see that they are of general importance for the theory of Darwinian evolution: they explain how we can lift ourselves up by our bootstraps. Or in highbrow terminology, they help to explain emergence. (ibid. p. 119)

Animals share with humans the basic characteristics of communication, self expression and signalling, but with the more complex processes allowed by description and argument, the possibility of *truth* emerges.

...(W)ith the development of a descriptive language, (and further of a written language) a linguistic third world can emerge; and it is only in this way, and only in this third world, that the problems and standards of rational criticism can develop....it is to the development of the higher functions of language that we owe our humanity, our reason. (ibid. p. 120)

P₁ → TT → EE → P₂ gives a rational description of evolutionary emergence, and our self-transcendence by means of selection and rational criticism.

This idea is important for holism, because it highlights the viability of the idea of downward causation that is seen as such a problem.

...(I)f we accept a theory of evolution then... even if we remain sceptical about the theory that life emerged from inorganic matter, we can hardly deny that there must have been a time when abstract and non-physical entities such as reasons and arguments and scientific knowledge, and abstract rules, such as rules for building railways or bulldozers or sputniks or say rules of grammar or of counterpoint, did not exist, or at any rate had had no influence on the physical universe. It is difficult to understand how the physical universe could produce abstract entities such as rules, and then could come under the influence of these rules, so that these rules in their turn could exert very palpable effects upon the physical universe. (ibid. p. 225)

Teilhard de Chardin (1965) describes this phenomenon.

In every domain, when anything exceeds a certain measurement, it suddenly changes its aspect, condition or nature.

The curve doubles back, the surface contracts to a point, the solid disintegrates, the liquid boils, the germ cell divides, intuition suddenly bursts on the piled up facts...Critical points have been reached, rungs on the ladder, involving a change of state – jumps of all sorts in the course of development. (ibid. p. 78)

The explanation of novel properties by the idea of emergence became the doctrine of emergentism. Emergentism states that when an entity reaches a certain level of complexity, genuinely novel properties emerge that are unpredictable and irreducible. So novelty, unpredictability and irreducibility are the three main tents of emergentism (Susse, 2000).

This triumvirate has been controversial. If emergent properties are unpredictable and irreducible they are beyond investigation of the scientific kind. Popper's explanation of the growth of knowledge, however, seems to justify the claim to unpredictability, "(f)or he who could so predict today by scientific means our discoveries of tomorrow could make them today; which would mean that there would be an end to the growth in knowledge" (ibid. p. 298). The same unpredictability applies to major historical changes and evolutionary changes. Popper is clear too that emergence is a real phenomenon and that it does call for revision of the strictest devotion to reduction.

I do not believe that anybody who has ever seriously gone into any chapter of the history of ideas will think that a reduction of these could ever be successful. But I take it as my task here not so much to argue against the possibility of any reduction, as to argue for the recognition of emergent properties. (Popper, 1972, p. 297)

Looijen (2000) makes the distinction that there are two theses embedded within the idea of emergence.

Thesis 1. An ontological thesis, states that the whole is more than the sum of the parts, that is, a whole has emergent properties which its components parts do not possess, either separately or in other partial combinations.

Thesis 2. An epistemological thesis, states that the emergent properties of wholes cannot be deduced from, or reduced to, 'the most complete knowledge of', that is, micro-theories and auxiliary hypotheses about their component parts.

These theses are independent of each other and Looijen proposes that the first be accepted but the second rejected. This is necessary, in his opinion, if investigation is to be possible. The implications of this concessive emergentism will be discussed in the next chapter.

There are multiple subtle variations to the understanding of emergence by proponents of the idea and strong views expressed by opponents that what is called emergent, is no more than what has yet to be explained. McLaughlin (1992, cited in Susse, 2000) criticizes the idea as one tied to a time of particular and limited scientific knowledge. Quantum physics, he claims, has rendered favourite examples untenable. If it was wrong to believe that emergent properties of chemicals would remain unexplained forever, are we wrong in the same way about Mind? Will contemporary nonreductive physicalism fall from favour when future scientific advances render their favourite examples untenable? Applying time indexed reading, is there more to emergence than what was inexplicable? Emergence enables two assertions about reality to be reconciled.

- The world is entirely constituted out of material stuff.
- Some things, for example living and conscious things, have properties that are not explained by the resources of physical theory.

Despite Miller's 1953 experiments using common chemical constituents of the Earth's atmosphere and an electric spark to simulate lightning, no more than 'precursor molecules' for life were formed. No viable life form has been made from matter. Though sensation and cognition are clearly related to neuronal activity, there is a gap between physiological activities and the simplest act of thought. We understand the histology of the nervous system and the physiology of action potentials and synaptic activity, but we are far from dealing with the nature of consciousness.

The issue of 'potential' cannot be avoided when considering emergence and is one addressed by Smuts in a particular way. The danger of the idea of potential, to him, was the lapse into pre-Darwinian understandings of all creation being somehow present from an instantaneous beginning, when Smuts had argued so strongly for the creation *process* of emergence. Because Smuts sees emergence as producing new and inexplicable properties and characteristics, he argues that it is impossible to hold simultaneously that the potential for these always existed. The future is not a mere enactment of the script of the past, it is "open in one direction, the direction in which time is moving." (ibid. p. 132)

Individuality.

Smuts uses this term to mean the uniqueness of features and function of an entity rather than meaning the primary moral value of the individual or its independence from relation with the greater environment. "Every whole has a real character, a unique identity and an irreversible orientation which distinguishes it from everything else and is the very essence of wholeness" (Smuts, 1926, p. 140). Individuality is a characteristic that increases with wholeness. The individuation of the Self emerges from the activity of Mind in relation to others. Smuts emphasises that the existence of the self is possible only by relation with others and this creates a tension between the whole making tendency towards individuation and the whole making tendency

towards the greater whole of which it is essentially part.

Koestler (1978) has drawn useful insights from this paradox of unity and individualisation of wholes: As previously discussed, he describes wholes or holons as possessing, both a self-assertive tendency and an integrative tendency. Not only do wholes have potentials for self preservation and autonomy but they have an integrative tendency to preserve and be part of the larger system. This tension exists at all stages of the evolutionary hierarchy and governs the development of wholes. Koestler describes the relationship between these tendencies as in constant interplay and in fluctuating dynamic equilibrium; in healthy individuals or social systems these tendencies are balanced. If however, either tendency becomes dominant, the operation or behaviour of the whole will be pathological in a particular way. Excessive self assertion leads, in Koestler's view, to the rampant growth of attributes that increasingly behave as separate from the greater whole and eventually succumb to their own unsustainability. For example, the holon that is an army ant would rapidly perish if isolated from the holon that is the column of marching ants. Higher up the evolutionary scale, effects of this imbalance can be seen in both the lesser and greater holon. For example, if some holon of the cognitive structure of the self assumes an excessively dominant functional role, the greater holon of personality, and even holons beyond that, the family, society, will be affected. Reciprocally, if integrative tendencies become unqualified identification with the larger whole, the vigour of the individual is crushed and the authority of the group is rendered supreme. At the level of homo sapiens, this has had calamitous outcomes.

The notion of individuality is extremely complex and it requires the tolerance of paradox in the same way that the notion of wholeness does: both are something discernable as part and whole, integrated and autonomous.

Freedom (autonomy).

Freedom, first manifest in organisms in their ability to take in their own nutrition and process it, is an increasing property of wholes. Mere aggregates of matter do not demonstrate such a process of creative assimilation which constitutes the very beginnings of autonomous action. Clearly by the time evolution has produced the human will, autonomy has emerged as a fully developed property. However, Smuts points out that some degree of freedom is present in all wholes and that development towards autonomy is a fundamental principle of evolution. Holism, as the tendency to form wholes, is paradoxically also the individuating activity, creating in its wake smaller wholes which are set free from external determination. Achieving ever greater inward determination gives freedom its full expression. Freedom of the Self, for example, is evident in its character of spontaneous or conscious self-determination. It is not a mere abstract principle, it is an activity.

Smuts sees the attaining of the characteristics of self-direction and self determination as fundamental to the activity of Holism. Smuts makes clear that he is not, in describing freedom as characteristic of wholes, engaging in the determinism vs free will debate. The idea of unmotivated decision making is in itself not compatible with holism and that of capricious self indulgence anathema to it. The freedom that holism brings about is freedom to develop wholeness and as such can be called holistic determinism.

Freedom, not in the sense of individual caprice of choice, but in the sense of self-determination of a whole, or holistic determinism, is an inherent character of Personality, and flows from the very nature of Holism. (ibid. p. 311)

Freedom is a measure of self realization, it is proportionate to wholeness. Koestler resolves the question about the nature of autonomy by making the distinction between 'fixed rules' and 'flexible strategies'. He uses the analogy of a chess game: there are permissible moves but the actual moves are left to the

player.

The notion of autonomy is central to understandings of health and in chapter eight its role as an indicator of the limits of holistic health care will be examined.

Unity of action.

Smuts maintains that interaction is too crude a word to describe the relationship between, or action of, parts and wholes and makes the following assertions.

Interaction seems to assume a common platform of action on more or less the same level. But we have seen that the structures of matter, life and mind are on quite different levels of organisation and inwardness. The one acts inside the other and through the other. To use a metaphor, the mesh of the one is much finer than that of the other; the lower is transparent to the higher structure, which therefore penetrates it and represents an inner activity which was not there before. Action through or inside, "peraction" or "intro-action" would therefore be nearer the mark than "interaction" in describing the action of elements in wholes with respect to each other. (ibid. p. 270)

To produce wholes that have emergent properties, parts relate in this way, rather than just combining arithmetically.

An important characteristic of wholes is the influence the whole exercises in whatever action takes place by or between the parts. It is the nature of wholes to demonstrate this creative, transformative activity, this mediating role that holds together all that make up the whole. Wholes function as if there is an inner 'government' serving the whole through action of the parts and the whole.

The unity of parts and wholes is expressed over time in the idea of a unitary system whose innermost nature is self maintenance and self development as a whole.

The organism as both structure and field, while carrying with it the past which is its expressed self, also carries with it the still unrealised future which flows organically from that past, and it maintains a living moving harmony between the two: its presently existing self is the more or less harmonious realization of the organic unity of its past and its future in its present. (Smuts, 1926, p. 210)

This understanding of the unity of the action of parts and wholes underscores the assertion that Smuts is not discussing some end-time whole but wholeness as part of present existence.

Purpose and Mechanism.

Two further issues arise from Smuts' understanding of reality and these in particular illustrate the difference between what has been narrowly defined as 'the scientific view' and the view that holism allows. One is about purposiveness and one about the status of mechanism.

Mechanism, a world view put to good use by science, sees the effects of working parts as adding together to produce a sum effect. The parts do not lose their identity nor are they changed in any way by the whole. Smuts perceives mechanism to be a part of the complex progress of evolution. Levels of mechanism change as systems become more complex. From mere physical approximations of properties to more active physical relations, to chemical relations and on to biochemical and psycho-physical relations, the presence of mechanism is gradually reduced to a point where the 'highest and fullest expression of holism' is realised in the emergence of the mental and spiritual capacities of humankind. It is at this point that Smuts unequivocally rejects the application of the mechanistic methodology.

Smuts is very clear that, in his view, mechanism and holism have a reciprocal relationship: there is a measure of mechanism in all things but this decreases as the factor of wholeness increases.

In proportion as Holism realises its inwardness more fully and clearly in the development of any structure, in proportion as its inward unity and synthesis replace the separateness and externality of the parts, Mechanism makes way for Holism in the fuller sense. (ibid. p.153)

Both mechanism and holism are a matter of degree. Holism is, however, the stronger operating factor. With time and increasing complexity, mechanism becomes progressively overridden by holism but remains present in ever decreasing evidence: an observable principle of incipient wholes at the most primitive end of the evolutionary scale, its vestiges become more attenuated in the progress towards mind. It is for this reason that Smuts sees as appropriate the use of mechanistic methodology for primitive wholes but laments its application beyond its limits. The inevitable meaninglessness of information gathered when mechanism is pressed too far is fundamental to the misunderstandings that are fraught in concepts like life and mind.

As a resolution to the questions about the gulf between matter and life and between life and mind, Smuts offers the possibility of ever increasing wholeness in which neither Life nor Mind are external forces, (vitalism) or entities (entelechies) or additional qualities (dualism) but are in fact brought forth from the structures that precede them. In principle, this is achieved by the developing capacity of incipient wholes to demonstrate *selectivity*, in particular, *self direction*. The slight variations that exist in the equilibrium of all physico-chemical structures enable change of any kind to be a possibility. This change affects all the components of the structure and a new, if precarious, equilibrium is found. It is this inner balancing, a property of all physico-chemical structures that directs the change. Life and Mind are more developed phases of the same inner activity. They are not separate agents, they are structures of greater complexity, deeper intensification, more refined selectivity, with increased inner control, based on the lower structures of the physico-chemical order. They have become more of a whole, demonstrating greater freedom, self maintenance and internal regulation and co-ordination.

The other idea that is threaded through the explanation of holism is one of purpose. The trend in evolution towards increasingly complexity has already been noted, but the mechanism of this directional progression remains a point of debate. Purposiveness is at least apparent (and science would have it that it is only apparent) when observing unified organic action and Smuts was certain of its defining place in the making of wholes. He and others since, have refused to accept that random chance alone has created nature.

Of course there are very significant arguments against any such idea. For example, Richard Leaky (1981) states in The Making of Mankind:

The apparent progress in evolutionary products is, however, just what one would expect from the action of natural selection. Ernst Mayr, one of the great evolutionary biologists of our time, explains it in this way: "Evolution...is recklessly opportunistic: it favours any variation that provides a competitive advantage over the other members of an organism's own population or over individuals of different species. For billions of years this process has fuelled what we call evolutionary process. No programme controlled or directed the progression: it was the result of the spur-of-the-moment decisions of natural selection". (ibid. p. 29)

And there is Dawkins' (1986) famous assertion in response to Paley:

All appearances to the contrary, the only watchmaker in nature is the blind forces (sic) of physics, albeit deployed in a very special way.Natural selection, the blind, unconscious automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparent purposeful form of all life, has no purpose in mind. It has no mind and no mind's eye ...It can be said to play the role of watchmaker in nature, it is the blind watchmaker. (ibid. p. 5)

In contrast, what Smuts seems to be saying is that the 'purpose' of nature is wholeness and that it is in order to *fill the gap* between 'the existing state of affairs' and wholeness, that the process of evolution has been driven forward. This is not the same as saying that this progression is the result of a mindful

consciousness or that there is some endtime purpose in the sense of an ultimate whole. Smuts does not emphatically preclude these possibilities but sees neither as necessary for the whole making process he is describing.

Any suggestion of the idea of the purpose of evolution is assiduously avoided by mainstream science but its spectre is never far from human thought about existence and reality: never more so than when faced with suffering and mortality. Smuts asserts that chance and contingency alone are inadequate explanation. He cites two examples. Firstly, the inherent tendency towards the realisation of wholeness is, as it were, moving reality in a particular direction.

This is not some arcanum: although it sounds mysterious, it is an immanent property of the universe. It is both a driving and a pulling, as matter moves towards mind and beyond. He proposed that the variations that occur in organic development are in fact 'chosen' by the whole out of many that occur, with the benefit of the whole in mind.

The individual and its parts are reciprocally means and end to one another: neither is merely self-regarding, but each supports the other in the moving dynamic equilibrium called life. And so it happens that the central control of the whole also maintains and assists the parts, and the functions of the parts are ever directed towards the conservation and fulfilment of the whole. (ibid. p. 210)

Smuts sees co-operation in the relationship between parts and wholes.

Secondly, everywhere in nature is abundance: far more than required for functional purpose.

The inner sources of wealth and beauty in Nature are inexhaustible, and they are poured forth with a lavish hand in the creative process of Evolution. Not merely survival values on Darwinian lines count: on the foundation of variations with survival value is raised a superstructure of development which far transcends that narrow basis. Mind in its marvellous human efflorescence rests no doubt on a basis of survival value; but how much more than that!

The glories of art and literature, the peace of the mystic religious experience, the creative Ideas which lift this life beyond the limits of its lowly origin – all these experiences have built a spiritual world on the humble foundations of survival. (ibid. p. 222)

Smuts sees so much more in the world than that with survival value.

So Smuts, awed by Darwin's vision but dissatisfied with his explanations, proposes the notion of Holism as a deeper explanation of the progressive evolution of nature: a speculative one certainly, but one that has much internal consistence and which he has shown to be congruent with observations of the natural world.

As illustrations of Smuts' idea of progression to wholeness, his thoughts about the emergence of mind and of personality are exemplars.

Holism and Mind

We won't have an adequate general conception of the world until we can explain how, when a lot of physical elements are put together in the right way, they form not just a functioning biological organism but a conscious being. (Nagel, 1987, p. 36)

For Smuts, Mind, as a development of prior organic regulation but with greater capacities for self-regulation, internality, freedom, creativity, is an emergent extension of Matter and Life. This theme of holism, ever increasing characters of wholeness, entails both the enhancement of these functions as well as additional characteristics that become manifest. The atom, the cell and the development of mind are processes in evolution that demonstrate a *saltus* or critical leap of some kind. Individuality, consciousness, reason, rational purpose, emotion, will, are new attributes in attributes of Mind. But this does not make Mind a separate entity, just as enhanced capabilities for self-regulation, internal co-operation and metabolism do not make Life a separate entity from Matter. "The successive phases of the whole so telescope into each

other that it is impossible to treat each phase in a watertight compartment” (ibid. p. 227). For Smuts, Mind is a phase in the universal process of development and one for which foundations can be traced back through earlier phases of Life and Matter. It is, however, the most significant manifestation of Holism so far, and radically new in its capacities.

Smuts describes Mind as having two interdependent tendencies (an idea later taken up by Koestler), the one individual and the other universal: “Mind shows both these contrasted characters and faces in both apparently opposed directions” (ibid. p. 238). Awareness of self brings with it possibilities of choice and autonomy, of differentiation between self and others and thus of individualization not previously found in the evolution process. Organic regulation, no matter how elaborate, is overshadowed by the creative power of conscious planning. All mental experience is a combination of Self, the conscious observer, and the Other, the object observed. This Subject-Object relation, this dependent correlate, is the source of the Mind-Body distinction. Smuts argues at length that this distinction is an error. He proposes instead, a relationship analogous to that of chemicals in solution.

Experience is one; and experience as it becomes conscious differentiates or unfolds itself into the Subject-Object relation... (Mind and Body) are elements or rather aspects of the same reality given in solution in experience and precipitated from it by consciousness. (ibid. p. 239)

For Smuts, describing the relationship between mind and body in this way dissolved the mistaken assumption of two separate entities, Body and Mind. Mental properties are different from physical properties but their existence emerges from and remains dependent on and inextricably related to the physical properties that preceded them. This is congruent with the idea of emergence discussed above. It is also congruent with non-reductive physicalism, arguably the current orthodoxy on the body – mind conundrum which holds that, “although all concrete objects and events in this world are physical, some of them have higher-level attributes in particular psychological

properties, irreducible to their lower level physical characteristics".
(Honderich, p. 679).

An important assertion about the Subject-Object relation is that experience is always a product of both. Science has pursued objectivity with insistent claims of its veracity but understanding of perception reveals the impossibility of the separation of the observer and the observed (Bohm, 1985). Mind, as a synthetic, co-ordinating activity, produces perceptions, imagination, judgement and reasoning, built up from a mass of sensations and experiences on particular organising principles. A significant development of Mind is the greatly enhanced capacity to distinguish between inner and outer worlds, and it thus comes to be drawn in two directions by the call to wholeness: mind is tensioned between the drive towards wholeness of the individual and the drive towards the universal whole. Self awareness gives new direction to individual purpose and Mind the rebel, Mind the self centred, apparently disturbs the unity of action directed towards the 'greater whole'. This seems like an anomaly. But Smuts sees that it was inevitable if the process of whole-making is in fact an underlying process to reality. The dependence that the Self still experiences on Other, on the greater whole serves as a mitigation in the pursuit of individuality. Through the balance of this tension between individuality and assimilation, the Self is brought to new stature. Self only comes to consciousness of itself through its unseverable relation with others. (Koestler has elaborated on these ideas but has a far less complementary view of the place of mind in evolution.)

The development of language is another holistic phenomenon as shared concept formation depends on social relations and enables the Self to 'rise above' the subjectivity and immediacy of experience. The ability to form general concepts is only possible through language, which is a socially generated vehicle, not a private one. This leads Smuts to the conclusion that the Self is the creative product of evolution, no less than the atom or the cell.

The individual Self is not singular, springing from one root, so to say. It combines an infinity of elements growing out of the individual endowment and experience on the one hand and the social tradition and experience on the other. All these elements are fused and metabolised into a holistic unity which becomes a unique centre in the universe and, in a real sense, of the universe.... The point I am trying to make, however, is that the apparently individualist Mind is in reality deeply and vitally influenced by the universal Mind; and that the individual self only comes to its own through the rational and social self which relates it organically to the rest of the universe. (Smuts, 1926, pp. 245,246)

So Mind is a culmination of a process that has been in action since the beginning of matter and as such has been inevitable. This is where the distinction between whether things are created at the point of their emergence or whether everything was created at a beginning point breaks down.

Smuts clearly asserts that there is evidence of incipient life in matter and incipient mind in life, as well as asserting that at critical points in evolution new properties manifest which radically affect the nature of reality. This paradox is addressed by Bohm (1985) in his ideas about the implicate order.

The new properties that Mind demonstrates are:

- a radically different form of internal control,
- an organising capacity not seen before,
- a capacity for self awareness and individualisation, and
- an ability for comprehending, for making decisions and for taking action that can be used to modify the environment.

Mind is in control of the environment and its capacity as creator, or indeed

destroyer, gives unprecedented power.

Matter and Life were described by Smuts to have 'fields', so too does Mind. In order to determine the field of an organism, that is its extension beyond its sensible limits, Smuts suggests the question, "In order fully to understand the nature, functions and activities of (this) organism, what more is necessary to its concept beyond the sensible data?" The central illuminated area of full consciousness is surrounded by context that falls beneath the level of consciousness but is integral to it. This sub threshold field of Mind is, according to Smuts, influenced by the past and pulled by the future. He describes the influence of unremembered past experience and of heredity as they are generally accepted today but adds the speculation of a 'mother sense' from which the ordinary senses evolved.

There is a subtle, profound, synthetic activity at work among our conscious activities of Mind. All the wholes we see in life as persons or things are composed of contributions from all or most of the special senses so utterly fused with each other that disentanglement becomes practically impossible. And these unique unitary wholes exist for us from the early beginnings of sensation and perception. So, for instance the unique whole of the mother is present to the young baby from the early weeks of life. Is there not some subtle fusing, unifying sense at work pari passu with the several differentiated senses? Is there not a sixth sense, the sensus communis, from which the others have been derived without exhausting it, and whose development has kept pace with their development? (ibid. p. 256)

The existence of an inner, deeper sense that underlies the unity of sensation and experience is a plausible suggestion considering the range of spiritual and other transcendent experiences that are part of the human condition. In contemplating mind it is just not possible to ignore the spiritual experience or experiences of synchronicity which Jung (1988) describes as the *Acausal Connecting Principle*. Ethnographic studies (Bourguignon, 1973) have found some form of altered states of consciousness to be fundamental to most cultures. The experiences of transcendence, or experiences that involve more than the five senses, seem to support Smuts' claims.

The intriguing statement that the future resides in the twilight of Mind, is elucidated by Smuts as the emergence of Purpose. Contemplation of the future sets in motion a train of actions that lead to the declared purpose. This is the fullest expression of the freedom and creative expression of the mind and it demonstrates the action of holism, the fusion of experience of the actual past and of an anticipated future. Each purpose is an amalgam of feelings, desires, sensations, perceptions and complex volitions in a creative mix that reach out towards the future.

The purposive teleological order is the domain of the free creative spirit, in which the ethical, spiritual, ideal nature of Mind has free scope for expansion and development. The realm of Ends, as Kant has called it, the realm of the great Values and Ideals is the destined home of Mind. (Smuts, 1926, p. 259)

Mind demonstrates a holistic nature in the following ways:-

- Attributes of mental activity, judgement, intelligence, volition and emotion are inextricably related: they are synthetic in character (Kant's synthetic unity of apperception): they deliver experience of associations, groups, wholes.
- The discriminative, analytical, selecting functions also render wholes. These may appear 'unholistic' but are in fact part of the process towards more effective grouping, greater understanding of wholeness. They are a means to an end in the synthetic process.

Personality (Self) as a whole

As an example of Smut's understanding of wholeness, personality is a second useful one, particularly in its parallels to understanding of health explored in the next chapter. It exposes more clearly his teleological thinking and the grave limitations of mechanism. Personality, the most recent emergence from the material, organic and psychical wholes, and the final synthesis of all the

operative factors in the universe, has both individualist and universal tendencies. Development of consciousness reveals a relatively persistent Self, which refers all experiences to itself. This 'personal centre' is the referencing unity which makes intelligible, directs, upholds and controls all mental life. It is fundamentally the power house of self realization. "It is a new whole, of prior wholes: the structure of matter, life and mind are inseparably blended in it, and it is more than any or all of them" (Smuts, 1926, p. 265). It is (for now), a culminating phase of graduated movement. It is the "very foundation and constitution (of the self), self of our very selves", but at the same time elusive and resistant to investigation by science. The active inter-relation of body and mind, which give rise to the emergence of personality, is an example of a whole. On analysis, this whole comes to be treated as two separate entities, which are then claimed to 'inter-act.' Smuts points out the fruitlessness of such division. The claim of holism is that the characteristics of the whole do not reside in the parts separated and then re-approximated by what is termed 'interaction'. Nor do they exist in parallel, each oblivious to the state of the other. They are related as parts to a whole as has been outlined above. This is a *particular* relationship which requires an understanding of "action *through* or *inside*, 'peraction' or 'intro-action'" (ibid. p. 270). Smuts describes it as an inner metabolising process, where properties are taken in and influenced, changed by the whole. From the 'intro-action' of body and mind and the tendency to wholeness, personality is made manifest. Smuts, having established that a tendency toward wholeness is the guiding principle of the universe, concludes that it is this tendency or Holism that works toward the creation of the highest reality of which we are aware, human personality.

In this Self we behold...the culmination of that fundamental holistic motive power of the universe, the beginnings of which lie far back, impersonal and embedded in the inorganic order of Nature, but which gradually disentangles itself and frees itself, until in the Self of the human Personality it attains its highest measure of freedom. The synthetic organising power of Holism, starting from the darkest and feeblest beginnings and blindly battling with all

sorts of refractory situations in the course of cosmic Evolution, gradually evolves and wins through until at last it emerges in the Self with luminous and radiant self-consciousness. (ibid. pp. 292,293)

Of course, saying that something emerges, says nothing about how this happens. This is fundamental to the notion of emergent properties; they have characteristics that are altogether different from the properties of their parts. Personality demonstrates the properties of greater freedom, plasticity, creativeness and self determined action than its evolutionary precursors but also greater variation and individualisation because it is a whole in the making. Smuts calls it “a youthful God destined to complete mastery over the old regular Routine, and to achieve Freedom, Creativeness and Value on a scale undreamt of by us today” (ibid. p. 276). It is evolving towards its own immanent ideal, the realisation of a spiritual character, inward spiritual grace and unity: wholeness is self-realization. As such, personality is eminently unsuited to analysis by psychology, which has adhered to the rules of science. “There is more in the central synthetic Personality than an analysis of psychological organs and physiological functions can explain....all experience, all intuitions, judgements, actions, beliefs and other mental acts are holistic products of Personality” (ibid. p. 284). There can be no reasonable argument to support the use of mechanistic tools to reach the synthetic unity that is personality, “the balanced whole or structure of various tendencies and capacities which are maintained in mutual and reciprocal harmony by the holistic nature of Personality” (ibid. p. 295).

Overlaying (or as Smuts terms it ‘super-added’ in an attempt to use language that describes the relationship in fresh ways) this inner movement towards wholeness is the conscious realm of purposive action. For Smuts the ‘ideal personality’ (healthy person) demonstrates a power to harmonise discordant elements, whether they be conscious will or unconscious, into one harmonious whole. It is its immaturity as an evolutionary whole that is responsible for the range of difficulties evident in human personalities that seem to be leading to

the destruction, rather than synthesis, of humankind. Many people have poorly developed harmonizing or fusing capacities, so that the whole they have potential to be, is disorganized and uncoordinated. Healthy or strong people have, on the other hand, body, mind, intellect, emotion, harmonised in an integral whole and the will 'becomes more silently and smoothly powerful'.

...(T)he wear and tear of internal struggle disappears; the friction and waste which accompany the warfare in the soul are replaced by peace and inner strength; till at last Personality stands forth in its ideal purity, integrity and wholeness. (ibid. p. 299)

Smuts drew parallels between the healing capacity of organisms (which is in fact due to the action of holism) and the healing capacity of the Self. It was his observation that, despite obstacles and impediment, the Self "endeavours to preserve (itself) and realise its own type or ideal, and often even from defeat and disaster itself to wrest the accomplishment of the ethical ideal at which it is consciously or unconsciously aiming" (ibid. p. 299).

Smuts relates the inner condition of the harmonising capacity of the Self *and* the adequate functioning of the external relations of the Self, that is the assimilation and accommodation capacity of the Self, as factors in the success of the achievement of robust Personality. Events, experiences, even obstacles to achievement, if processed as part of the holistic movement of the Self, can lead to deepening and enriching of the Personality. The more a Self is able through the unity and balance of perception, intuition, conception, emotion, reason, to assimilate the influences and obstacles of the environment and work them up, as if by metabolism, to be a part of its own substance, part of the whole, the more complex and resilient it will become. If, however, these same occurrences are experienced in a 'mechanical manner', that is, without assimilation, as mere external stresses, the self becomes depersonalised and caught in an endless process of defending itself, at the cost of essential unity. He or she becomes over burdened and succumbs to the overwhelming demands of the external environment; to external influences which can neither be mastered or

assimilated.

“The ‘Ideal Personality’ is a whole and should not have in it anything which is not a piece of itself, which is alien or external to itself” (ibid. p. 302). It is in this sense that Personality is a whole: it has an interior direction of its component functions, it has power to process material from its environment and to transform this material in to unity with itself. This synthetic, creative process is always in the direction of greater wholeness.

...(T)he Whole knows no end beyond or outside itself. The object of the holistic movement is simply the Whole, the Self realisation and the perfection of the Whole. And the same is true of Personality in so far as it is a whole. Its object is to achieve self realisation, to realise its wholeness, to attain freedom not in a selfish, egoistic sense but in the universal holistic order. (ibid. p. 315)

This is certainly a particular way of viewing the nature of what it is to be a whole person. It is as very positive view of human potential. It is ultimately an expression of belief in the capacity of each person to realise their true nature as a whole.

The understandings expressed by Smuts about wholeness and evolution are not shared by mainstream Darwinists. However, his ideas are rooted in Darwinian theory. This chapter is not complete without some discussion of the agreements and tensions that exist between Smuts’ holism and evolution theory.

Holism and Evolution theory

There are those who think that evolution theory of gradual modification by descent, or mutation and competition, can explain all that is in the natural world (Dawkins, 1986; Gould, 2002). There are however, those who identify gaps that remain in our understanding despite the modifications that have been made to

this account.

Popper (1972) believed the phrase 'survival of the fittest' required qualification to avoid circularity. (Who survives? The fittest survive. Which are the fittest? They are the ones that survive). Acknowledging Darwinism's great virtues he nevertheless maintained that the theory of the process of evolution requires restatement to make it less vague. Teilhard de Chardin (1955), noting that life is 'an anti-entropic process' running counter to the second law of thermodynamics, asked, "by what special energy does the universe propagate itself along its main axis in the less probable direction of the higher forms of complexity and centrality?"(ibid. p. 66). Teilhard de Chardin was concerned with what is missing from a mechanistic account of life.

Koestler (1978) is well known for his criticism of what he calls the 'contradictions and tautologies' of neo-Darwinian dogma. He draws parallels between proclaiming that the driving force behind biological evolution is no more than chance plus time plus selection and the reductionist behaviourism of Watson and Skinner. It is in his opinion as absurd to say that cultural progress (great works of art and literature for example) is the result of nothing more than random responses and positive reinforcement as it is to say that biological evolution is nothing more than blind chance and rewards for fitness. And like Popper before him, Koestler questioned the very idea of 'fittest'.

The trouble ...started when it came to defining "fitness". Are pygmies fitter than giants, brunettes fitter than blonds, left-handers fitter than right-handers? What exactly are the criteria of "fitness"? The first answer that comes to mind is: the fittest are obviously those who survive longest. But ...the life span of individuals is irrelevant (it may be a day for some insects, a century for tortoises); what matters is how many offspring they produce in their life time. Thus natural selection looks after the survival and the reproduction of the fittest, and the fittest are those which have the highest rates of reproduction – we are caught in a circular argument which completely begs the question of what makes evolution evolve.... Von Bertalanffy put it more pointedly. Commenting on the orthodox theory, he remarked, "It is hard to see why evolution has progressed beyond the rabbit, the herring, or even the bacterium which are unsurpassed in their

reproductive capacities". (ibid. p. 170)

Natural selection as a creative mechanism is questioned on other grounds too. How can a process which subtracts or eliminates weakness (or the 'un-fit') be responsible for the emergence of new properties? Dawkins (1986) uses the metaphor of a sculpture emerging from marble as the stone is chipped away, to explain natural selection as a creative process despite its nature as subtractor. This metaphor highlights some of the very profound difficulties that exist with the merely chance plus time plus selection idea of evolution.

Besides suggesting the possibility of the existence of a 'sculptor', which Dawkins immediately corrects, his metaphor raises the question of what exists before the sculpting starts. A block of marble suggests something substantial undergoing change rather than the intricate process of small change selected, something being built up.

Debates rage over the actual meanings of 'random mutation' and 'natural selection' and over the potential of these two principles to fulfil the evolutionary tasks that have been attributed to them. For example, firstly, there have been revisions to the notion of chance as it has been applied to mutation.

For example, Dawkins (1986) asserts that there is more to the Darwinian idea of mutations than 'variations which happen to arise'. According to Dawkins, mutations are not due to blind chance but can be a response to 'mutagens' (these can be external, for example environmental stressors or internal, for example in response to 'mutator genes'). Randomness when applied to mutation does not mean that all genes are equally likely to mutate, it does not mean that 'mutation pressure' (the likelihood of a mutation occurring in one direction rather than another) is always zero, it does not mean that all changes are equally likely. It does, however, according to Dawkins, mean that mutation is random in the sense that it is not directed towards improvement. He reiterates the mantra of evolution theory; mutation provides the raw material, it is the

process of selection that is said to provide the direction of evolution. It can be argued that far from solving any problems associated with why certain changes happen at all, why certain mutations occur, Dawkins has exposed a contradiction. If mutations can occur in response to stimuli, and if there are some conditions that guide or even cause their occurrence, it is difficult to sustain the argument that there is absolutely no bias in the favour of advantage.

Secondly, there have been revisions to the principle of competition as the primary force in selection. Margulis, a Boston University microbiologist, emphasizes the role of symbiotic relationships in the evolutionary process.

Competition in which the strong wins has been given a good deal more press than cooperation. But certain superficially weak organisms have survived in the long run by being parts of collectives, while the so-called strong ones, never learning the trick of co-operation have been dumped onto the scrap heap of evolutionary extinction. (Margulis, cited in Briggs & Peat, 1989, p. 155)

Margulis proposes that the organs of the modern cell, for example the mitochondria, or the chloroplasts of plant cells, were originally bacteria which joined forces because of the benefits they could accrue. The 'new kind of cell' which made its appearance 2.2 billion years ago to become the basis for the cells of all the multicelled plants and animals that exist today was not the product of brutal competition for survival of the fittest, but cooperation. Though Darwin's original theory can be interpreted to accommodate the co-operation of organisms, it has over emphasized the role of competition in survival. There have been calls for a refocusing from the emphasis on 'fittest' as the conqueror to 'fittest' as most adaptive. Rainey (2003), an evolutionary biologist, is researching the ways in which bacteria evolve, and suggests that micro-organisms within a colony produce by-products not for their own feeding or reproduction, in fact at some cost to themselves, to promote the colony. A mutation causing a polymer glue to be produced enables a matting or sticking

together which allows the bacteria to maximize their exposure to both the oxygen in the air and the nutrients in the broth. His discovery of 'cheaters' within these colonies, those that do not produce the glue but reap the benefit, must raise profound questions about the mechanism of mutation and natural selection. By what process does the 'cheater' evolve and by what process can the colony survive rampant cheating? In addition Rainey has demonstrated that bacteria in broth evolve rapidly (within a week) into niche-adapted types given ecological opportunity. For example, following propagation of single *Pseudomonas* genotypes in a spatially heterogeneous environment, some colonize the rim of the container while others prefer the base. However, in spatially homogenous environments no such diversity emerged (Russo, 2003).

The problem of the punctuated fossil record and attempts to understand the randomness of mutation has stimulated theories about the self organizing capacity of organisms and about the 'quantum' nature of evolution (McFadden, 2000). It is not possible in this study to embark on a comprehensive analysis of the problems unaddressed in evolutionary theory. The fact that there remain unexplained phenomena is important. Research into evolutionary processes continues to refine our understanding and some of these findings can be said to challenge the purely mechanistic interpretations of Darwin's ideas.

Smuts is just one of many who have examined possibilities that could account for the gaps in the mechanistic version of mutation plus selection plus time. Smuts' admiration for Darwin is profound but he respectfully proffers his deep concerns about the sufficiency of Darwinian evolutionary theory.

Newton proved epoch making for science, while Darwin has become epoch-making in a far more fundamental sense. He has changed our whole human orientation of knowledge and belief, he has given a new direction to our outlook, our efforts and aspirations, and has probably meant a greater difference for human thought and action than any other thinker. But even he is not final. (ibid. p. 186)

Smuts proposed, as an underlying principle of evolution, the idea of holism. Holism is essentially thoroughly Darwinian. It does not contradict either the idea of mutation or natural selection as processes in evolution. But Smuts protested that while they are essential elements of evolution theory, they are not sufficient to account for the direction of complexity in evolution. Smuts identifies a number of obstacles to a clear understanding of the principles behind evolution. Firstly, he pointed out that Darwin focused predominantly on the evolution of species through natural selection and was very vague about the ‘tendency to variation’ that natural selection was purported to act upon. To illustrate this, Smuts refers to Darwin’s concluding sentences in The Origin of Species.

It is interesting to contemplate an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, have all been produced by laws acting around us. These laws, taken on the largest sense, being Growth with Reproduction: Inheritance which is almost implied by Reproduction: Variability from the indirect and direct action of the external conditions of life, and from use and disuse; a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection, entailing divergence of Character and the Extinction of less-improved Forms. (Smuts, 1926, p. 187)

There has been much controversy about the “variability from the indirect and direct action of the external conditions of life, and from use and disuse” and clearly from the research cited above exploration continues into the conditions under which mutation occurs. Smuts noted a difference in the quality of attention paid to each of Darwinism’s implied two factors: the first, an internal, mysterious, creative factor responsible for variations and the second an external factor, essentially negative and eliminative, which resulted in the survival of the most adaptive characteristics. The latter, being much more readily explicable, was emphasised and a mechanistic conception of the process resulted: “...the survival of the fittest was so simple and so clear an idea, and one too so deeply rooted in our ordinary empirical evidence, that it seemed all a matter of course which had only to be pointed out by Darwin to be accepted by everybody”

(Smuts, 1926, p. 189).

The mystery of the *variation*, the first of the two Darwinian tenets, was however, overshadowed. Even when this process of variation came under investigation by Weismann, de Vries, Mendel and others, it was from this mechanistic standpoint: they were looking for the *mechanism* of variation. Smuts was sure that mutations could not be accidental or random in the sense of being totally arbitrary, or in the sense of 'anything' being possible (as indeed modern biologists attest). He was puzzled too, by the process whereby small variations could be said to have survival value: how could small variations be selected and conserved in the struggle for existence until they became significant enough to have survival value? Indeed, from the evidence available to him, he could not see how natural selection could be set in motion at all. At some point, once a number of mutations had coalesced to produce a marked difference, natural selection could act, but Darwinism could not account for the setting in motion of this process. At the very least, a richer understanding of the notions of 'variation' and 'natural selection' was required.

Gould, (2002) discusses requirements for variation as 'walking a tightrope between two unacceptable alternatives.'

They must not be so prolific that they become the creative force of evolution (that is, in orthodox evolution theory, selection's role) but they must be copious enough that selection can take hold. He lists the requirements of variation as *copious*, *small in extent* and *undirected* and examines each in detail but his exegesis does not answer Smuts' second group of concerns: those about selection of variation with no survival value. Gould's explanation of selection as "the claim that organisms enjoying differential reproductive success will, on average, be those variants that are fortuitously better applied to changing local environments, and that these variants will then pass their favoured traits to

offspring by inheritance”, (Gould, 2002, p. 14), fulfils all the requirement for the circular thinking that puzzled Smuts. This statement in itself does not provide information about how variation becomes selected. Even Gould acknowledges that this was perceived as a problem.

Virtually all anti-Darwinian biologists accepted the reality and action of natural selection, but branded Darwin's force a minor and negative mechanism, capable only of the headman's or executioner's role of removing the unfit, once the fit had already arisen by some other route, as yet unidentified. This other route, they believed would provide the centre piece of a "real" evolutionary theory capable of explaining the origin of novelties. (ibid. p. 14)

Darwin was insistent that the admittedly 'weak and negative force of natural selection' could act as the positive cause of novelty, that is, 'create the fit' as well as eliminate the weak, 'by slowly accumulating the positive effects of favourable variations through innumerable generations. However, there have been many who have agreed with Smuts that some other deeper explanation is required.

I for one,... am still at a loss to understand why it is of selective advantage for the eels of the Comacchio to travel perilously to the Sargasso sea, or why Ascaris has to migrate all around the host's body instead of comfortably settling in the intestine where it belongs; or what was the survival value of a multiple stomach for a cow when a horse, also vegetarian and of comparable size, does very well with a single stomach. (Von Bertalanffy, cited in Koestler 1978, p. 173)

It may be that rigorous research is accounting or will account for these gaps in the theory some time in the future but there have clearly been substantial difficulties with evolution theory that have shown some resistance to explanation.

The popularity of the notion of emergence in current evolution literature (Morowitz, 2002) and the intricacies of the technical debate about 'emergent character' and 'emergent fitness' (Gould, 2002) is some indication that the

manifestation of novelty remains to some extent mysterious. Ideas about emergence have an association with ideas about holism as discussed earlier in the chapter, and are a link between holism and evolution theory that is difficult to disregard. Novelty as an irreducible property is a feature of evolution that Smuts (and others for example C. Lloyd Morgan, Henri Bergson) related to the emergence of life from matter and mind from life. Contemporary views of emergence involve the novel properties of complex phenomena in a much wider application.

John Holland (1998), in Emergence: From Chaos to Order has described the contemporary view of emergence coming from computational science. He gives as example a checkers-playing program that has strategy rules and is capable of learning – that is, of altering the rules and parameters in the response to playing against human players or other programs. After a lot of playing, the program can defeat its designer at checkers, but its emergent strategy is opaque to the designer. A novelty emerges, unpredictable because of its complexity. All possible pathways have been pruned to a subset of experience. The pruning generates a fitness for winning. (Morowitz, 2002, p. 21)

Morowitz goes on to talk about the emergence of twenty eight phenomena from the emergence from nothing from the primordium to the emergence of mind in humans, declaring that we have no reason to believe this to be the end of the emergences. Shipley (1995) in Intersensory Origin of Mind: A revisit to emergent evolution, gives account of how the functions of mental life develop, citing emergence as the key to this process.

Resolution of turbulence, far from equilibrium coalescence and the perception of order within disorder are only three new members of the old multitudinous set by which we describe the emergents which occur in nature. That grand set permits us to hold to the strong view that various emergents, i.e. non computable singularities, sudden reorganizations, cusps, catastrophes, insights, may occur widely in biological organisms governed, as they are, by the most complex physical laws imaginable, and perhaps some others still. Indeed because of this new recognition by physics of a dynamics sufficiently complex almost to parallel that in psychology, it has become more attractive than ever to hold that emergence lies at the foundation of our reflexive self-consciousness. (Shipley, 1995, p. 51)

Clearly, much of what was preoccupying Smuts is still an unfolding tale.

In addition to the problems of natural selection seeming unable to account for much of the variety in nature that has no clear survival value, and the appearance of emergent properties, Smuts was also troubled by the co-ordination and co-adaptation of organisms. Variations do not appear singly, they appear in associated groups. He asked whether we are not throwing a weight on the natural selection principle that it is unable to sustain. For the appearance and selection of, for example, the horns on an antelope to evolve, “consequential adjustments to its head, its neck, its muscular system, the development of the forepart of its body, and its relation to the back parts” are simultaneously necessary.

And when we come to consider the question, already so difficult, of the selection of a small variation in respect of such a horn, we are confronted with the still more hopeless difficulty of having at the same time to account for many other minor correlated variations, each of which has to be selected. (ibid. p. 209)

It is at this point that Smuts decided that mechanistic conceptions and disregard for the observable nature of living organisms as wholes were the fundamental obstacles to understanding the complexities of evolutionary development. In his eyes natural selection was too mechanistic a process. Intelligent, co-ordinated and purposive action of an animal for example, could not be explained by natural selection or indeed any mechanistic principle. As remediation for evolution theory, Smuts proposed a deeper underlying tendency to complexity. Holism was a defensible *vera causa* for the progress of evolution.

The whole body is a system of co-ordinated structures and functions, and its origin and development can only be represented as a complex movement forward in time of a mass of associated variations which have resulted in the most marvellous co-adaptations of structures and co-ordinated functions....The whole is not a mechanical aggregate indifferent to and without influence on its parts. It is itself an active factor in controlling and shaping the functions of its parts.... The parts bear the impress of its directive influence, without and apart from which it is vain to speculate their character

and activities. (ibid. p. 209)

Holism as an idea describes the tendency in nature to form wholes. It does not aim to fill in the technical detail of specific evolutionary developments. It does however, provide a richer understanding of the meaning of 'the fittest'. It is the lubrication for the theory as a whole. Fealty to Darwinian ideas of mutation and selection is at its core. The set of characteristics of wholes is in effect a blueprint for survival.

- Complex internal organization
- Unique character, i.e. emergent properties
- Self direction, i.e. autonomy
- Capacity for integration

The idea of wholeness as achieved by the convergence of these four characteristics can account for the observable complexification of evolutionary development, for the emergence of new properties, for the evident striving for *both self direction* and *integration* of all living organisms. However, Smuts contributed the observation that the orchestrated development in a direction of complexity, an inherent capacity of nature, required an additional idea. He called this Holism.

Holism is not a word found in modern texts on evolution. It is seen (perhaps) as too close to discarded ideas of vitalism and entelechy that succumbed to suspicion of implying mystical forces. Smuts maintained that he was not calling on some external force but at times, reading his colourful prose, it is difficult to avoid this suspicion. It is extremely difficult to describe a tendency without sounding mysterious. (The ideas of Teilhard de Chardin have suffered the same

suspicion, though perhaps with slightly more ground). The word holism has been taken to imply some primacy of 'the whole' which precludes analysis, and this is a great pity for nothing was further from Smuts' expressed intentions. However, the ideas of change in the direction of complexity, the existence of emergent properties, and the role of the tension between co-operation and competition are widely recognized. These characteristics can be seen as a plausible and more detailed version of 'fitness'. They offer a more coherent explanation than other qualifications of 'fittest', the most canonical being the ability to produce the most offspring (a self limiting principle as humanity is coming to realise). Even if the crux of evolution is (merely) survival, hyperfecundity seems a poor competitor in comparison to the emergence of mind and consciousness.

Smuts' conception of holism is not science, it is scholarly suggestion, a speculative possibility, and some of its implications are controversial. It does, however, make sense. Koestler's development of the self assertion and integrative tendencies are an indication of the potential of Smut's ideas. Emergence, although trivialised by some as meaning nothing more than 'things change in as yet unexplained ways' has survived into modern evolution theory texts and has provided a vehicle for expressing the 'more' in the phrase 'the whole is more than the sum of the parts'. As Looijen (2000) has asserted, the part of the emergence thesis that requires unpredictability is not inextricable from the thesis that the whole has properties that its component parts do not have. Even if it does no more than flag what is apparent, but not yet explicable, and assert that mere mechanical or reductionist thinking is not capable of rendering a full understanding of reality, it is a useful notion. It illuminates what remains mysterious to a tradition of thinkers who have shown a tendency to gloss over what is not amenable to science. It stands in opposition to piecemeal explanation.

Whether or not one believes that everything will be knowable some time in the future, it is useful to be able to identify those observable properties of nature

which are unexplained and inexplicable at present. For example, health can be seen as an emergent property. The constituents of health are largely known, but the actual experience of health emerges with a power and energy that is not present in its constituents. Health cannot be directly created, given or bought, it emerges out of the provision of certain conditions. Holism as a notion shows promise in understanding what it is to be healthy for two reasons:

- 1) holism gives characteristics to the wholeness that is so commonly sought in descriptions of health and,
- 2) because it provides a way of conceptualising health that accounts for the 'more than' the mechanistic view. It is a way for viewing health that is not constrained by science.

Smuts anticipated the reaction of science to his ideas.

He (the scientist, sic) may object that Holism is a mere assumption which may have a philosophical or metaphysical value but that it has no scientific importance, as it cannot be brought to the test of actual facts and experiments....(that) (i)t falls outside the scope of Science, and the explanation of things which it purports to give, is not a scientific explanation. Even assuming there is such an activity as Holism at work in the universe, it would be of no value to Science. (ibid. p. 321,322)

However, Smuts regards the activities of Science, those of detailed investigation and description of measurable aspects of the universe as useful but insufficient to give a proper account of reality.

These experiments, however valuable and instructive in affording subsidiary clues and hints of the natural process, do not by any means exhaust or even seriously affect the real problem of creative Evolution. ...a view of Evolution... must be based on an intelligent appreciation of the natural process rather than on the very limited data yielded by our laboratory experiments. (ibid. p. 217)

A full description of the organisation of the whole in addition to its functions and internal relationships is a more accurate tool for understanding a phenomenon than a detailed analysis of its parts and their functions. “The anatomy and physiology of a plant would surely not be sufficient a description of the plant itself. No description of the parts is a complete description of the whole object”. (ibid. p. 322)

It could be argued that if there were such an inherent tendency towards wholeness, Science would have ‘discovered’ it by now. But classical science is wired to preclude the possibility. It remains a somewhat outrageous idea entertained by ‘visionary’, even mystical, scientists like David Bohm and Fritjof Capra. And it remains the height of scientific form to be extremely cautious about what research findings might *mean*. For example :

Fact One. *Myxococcus Xanthus*, a well-known social bacterium can regain the ability to swarm socially (within about 36 weeks) by using a new method, (sticking together) after the genes necessary for producing the pili that normally enable social motility had been experimentally destroyed. (Russo, 2003)

Fact Two The fact that ‘wrinkly spreaders’ –that group of *Pseudomonas* bacteria who adapt as a group to their niche on the air-liquid interface of the container (by sticking together), while other members of this single *Pseudomonas* genotype equally rapidly diversify to colonise the base of the vial. (Russo, 2003)

What are the implications of this behaviour? What is the ‘driving force’ behind these processes? Is everybody in the scientific community satisfied that non-directed variation and selection by reproductive success is all that is operative here? These bacteria are demonstrating the characteristics that Smuts ascribed to the tendency to wholeness, increasing functional organisation, self direction, the struggle between the proclivity to autonomy and the proclivity to integrate, the emergence of unique characteristics, but this fundamental process or

tendency, holism, remains invisible or at least is not considered a necessary or useful idea.

Of course, ecology, has revealed much of what is embodied by Smuts' ideas of holism but has been constrained by the requirements of proof demanded by reductionist hegemony. These methodological spats are finally being addressed (Looijen, 2000) with the acknowledgement the both reductionist and holistic research programmes render useful information. However, Science has in fact, always had to rely on assumptions or theories that are beyond experimental proof in order to make sense of observable phenomena: it is an impoverished view of science that confines itself to questions it is already competent to answer. These assumptions function as place holders until evidence accumulates to dislodge them. It may be that in time they are rejected because they fail experimental tests or because new understandings are reached, for example the postulated existence of 'phlogiston' or 'the ether'. Theories must primarily be plausible explanations and may exist in this form as possibilities consistent with observation.

It may be that holism is just such a place holder, but it was proposed as a new *Weltanschauung*, a new system of understanding the connectedness of reality, a look at the inward character of the universe. It was intended to explain an aspect of the phenomenon of evolution and the emergence of novelty, for example, of life and mind. It was an attempt to highlight the limitations of a purely mechanistic view of the world and has been followed by others attempting to do the same, Prigogine, Bohm, Teilhard de Chardin, Margulis, Lovelock, to name a few. It was offered as a description for the yet unexplained, its recommendation being its capacity to account for the creative direction of evolution. At its most trivial, it is a call not to ignore, exclude from serious consideration, even deny, the existence of phenomena we do not understand. There are lessons for health care in this.

From the atom to the soul, from matter to Personality is a long way, marked by innumerable steps, each of which involved a creative advance and added

something essentially new to what had gone before. (Smuts, 1926, p. 332)

Holism as an idea has faced vicissitudes in biology, as it has in other disciplines which have embraced its use. The nature of wholes and the inter-relatedness of their properties have been a central concern in philosophy, social science, and linguistics and holism in various guises has been applied in these fields. The following chapter addresses some of these guises and examines some of the assumptions made about the implications of holism.

Chapter Seven

Holism Applied

A social revolution involves the standpoint of the whole because it is a protest of man against dehumanised life even if it occurs in only one factory district, because it proceeds from the standpoint of the single actual individual because the community against whose separation from himself the individual reacts is the true community of man, human existence.

(From Writings of the Young Marx on Philosophy and Society, L. Easton and K. Guddatt. Eds. Cited in Jay 1984, p. 62)

Holism is a collection of theses about the nature of wholes and the relationships between parts and wholes. Holism is primarily about properties. It is about the way certain wholes are organized. These wholes are commonly construed to be complex entities or systems: they may be for example, belief systems, social systems, knowledge systems or organic systems. The theses have implications for epistemic access to these complex entities or systems. Wholes are said to have particular and recognisable characteristics. They are recognisable in two ways, from without and from within. (These views have also been called bottom up and top down). Wholes have an outward appearance of individual, unique character, a measure of self direction and autonomy. But they have an internal structure too, and thus understanding them means taking their parts into account. Holism is about certain properties of parts. It entails a certain mutual dependence among parts as an aspect of their identity. It is the characteristics of the parts of a system that, in part, define the holistic nature of a whole. In several branches of philosophy, for example philosophy of physics, and philosophy of mind (Esfeld, 2000) and the philosophy of meaning (Fodor & Lepore, 1992), these characteristics are explored in discipline specific and technical ways. For example, Esfeld explains what characterises a holistic system:

General characterisation of a holistic system.

Consider a system of the kind S and its constituent parts. For every constituent of an S, there is a family of qualitative, non-disjunctive properties that make something a constituent of an S provided that there is a suitable arrangement. An S is holistic if and only if the following condition is satisfied by all the things which are its constituents: with respect to the instantiation of some of the properties that belong to such a family of properties, a thing is ontologically dependent in a generic way on there actually being other things together with which it is arranged in such a way that there is an S. (ibid. p. 16)

This is a technical application of the basic holistic premise that the properties of parts have a certain sort of characteristic dependence on their *relationships* in the whole. There is an array of such statements about holism and its implications scattered throughout the literature couched in technical terms. The most common, phrased simply, are these:

Generic assertions of holists:

- Wholes are qualitatively distinct from the aggregate of the properties of their parts: Wholes demonstrate emergent properties.
- Properties of parts of a whole are dependent on their relationships within a whole.

Generic implications of these assertions:

- Description of properties of the whole cannot be reduced to a description of the pre-relational properties of parts.
- The properties of parts cannot be explained in isolation from the whole.

- Even complete knowledge of the properties of parts in isolation does not render the whole explicable.
- Meaning is only possible within a whole.
- Wholes are a central condition of explanatory theory and a more powerful explanatory phenomena than parts.
- The properties of parts are determined by the whole.

There are numerous applications of these central ideas of holism and few that are not disputed. It is difficult to make sense of them all and any distinctions made for the purposes of understanding must be taken as tentative at best. This chapter will examine these notions of holism as used in social science in some detail as an example of the application of holistic tenets.

Holism in Social Science

The place of holism in the explanation of biological evolution has been generalized to social explanation. Social science is the arena in which holism is pitted against individualism. The social world holds all the variety of the biological world and perhaps less of its visible order. It is a world of abstract constructs, rules, roles and personalised understandings. Each of these exists in relation to one another in a complex, ever changing matrix of invisible 'forces', custom and tradition, revolt and change.

At the level of humankind, two of the strongest of these influences are directed towards creating and sustaining the individual and towards creating and sustaining the group that is society. This distinction evolves from the beginnings of consciousness of 'the Self' and 'Other', and the tension this creates is a

foundational substrate for social theory. The actual relation in which these ideas 'the individual' and 'society' stand is perennially debated. It is to the context of this relationship that holism is invoked.

There are at least two conceptions of holism that are brought to bear on the relationship between parts and wholes. A helpful distinction is made between holism of content and holism of form (James, 1984).

Holism of content

Holism of content argues that wholes have characteristics that are qualitatively distinct from the properties of their parts. At higher levels of organization, novel properties appear: this is called the doctrine of emergence. It is the same as saying that the whole is more than the sum of its parts. Therefore, wholes cannot be satisfactorily explained as an aggregate of the properties of their parts.

In its strictest form this assertion has led to the following conclusions:

- The whole is an essential condition of explanatory theory. For example:

...an adequate social theory must admit social wholes of some sort into its ontology, and (asserts) that it will not prove possible to substitute...explanations which do not appeal to the properties of wholes at all. Holism of content is therefore a general view about the terms of satisfactory social theories. (James, 1984, p. 3)

- Wholes are not reducible: a description of their properties cannot be reduced to either an aggregate of the properties of the parts or the properties of the parts in isolation.

However, wholes have internal structure, and the properties of their parts and the relationships between them do in fact, determine the nature of the whole.

Esfeld (2000) states that, “(o)ne supports holism ...if one claims that the things which are parts of the whole have the properties that are characteristic of them only within the whole” (p. 4). (In contrast, an atomistic system is one in which the parts are able to exist independently of the whole and one in which the whole is no more than the aggregate of the parts. Esfeld considers it irrelevant whether these ‘atoms’ are ultimate parts or can be divided further).

An example of the properties of parts in a whole affecting the properties of that whole is a family. The properties possessed by a son in a family are not all the same as the properties of a boy with no family. A collection of boys does not constitute a family, but a group of people in which being a son has meaning will be a family. Conversely, the properties of a grain of sand in a heap of sand, their molecular structure, their shape, size, colour, do not depend on the grain of sand being in the heap. It is possible to have a grain of sand all alone.

Esfeld’s assertion is that if one were to insist that the heap of sand was a whole in the holistic sense, one would have to demonstrate that the grains of sand have the properties that make them grains of sand only when they are in the heap. It seems therefore that although wholes may be irreducible to the properties of their parts, they are fundamentally related to their parts. In explanations about wholes, parts are significant. This is the bridge to the other distinction.

Holism of form

Holism of form is a thesis about the way in which meaning is derived. It is a view about the relationship between the meanings of statements and their contexts. It asserts that parts and wholes are functionally related in a reciprocal manner: parts influence wholes and in turn wholes exert influence over, even determine, the properties of their parts. The properties of parts are dependent on their being constituents of a whole. Therefore parts cannot be understood in isolation from each other or from the whole. For example, the terms of a theory are all inter-defined, each dependent on all others in the theory. This stands

opposed to the empiricist assertion that there are observation statements that are untainted by theory and analytical propositions that are inherently true which can be used to assess the truth of a claim.

In its strictest form these assertions are assumed to mean:

1) that there is no absolute or neutral standpoint from which to assess an idea.

2) that theories must be evaluated by their internal consistency and with reference to the context of existing beliefs.

These assertions are the subject of controversy and debate and have implications for attempts to formulate theories and on attempts to understand those already proposed. Holism of content and holism of form are, according to James (1984), logically distinct: it is possible to be a holist about content while denying holism of form. Philosophers of language and science are concerned with the latter, while social scientists categorize 'the problem of holism' as a problem of content. Inquiry into holism in health care involves primarily the assertions of holism of content although the problems of epistemology raised by the implications of holism of form are inescapable and were addressed in chapter two.

Another example of the arrangements of the theses of holism is offered by Phillips (1976):

Holism 1

This is a set of five ideas about organic wholes.

1.) The analytic approach as typified by the physico-chemical sciences proves inadequate when applied to certain cases – for example, to a

biological organism, to society or even to reality as a whole.

2.) *The whole is more than the sum of the parts.*

3.) *The whole determines the nature of the parts.*

4.) *The parts cannot be understood if considered in isolation from the whole.*

5.) *The parts are dynamically interrelated. (ibid. p. 6)*

This is a confusing array of ideas. The first sounds as if it is referring to the 'reduction problem' but Philips declares internal relations to be what is at issue here. Three theses constitute the theory of internal relations.

Consider the entities A, B, C:

First, any relation between these entities is possible only within the "whole" that embraces them.

Second, entities are altered by the relationships into which they enter. A, B, and C would be different when isolated, compared with their condition when interrelated.

Finally, the entities A, B and C "qualify" the whole of which they are parts, and the whole in turn "qualifies" A, B, and C. (ibid. p. 8)

Of these internal relations theses, only the second thesis makes sense but it is awkwardly phrased. It is the same as the assertion made by James under holism of form: the properties of parts are determined by their being constituents of a whole, or that made by Esfeld (2000): "(o)ne supports holism ...if one claims that the things which are parts of the whole have the properties that are characteristic of them only within the whole" (p. 4).

The remaining statements of Holism 1 are a mixture of ontology and

epistemology: two and four are typical holist claims broadly equivalent to holism of content and holism of form. Thesis five is too vague to mean anything. 'Dynamically interrelated' is not a defining relationship: it does not tell us whether this means that parts change in direct proportion, in reciprocal proportion, in synchronization or in some other ratio. Thesis three is the controversial claim of 'downward causation'; the idea that the whole determines its own nature.

Holism 2

According to Phillips, holism 2 states that a whole, even after it is studied, cannot be explained in terms of its parts. This is the anti-reduction thesis.

An extract from Paul Weiss's Living Systems illustrates the sentiment of it.

So, here I have at last put my finger on the sore spot, the touching of which has for ages hurt the protagonists of analytical orthodoxy- the concept of wholeness. Refusing to look beyond their ultimate and most extreme abstraction, namely the presumption of truly "isolated" elements in nature, and spurred by the dramatic success of explanations of many complex effects in terms of interaction among such elements, they could not but ask what there could be in the universe other than elements and interactions. (cited in Phillips, p. 34)

Holism 3

This thesis is stated by Phillips to be: "there is an important place in science for concepts referring to properties of wholes" (p. 35). In this form, it is not an essentially holistic claim. It is a very weak version of the assertion that wholes are a central condition of explanatory theory made by James as part of holism of content.

There are many assumptions made about parts and wholes and the relationship between them. Certain assumptions about the nature of wholeness and the

characteristics of wholes have generated a constricted view of the implications of holism but have allowed a confusing variety of holistic tenets to be promulgated.

When compared to the understanding of holism proposed by Smuts, five of these assumptions amount to fallacies, and are particularly relevant to holism in health care as uncorrected/unresolved they are obstacles to congruence between notions of wholeness and notions of health.

Fallacies about Holism

These fallacies are inextricably linked and are only distinguished for the purpose of closer examination. They can be summarized as:

- Fallacy one: wholes and parts are fixed/final/static states.
- Fallacy two: holism necessarily privileges social wholes and subordinates the 'value' of 'parts' (in social science, individuals) to the 'whole' (in social science, the state or social whole).
- Fallacy three: holism erodes the concept of personal autonomy.
- Fallacy four: holism is a form of determinism.
- Fallacy five: holism is dependent on complete refutation of reductionism.

These assumptions have led to superficial labelling and static explanations.

Addressing fallacy one

- Wholes and parts are fixed/final/static states.

Fallacy one attributes to a whole a *state* of wholeness. It ignores a significance feature of Smuts' description of wholeness: the evolution of wholeness, the tendency towards increasing wholeness that is evident in nature, the concept of incipient wholeness. Wholeness is not, in the sense described by Smuts, an absolute state: it is a process of increasing internal organisation and self direction. It is constantly subject to the pull of individuation and integration which ensure that it is not a simple state of achieved characteristics.

The doctrine of Monads proposed by Leibniz during the early 1700s is a useful contrast to the wholes Smuts describes. Leibniz defined a monad as: "...nothing but a simple substance that enters into composites – simple that is, without parts" (cited in Jolley, 1995, p.132). Composites are then defined as nothing but collections or aggregates of simples. Monads are not subject to growth or development, nor to degeneration and are thus static between their creation and their annihilation. They do not relate to each other. They do, however, have inner complexity which gives them their identity: each monad is said to be different from every other. This inner complexity is the medium of change of monads since they are externally immutable. They are maintained in a state of harmony by an external pre-established order.

Smuts, in contrast, is arguing for an understanding of reality in which wholeness is an evolving property. The intricate relationships between wholes and their parts and wholes of which they are part, are the fundamental generative factors of even greater wholes. These relations connect the whole of reality but not as some mysterious external force but in the tendency towards wholeness, in the process of creative evolution: "an expression of the creative process which is forever revealing new riches and supplying new unpredictable surprises"

(Smuts, 1926, p. 337).

A second factor in understanding the nature of parts and wholes as non-static phenomena is the idea of parts as limited wholes. Koestler's assertion of the dual nature of holons has been discussed in earlier chapters. He provides this example to illustrate his understanding of part whole relations: a fascinating description of the parasite *myxotricha paradoxa*.

At first glance he appears to be an ordinary, motile protozoan, remarkable chiefly for the speed of and directness with which he swims from place to place, engulfing fragments of wood finely chewed by his termite host. In the termite ecosystem, an arrangement of Byzantine complexity, he stands at the epicentre. Without him, the wood, however finely chewed, would never get digested; he supplies the enzymes that break down the cellulose to edible carbohydrate, leaving only the non-degradable lignin, which the termite then excretes in geometrically tidy pellets and uses as building blocks for the erection of arches and vaults in the termite nest. Without him there would be no termites, no farms of fungi that are cultivated by termites and will grow nowhere else...But this tiny creature inside the termite's digestive tracts turns out to consist of whole populations of ever tinier creatures...the flagella that beat in synchronicity to propel myxotrycha with such directness turns out, on closer scrutiny with the electron microscope, not to be flagella at all. They are outsiders, in to help with the business: fully formed, perfect spirochetes that have attached themselves at regularly spaced intervals all over the surface of the protozoan. (ibid. p. 68)

With this example as metaphor it becomes nonsense to talk about individuals as 'parts' and society as 'the whole' in the sense of states. Instead a view that recognizes the partness and wholeness, the self assertion tendencies and the integrative tendencies of things, reflects the relational quality of reality.

Addressing fallacy two

- Holism necessarily privileges social wholes and subordinates the 'value' of 'parts' (in social science, individuals) to the 'whole' (in social science, the state or social whole).

Claims about which view of this world, a holist view or an individualist view, is more suited to its explanation, has brought forth 'versions' of *holism*, many of them inconsistent with the understandings outlined by Smuts. Applying Smuts' understanding of wholeness shows this linking of holism to social wholes at the expense of individual wholes is a mistake.

Is holism about the priority of theories about social wholes over theories about individuals, whether the properties of social wholes determine the actions of individuals, or whether these individual traits explain the characteristics of the social whole? In its strictest forms this is what holism has been construed to be about. Society is elevated to the status of 'the whole' making the individual 'a part', or society is presumed to be no more than a collection of the traits, values and actions of individuals, which are seen as fully explanatory of the whole. These views have consequences for methodology and have come to represent a battle for primacy of principles, claims for explanatory power: Is the social whole the determining influence of individual experience? Can all social theory be reduced to psychological theory? The former has been called 'holistic' and the latter the individualist position.

The gulf between these views and the high moral tone that each assumes are essentially part of the identities of these ideas. Defence of one assumes to have established the limits of the other. The vehemence that characterises the debate is fundamental to the stands that proponents of each view maintain. Karl Popper strongly admonishes those who may entertain holist sympathies.

All social phenomena, and especially the functioning of all social institutions, should always be understood as resulting from the decisions, actions and attitudes, etc. of human individuals, and we should never be satisfied by explanations in terms of so called collectives (states, nations, races, etc.). (Popper, 1977, p. 98)

This is cited in strong contrast to the views of Louis Althusser who defends a position which denies that characteristics of individuals are ever explanatory of

the nature of social wholes. He aims to show that concepts which appear to be independent are in fact interdependent and so cannot be removed from their context without loss. He says that 'subjects' are 'positioned' by social wholes (social norms) and that we essentially fit into preordained slots as we somehow are attracted to a social position in a process he calls 'hailing'. For Popper, we are rational beings largely independent of the social forces that Althusser argues have 'constructed' us.

James (1984) uses the work of Althusser to exemplify this view of absolute holism. In honour of his commitment to a holist view, Althusser uses a hermeneutic technique of 'symptomatic reading' of texts in order to reveal the deeper and embedded meaning. Attention to 'what is not said', emphasis on understanding texts in 'their own terms' and a quest for internal coherence, characterise his attempts to reveal the part played by the totality in a range of social phenomena. In rejecting the concept of the individual as anything other than an artificial ideological construction created by larger social groupings, Althusser insists that:

- individuals are not autonomous agents.
- individuals are products of society i.e. determined by social factors.
- treating individuals as explanatory phenomena for social explanation is misguided.

This is the frame of the ontological dispute about the relative nature of individuals and social wholes which underlies the dispute about reducibility. There is a consequent epistemological dispute about how best to derive understanding of reality. The importance of illuminating this spectrum resides in making clear the origins of the misunderstandings. The contested issues seem to be:

- Reduction is or is not possible.
- Individuals are or are not the fulcrum of social explanation.

However, this is oversimplification and it leads to the dead end of theoretical extremes. A useful question to ask is, 'what in particular are the pitfalls of the theoretical extremes implied by these statements?'

Firstly, the search for the 'most basic', most robust explanation is a trap. It calls for a choice between opposing views on an arbitrary basis when a robust case can be made for the claim that the dynamic relationship between the two is the most fruitful view. It is contended that some statements about social wholes can be made without recall to individual explanation, for example observations of armies, crowd behaviour, even families, and that individual explanation is not sufficient to account for the properties of social wholes. This argument has been labelled 'holist' and holist it is in respect of acknowledging emergent properties. But it does not necessarily follow that the wholeness of the individual is somehow subordinate to the social whole. The question is 'why are we forced to choose which predicate, the individual or the social has in a generic sense, the *greatest* explanatory power?' It seems naïve to assert that in every event there is either total self direction or overwhelming compulsion.

Secondly, the application of the word 'holism' to indicate 'explanation by recourse to the *greater* whole' is a mistake. It demonstrates a lack of understanding of Smuts' complex notion. With the evolution of Mind, the tension that is observable between the 'individual' whole and the 'social' whole has become the trade mark of humankind: the very heart of the human condition. It is deeply misleading to privilege one whole over the other. The wholeness of the individual (which is a relationship between self-assertion tendencies and integrative tendencies) is as powerful in the notion of holism as outlined by

Smuts, as is the wholeness of society (which in turn is also a function of self-assertion and integration tendencies). In fact, it is the relationship between the tendencies towards wholeness of these categories we call 'self' and 'other' that creates the social world. Koestler (1978) makes this point:

Let us remember that in the basic polarity underlying all phenomena of life, the self-assertive tendency of a holon is the dynamic expression of its "wholeness", the integrative tendency the expression of its "partness"...In a well balanced society both tendencies play a constructive part in maintaining the equilibrium. Thus a certain amount of self –assertiveness...is indispensable in a dynamic society; without it there could be no social or cultural progress. John Donne's "holy discontent" is an essential motivating force in the social reformer, the artist, the thinker. (Koestler, 1978, p. 78)

Equally, a certain level of integrative tendency, belonging, identification with the social whole is salutary for the individual and creative of society. Having studied Smuts' understanding of the dynamic tension between these two operative factors, it is difficult to have patience with the extremists on either side. In addition it is not at all certain that these are always easily differentiated. Individualists will contend that even in understanding social phenomena, individuals and their properties are the enlightening predicates: so called holists will assert that appeals to the predicates of social wholes is unavoidable even when explaining individual behaviour. However, Mandelbaum (cited in James, 1984) illustrated that societal predicates and individual predicates are interdefined and therefore not comprehensible independently of each other.

Suppose that I enter a bank, I then take a withdrawal slip and fill it out, I walk to the teller's window, I hand in my slip, he gives me money, I leave the bank and go on my way. Now suppose that you have been observing my actions and that you are accompanied by say, a Trobriand Islander. If you wished to explain my behaviour, how would you proceed? You could explain the filling out of the withdrawal slip as a means which will lead to the teller's behaviour towards me, that is, a means to his handing me some notes and coins: and you could explain the whole sequence of my actions as directed towards this particular end. You could explain the significance which I attach to the possession of these notes and coins by following me and noting how the possession of them led other persons, such as assistants in shops, to give me goods because I gave them the notes and coins that the bank teller had

handed me. ...However, it would also be necessary for you to inform the stranger who accompanies you that it does not suffice for a person to fill out such a slip and hand it to just anyone he may meet. It would also be only fair

to inform him (sic) that before one can expect a bank teller to hand one money in exchange for the slip, one must have 'deposited' money. In short, one must explain at least the rudiments of a banking system to him. In doing so one is, of course, using concepts which refer to one aspect of the institutional organisation of our society....in all cases of this sort, the actual behaviour of specific individuals towards one another is unintelligible unless one views their behaviour in terms of the status and roles and the concepts of status and roles are devoid of meaning unless one interprets them in terms of the organisation of the society to which the individuals belong. (Mandelbaum, cited in James, 1984, p. 44)

The assertion illustrated in this example is that individual explanations are frequently inseparable from explanations of social wholes and that to attempt to distinguish them is fruitless. This example demonstrates that the case for individual explanation is questionable at least in some instances. However, individualists are not expected to concede this because Mandelbaum's assertion rests on the acceptance of the theory of meaning implied by holism of form: the internal relation of terms of a theory. This being a premise that individualists reject, a stalemate is reached whereby holists and individualists simply cannot concede their position without losing their identity. There seems little point to arguing whether sociological theory can be reduced to psychological theory, particularly when there is dispute about the limits of each and when each can be demonstrated to have explanatory power. This stalemate can be resolved by understanding holism as the tendency towards the formations of wholes, both individual *and* social and by understanding that the tension and inter-relatedness of these wholes is the very essence of the human struggle.

Addressing fallacy three

- Holism erodes the concept of personal autonomy.

A fundamental mistake is made when the autonomy of the individual is called upon as an argument against holism. There is both a general sense in which this can be said to be a fallacy and a more specific sense, which involves ideas of causality.

Autonomy, as quality, is a complex notion comprising ideas of freedom to choose, ability to do, expression of individuality, and freedom from constraint. The idea that the social whole has causal influences on individuals is repugnant to the individualist's sense of 'self', but it is specious to conclude that this is necessarily totally destructive of autonomy. Holism has been generally construed to assert that individual beliefs and actions are determined solely by social forces and in the strict terms of Althusser this accusation may be well founded. However, there is a more sensible position that acknowledges the influences of social wholes but stops short of denying the possibility of autonomous action.

There is a more fundamental reason to argue that autonomy is not compromised by holism. Autonomy is a property of wholes and, as we have established, individuals are wholes too. Smuts' idea, developed further by Koestler, stresses the dynamic relationship between the self assertion tendency and the integrative tendency of wholes and it is possible to see autonomy as emerging from the tension between them. In this view autonomy is paradoxically fostered by integration: it can be shown to be a result of a sense of belonging, adequate nurturing and experience of a supportive social context.

There is a more specific way of addressing the understanding of autonomy, by examining ideas of causation. Causation is a phenomenon about which holists

and individualists are said to differ and which underpins ideas about autonomy. Clearly these ideas are closely linked to those about determinism. One question to ask is, 'to what extent does stipulating or discovering causes or influences, limit autonomy?' Individualists have claimed autonomy and causality to be separate categories. It is asserted, too casually, that because autonomy ensures free choice and causality is a form of determinism, establishing causes and having autonomy are mutually exclusive. However, for an action to be autonomous it does not need to be without cause and in fact would make individualism a very weak explanatory tool if it were.

To be autonomous, an action must be at least a choice between choosing and not choosing: it does not need to be a choice among an infinite number of choices.

Aristotle's distinctions of material, efficient, formal and final cause are useful to distil the nature of this influence finely. Neither individualist nor holist devalues the role of material cause, the causal influence of the properties or constituents of a phenomenon. The efficient cause, that action taken to start or initiate the phenomenon, a cause that produces something distinct from itself can be perceived as a threat to individual autonomy but need not necessarily be. For example, it may be that some external event is seen to diminish the range of possible actions, say, undergoing surgery. Smuts, however, described how an external cause, is internalised by a whole in the creative response to a stimulus. Wholes are defined as being affected by *and* affecting, the nature and behaviour of their parts. He argued that the nineteenth century idea that there can be no more in the effect than in the cause is negated by the phenomenon of emergence which is the creative process of generating new phenomena. Smuts noted the paradox between his assertion of the influence of the physical and social world and of the freedom of the individual to make conscious choices. He saw the external environment influences as "merely the rough material with which the organism works and builds up its own strength" (ibid. p. 137).

The stimulus (is) transformed and absorbed by the organism: the organism makes the stimulus its own...and as a result the response is not the mere passive effect of the stimulus, but the free and spontaneous movement of the organism itself ...the passive external stimulus has been recreated into an active free response of the organism....The procedure is transformative, synthetic, recreative, holistic and the result is “new” in one degree or another. (ibid. p. 136)

The organism does not passively respond to the environment but transforms it, metabolises it, using it for growth in function and independence. It sounds as if Smuts is taking an individualist stance. He is rather, consistently describing the tendency towards wholeness.

The idea of formal cause, that “ordered and structured inner movement that is essential to what things are” (Bohm, 1980, p. 12) is central to Smuts’ holism but could be too ‘deterministic’ for the strict individualist. However, the notion of final cause, the idea of purpose and direction as discussed in chapter four, is a threat to autonomy only if it is taken to imply determinism. In Smuts’ understanding of the relationship between the environment and the individual, autonomy is facilitated by unique interactions and resolutions of the tension between the needs for self direction and integration. Far from being antithetical to autonomy, holism is a collection of ideas that clearly explains the emergence of autonomy.

Addressing fallacy four

- Holism is a form of determinism.

A particular application of ideas of causation, determinism, is an issue that is claimed to divide holists and individualists. Determinism, as a general thesis, takes causal influences into the future making it fixed and unalterable. William James (cited in Honderich, 1995) called this “the iron block universe”:

...(T)hose parts of the universe already laid down appoint and decree what other parts shall be. The future has no ambiguous possibilities hidden in its womb: the part we call the present is compatible with only one totality. Any other future complement than the one fixed from eternity is impossible. The whole is in each and every part, and welds it with the rest onto and absolute unity, and iron block, in which there can be no equivocation or shadow of turning. (ibid. p. 194)

Many great philosophers, Thomas Hobbes among them, have been determinists and until part way through the twentieth century so were most physicists. The only obstacle to dissolving the illusion of indeterminism was the practical one of limited information about the world, but in principle they believed in a rock bottom matrix of strict and ultimately predictable cause and effect. There is thus some irony in the accusations that holism entails a deterministic view that precludes its being taken seriously. It was the atomists who were the strict determinists, believing nothing to happen by chance. Leucippus is attributed with the comment, "Naught happens for nothing, but everything from a ground and of necessity" (Russell, 1946, p. 84).

However, it is holism that is called to defend itself in this regard today. In social science the individualist attributes the cause of a revolution to choices and decisions of a small number of visionaries and the holist attributes it to the vicissitudes of the social and economic milieu of the time. The possibility of autonomous action is jeopardized by assertions of determinism (as is the point of any rational deliberation) and our prevailing intuition about ourselves as more or less autonomous agents is called onto question. Strawson (1992) describes how Spinoza in The Ethics proposed two theses concerning the experience of autonomy. The first, that freedom of decision and action is illusory and the second that this illusion is caused by the combination of our conscious awareness of our actions and our ignorance of their causes. Because we are not aware of why we do things it appears to us that we are making free choices.

(This is much the same view as the Newtonian physicists). Strawson asserts, however, that it is nonsense to say that unknown causes are more constraining than known causes and that thus the 'illusion' of autonomy must be derived in another way. Strawson offers three possible sources of our sense of autonomy.

- The experience of our desires and preferences as *in* us: they are not an alien presence.
- The experience of deliberation, which with heightened awareness of self, identifies 'our choice'.
- The experience of agency: of the relationship between intention and action.

That autonomy, as the capacity for self-direction, is a human sensation is not in question. But is this autonomy more than illusory? One way of approaching this question has been to ask 'could the individual have done otherwise?' and a perhaps more penetrating question, 'were there impediments to the individual acting otherwise?' Holists and individualists may answer these questions differently but there is nothing in the notion of holism as outlined by Smuts that confers limited capacity on the individual due to overwhelming influence of the social whole.

However, it is claimed that holists in social science explain individual intentions and desires as primarily the outcome of the influence of social wholes thus undermining autonomy of the individual. With present understanding of social influence, it is untenable to claim exemption from it and notions of autonomy need to reflect this. But, recourse to the original understanding of holism shows the assumption that holists believe the environment to have a dominating influence on the individual, to be flawed. If evolution is creative in the way

holism proposes, there is an adjustment to the environment that is an autonomous action. Likewise, holism does not, indeed cannot, deny the influence of reformers, visionaries and individual thinkers who clearly influence social outcomes. It appears that, while there is a general understanding that cause and effect are complex, intricate and dynamic processes, those who favour a preference for the notion of individualism or for holism, still wish to occupy their own corner of the ring.

Addressing fallacy five

- Holism is centrally concerned with complete refutation of reductionism.

It is a common contention in the literature that holism is in some sense the 'opposite' of reductionism. Considering each in its strictest form makes this view plausible. There is much to suggest that these are antagonistic. They certainly have different views about:

- Which units of reality, or understandings of reality, have explanatory power.
- The contribution of the relationships between properties of the parts to the unique character of the whole.
- The existence of emergent properties.

If the views attributed to 'a holist' and those attributed to 'a reductionist' were unequivocal the debate would be a simple test of argument. However, the literature reveals a *mêlée* of compromised versions of these views. Whole books are dedicated to the relationship between these ideas with theoretical descriptions of subtle differences between them. The conflict however remains. Perhaps this is because of what is at stake. No matter what technical assertions

can be made by some about the possibility of reducing one theory by another, there is the perception by others that something important is (almost) always lost. Caricatures of these positions develop and are extremely unhelpful, only fuelling the rhetorical polemic. Holists oppose the 'machine' model of reality and reductionists oppose the notion of emergent properties which they see as necessarily mysterious and unscientific and thus not part of acceptable academic tradition.

It is fashionable to talk of co-operative possibilities between holist and reductionist approaches, albeit in concessive forms, and examination of the three issues identified above reveals some ground for this.

1) *Explanatory power.*

The idea of reduction seems to have both a general and a technical aspect. Reductionism in a technical sense is an epistemological procedure with laws and qualifiers which are aimed at the unity of knowledge by simplification.

According to Nagel, a reduction is "the explanation of a theory or a set of experimental laws established in one area of enquiry, by a theory usually though not invariably formulated for some other domain". Thus, in the view of Nagel, reduction is a kind of explanation and, more particularly, a kind of deductive-nomological explanation. (Looijen, 2000, p. 26)

This is inspired by the ontological search for the smallest entity or the smallest number of basic (non-reducible) entities. The belief that all higher level phenomena will eventually be explained by the structure and properties of lower level phenomena is an extreme form of ontological reductionism which can be seen as opposed to a holist view. However, there are obstacles to the actual reduction of one theory to another. One of these centres around the difficulties associated with the approximation of the terms of each of the theories, which is a requirement for successful reduction. Invariably there are terms in the theory to be reduced that are not present in the reducing theory.

Various techniques are proposed to accommodate this problem and claims made for their success. Reductionists do not consider this an obstacle in principle, only in practice, but they do concede it. This is in fact the obstacle that holists see as fatal to claims of the success of reduction. If approximation is not total, something is lost. Talk of the possibility of 'incomplete reduction' must be fuel for some rapprochement with holists. The salient point to have established is that theory reduction is a disputed procedure and that it does not in fact solve the problem of complexity.

In a more general sense, all investigation by its very nature is 'reducing' in some way in that it focuses on a *part* of reality or experience and aims to distil essences of what can be called insight, understanding or truth. The bracketing of phenomenologists, the deliberation of philosophers, the categorising of social scientists, is all 'reducing' in a general sense. In order to reveal the essence of any phenomenon there is a process of separating out.

Attempting to look at an idea without prejudice is a form of reducing, attempting to leave theoretical speculation aside is a form of reducing, aggregating or categorizing is a form of reducing. So reduction has at least two guises. In the former guise it is not usually possible and in the latter guise it is an unavoidable process in any investigation. Neither of these statements is incompatible with some view of holism. It seems that the disagreement is about establishing a 'level' of or 'unit' of useful and productive investigation. The unit of inquiry is at issue. Althusser would have the smallest unit be the 'social whole', Skinner would have it a 'unit of behaviour', a physicist may have it a small sub-atomic phenomenon. There are limitations incurred by this insistence on claiming the value of one level over others and both holists and reductionists end up admitting these limitations in 'via the back door' when they admit concessive conditions.

The physicist believes that the laws of physics, plus a knowledge of the relevant boundary conditions, initial conditions and constraints, are sufficient to explain, in principle every phenomenon in the universe. (Davies, 1989, p. 1)

This statement seems to be placing a considerable emphasis on context, perhaps even enough for a practical holist.

2) The property of parts.

By asserting the primacy of wholes as the only effective explanatory tools, the strict holist faces investigative paralysis as Parmenides did: it is a fruitless exercise to identify the whole as the fundamental property unit of reality, and then to invoke unity of all, to comprise this 'one'. But there is a more concessive version of holism which, in maintaining the explanatory value of the whole, makes two salient assertions:

- that the *part* derives at least some of its meaning from the whole of which it is part and
- that the *part*, being in some way a whole itself, will have some features not explicable by the properties of its components.

So holism is not necessarily a view that makes examining parts a destructive exercise. The irreducibility claim does not preclude examining the properties of parts, it merely means that parts acquire certain properties in relationship that they do not have in isolation. The nature of the relationship between the parts and the whole interests holists and reductionists alike.

3) Emergent properties.

There is another misunderstanding to expose. Holism's assertion of emergent properties is an ontological issue, an empirical claim that should be

distinguished from the epistemological claim about the unpredictability of these properties. It is one thing to state that a whole has emergent properties which the parts do not have in isolation and another to say that these are always unpredictable (and therefore irreducible) from micro-theories and auxiliary hypotheses about the parts. Looijen (2000) defends the former, conceding that we live in a world of emergent novelty but disputes the latter on the grounds that many of the properties of wholes that are called emergent have subsequently proved to be explicable in terms of micro-theories and supplementary information. He cites the example of the fluidity of water.

The "aquosity"... of water cannot be deduced from the properties of individual hydrogen and oxygen atoms, but it can be deduced from interactions between them leading to H₂O molecules; and from the interaction between large numbers of H₂O molecules under certain temperature conditions. All one needs for this is the theory of chemical bonding, supplemented with auxiliary hypotheses. (Looijen, 2000, p. 72)

Irreducibility or unpredictability may be a temporary matter until adequate explanatory theory is available. This is the heart of the matter, for holists are portrayed as tending to show more tolerance for contemplating that which is not yet explicable than the reductionist, but what great scientific theory did not begin with contemplating the inexplicable? Emergence is a pre-requisite for reduction.

Co-operative possibilities

Is it possible that the bringing to bear of these different views can be constructive, even remedial, in our quest to understand the world around us?

There are at least three ways in which reductionism and holism can be shown to be essentially compatible.

- Both are concerned with understanding complexity

- Both views accept a step-like evolutionary process
- Both are engaged in the construction of a theory of meaning

There have been a number of writers who have maintained that a holist view is not dependent on the complete refutation of the place of reduction and that in fact the complex nature of phenomenon require both processes. Holism as envisioned by Smuts has a reciprocal relationship with what he calls 'mechanism' which is the basic metaphor that inspires the reductionist method.

...Holism is a matter of degree...and in its earlier phases as structure it is scarcely different from Mechanism. Indeed we may look upon Mechanism as incipient Holism, as a crude early form of Holism. In proportion as Holism realises its inwardness more fully and clearly in the development of any structure, in proportion as its inward unity and synthesis replace the separateness and externality of the parts, Mechanism makes way for Holism in the fuller sense. But its realization is a matter of degree, and there will probably always remain some residuary feature of Mechanism which will to some small extent justify the resort to mechanistic concepts and categories, even where the most developed and refined Holism is concerned. (Smuts, 1926, p. 153)

Viewed in this way, each with a legitimate domain which blends into the domain of the other, reductionism and holism are reciprocal processes. Koestler, who laments the application of reductionism beyond what he would call a constructive limit, concedes the legitimacy of reductionist method within certain constraints.

Now the reductionist fallacy lies not in comparing man (sic) to a "mechanism powered by a combustion system" but in declaring that he is "nothing but" such a mechanism and that his activities consist of "nothing but" a chain of conditioned responses which are also found in rats. For it is of course perfectly legitimate, and in fact indispensable, for the scientist to try to analyse complex phenomena in to their constituent elements – provided he remains conscious of the fact that in the course of the analysis something essential is always lost, because the whole is more than the sum of the parts, and its attributes as a whole are more complex than the attributes of the parts. (ibid. p 25)

Thus a case for respect for both epistemologies is made, citing the relevance of each at different phases of research (Looijen, 2000) or different phases of evolution (Morowitz, 2002) or in combination or in concessive form as social explanation (James, 1984).

In radical forms both reductionism and holism have been shown to fail, so concessive positions are necessary. They are mutually compatible, if extremes on either side are relinquished. This entails the moderate position of recognizing wholes as 'real' entities with unique identities (emergent properties), a measure of self direction, an internal organization and a potential for integration with its context or greater whole. The contributions of parts in relationship to the whole are considered useful explanation but are not expected to render complete explanation in isolation. There are, however, at least two ideas that stem from holistic tenets which are not easily rendered into a concessive form and so remain contentious.

Remaining difficulties with holism

There are two members of the holism cluster of ideas that have been severely criticized. Both have their origin in Hegelian philosophy and are identifiable in Smuts' holism but as will be shown, in an attenuated form. Each has consequences for epistemology that science has found untenable. These ideas are the theory of internal relations and what has been termed the notion of downward causation.

Internal relations.

This idea is derived from the theses, parts and wholes are functionally related and therefore parts cannot be understood in isolation from the whole, and entities are necessarily altered by the relations into which they enter. The first became a popular battle cry for those opposed to the growing mechanism of science at the end of the nineteenth century. As a plea for context it is a

very sensible call but it has been extended to the far more extreme claim that understanding anything requires knowledge of everything to which it bears relation. It has been called the organicist view and has been categorized under the aegis of holism. In James' (1984) classification of holistic tenets, this view is derived from holism of form. It has been influential in the philosophy of language and of science as well as a major foundation of systems theory. Objections to the idea of internal relations have been roughly twofold.

The first objection claims that not all characteristics and relations of an entity are defining ones. Wittgenstein's claim that of any cluster of characteristics or 'family' of resemblances, not all need necessarily be accepted for a term to be applied, supports this statement. When a term such as 'democracy' is used, it is possible that not every defining characteristic of democracy is present but enough of the 'family' of characteristics to warrant the description.

The second objection concerns the practical impossibility of attaining knowledge if the theory of internal relations is accepted. "If Hegel were (sic) right, no word could begin to have a meaning, since we should need to know already the meanings of all other words in order to state all the properties of what the word designates, which, according to the theory, are what the word means." (Russell, 1946, p. 714)

It might be supposed that this latter objection would prove fatal to the idea of internal relations. It certainly is, to an extreme application of the thesis, but the attractiveness of the call to context is a powerful one and sorely needed in the face of rampant mechanistic thinking.

There are more complications with the idea of internal relations. The holist assertion that the whole is more than the sum of the parts asserts that if entities A, B, and C become inter-related they become A_1 , B_1 and C_1 as a whole. This is almost indistinguishable from the assertion of the second thesis of internal

relations, but as parts are said to be inexplicable in isolation, it is difficult to see that A, B and C would be identifiable. This leads to the absurdity that only wholes are explicable. It is easy to establish the shortcomings of the idea of internal relations and as asserted in its extremities, it is eminently unworkable, but it serves well as an admonition to piecemeal thinking and as a reminder of the importance of context.

Smuts approached the relationship between parts and wholes with an emphasis on what is to be gained from wholeness. Parts are viewed as intricately related and as changed by virtue of coming together. The individuality of the part, its autonomy, its identity are enhanced by process towards wholeness.

The organism embraces innumerable smaller units whose identity is not swallowed up in it, is expressed and not suppressed by it. The large organism does not only mean union and co-operative harmony of its smaller units, but also as a rule the more perfect individuation and specialized development of these units in the harmony of the whole. The plant or animal body is a social community, but a community which allows a substantial development to its individual members. (Smuts, 1926, p. 83)

This may be the same as saying that parts can not be understood in isolation because they would be different phenomena from that which they were within a whole but it stops short of the extreme claims of internal relations.

Downwards Causation.

The assertion that parts are changed by coming into wholeness has led to an objection that this means that wholes *determine* the nature of parts. This is in apparent conflict with the idea of cause and effect. A common sense resolution to this conflict has been discussed above in relation to social science. The conclusions drawn were:

It is not possible to sustain the argument that wholes determine completely the nature of their parts.

It is reasonable to assert that wholes influence the nature of parts.

An apparently more objectionable paradox is derived from the extension to the above assertion; that wholes cause themselves. It appears that we are trying to combine a thesis of upward causation with a claim of downward causation. If lower level entities determine what happens at the higher level, then how does the higher level in turn influence the causal powers of the constituting lower levels? Can determination go in both ways?

The phenomenon of feedback enables this to occur. Popper 's (1972) example of the influence of the scientific presentations at a conference (higher level functions of descriptive and argumentative functions) exerting influence or *plastic control* over the expressive and signalling functions of language, the lower level functions. This describes a feedback loop; the same as those proposed by systems theorists. Even simple self organizing systems have feedback loops that enable the processes of the system to be responsive to changes in the system as a whole. One of the characteristics of wholes noted by Smuts is that of self-generation, the ability to 'metabolise' the environment to its own ends. These characteristics involve both the self directed nature of a whole and its embeddedness in the environment. These are mediated by intricate feedback loops. For example, "our most private thoughts and feelings arise out of a constant feedback and flow through of the thoughts and feelings of others who have influenced us. Our individuality is decidedly a part of a collective movement. That movement has feedback as its root" (Briggs & Peat, 1989, p. 154).

This idea of process has been described as analogous to pulling oneself up by one's bootstraps. The bootstrap hypothesis, proposed by physicist Geoffrey

Chew is based on the view of universe as a dynamic web of interrelated events in which none can be said to be fundamental. Each event or part follows the properties of the other parts in the mutual interrelatedness of the structure of the entire web. Capra describes the implication of this theory in this way:

When this approach is applied to science as a whole, it implies that physics can no longer be seen as the most fundamental level of science. Since there are no foundations in the network, the phenomena described by physics are not any more fundamental than those described by, say, biology or psychology. They belong to different systems levels, but none of those levels is any more fundamental than the others. (Capra, 1996, p. 39)

This is where everyday science, such as that understood by medicine, takes exception. Science, as we know it, requires a basis of some unquestionable framework, a body of fundamental evidence from which all other hypotheses are generated and tested. The web of life idea is far closer to the understandings of Eastern mysticism than is comfortable for everyday science. It is 'beyond science' to claim everything to be mutually dependent and it makes knowledge of a rational kind impossible.

In the eastern view, as in the view of modern physics, everything in the universe is connected to every thing else and no part of it is fundamental....Both physicists and mystics realise the resulting impossibility of fully explaining any phenomenon, but then they take different attitudes. Physicists are satisfied with an approximate understanding of nature. The Eastern mystics, on the other hand are not interested in approximate or "relative" knowledge. ...Being well aware of the essential interrelationship of the universe, they realise that to explain something means ultimately, to show how it is connected to everything else. As this is impossible, the Eastern mystic insists that no single phenomenon can be explained. (Capra, 1975, p. 321)

The exploration of the parallels between understandings of modern physics and Eastern mysticism are well beyond the remit of this thesis, however the similarity of these ideas to those of western ideas of holism is noted. The significance of the frequent resort to eastern medicine in calls for holistic health care may have its origin in this similarity. It is however, these sojourns beyond

normal science that condemn holism as an unworkable doctrine in the eyes of many.

Concluding remarks

It seems therefore that although there are asserted differences between reductionist science and holism that can be shown to be illusory or amenable to concessive views, there remain some non-resolvable differences in the way each views the world.

It is these differences that cause the dissonance between health care from an orthodox medical view and health care from a holistic view. It is not possible to state unequivocally what a universal holistic view is. As described above, it appears in a variety of combinations and degrees of concession. Yet for application in health care, some specification is necessary. In this vein, a summary of the central descriptors of a holistic view is important.

A holistic view is concerned primarily with the nature of wholeness and asserts a tendency towards wholeness to be evident in reality. The characteristics of increasing internal organization and complexity, increasing self direction, unique properties and a capacity to integrate with greater wholes, are evident to different degrees on all levels of reality. Because it has been posited as opposed to reductionist views, holism has been assigned the role of championing the explanatory power of the whole as opposed to the part, and of criticising the effects of deconstruction by analysis. This chapter has aimed at freeing holism from these obligations on the grounds that as stereotypical responses they are a mere caricature of the ideas originally expressed by Smuts. Holism's contribution to explanation of the world round us is primarily one of exposing the creative intra-relationship between partness and wholeness. It is with this understanding that the following chapter will address the place of holism in health care.

Chapter Eight

Holistic Health Care: Patterns of Practice

By health I mean the power to live a full, adult, living, breathing life in close contact with what I love – the earth and the wonders thereof – the sea – the sun, all that we mean when we speak of the external world. I want to enter into it, to be part of it, to live in it, to learn from it, to lose all that is superficial and acquired in me and to become a conscious, direct human being. I want, by understanding myself, to understand others. I want to be all that I am capable of becoming so that I may be...a child of the sun...but warm, eager, living life – to be rooted in life –to learn, to desire to know, to feel, to think, to act. That is what I want. And nothing less. That is what I must try for. (Mansfield, 1977, pp. 278, 279)

A variety of ways in which the notion of holism is employed has been demonstrated in the preceding chapters. The task of this chapter is to explore the ways in which holism can be applied to health care. The importance of this task should not be underestimated, for unless a useful and philosophically defensible application can be established, health care workers should abandon the notion as an empty slogan that has no possibility of contributing to work for health.

Running through the range of assertions made in the name of holism, one common feature is the nature of each as *explanation*. Holism is a way of explaining the order of, or in fact ordering (depending on the view taken on the relationship between thought and reality) the universe, using the notion of wholes as medium. Wholes are taken to be the explanatory units of reality. This sounds like a variation of atomism and indeed this is a trap for those who take the view that holism is about identifying ‘the whole’ and then treating it as a unit. (Health care workers fall into this trap in their claims to ‘treat the whole person’). The difference between atomism and holism lies in the perception of the nature of wholes as ‘unit’. We do not escape atomism simply because we choose a bigger unit. In a holistic view, wholeness is not a fixed or static entity. Wholeness is a dynamic state with particular characteristics. Wholes have a

'process' nature and are themselves parts of greater wholes. This is the important legacy of Smuts and others like Teilhard de Chardin and Bohm; the inner space of the human psyche and the outward space of the vast physical universe constitute one evolving process.

The creation of wholes, and ever more highly organised wholes, and of wholeness generally as characteristic of existence, is an inherent character of the universe. There is not a mere vague indefinite creative energy or tendency at work in the world. This energy or tendency has specific characters, the most fundamental of which is whole making. (Smuts 1926, p. 99)

The notion 'whole-making' is important. Holism is about the making of wholes. The following distinctions have been explored in chapter four.

- Wholes as unity of everything
- Wholes as some ideal end point
- Wholes as complex entities with certain characteristics
- Wholes as ambiguous states (having a dual nature of partness and wholeness) in a creative process that enables the emergence of novelty

As identified in chapter four, a fundamental assumption of holism is that partness tends towards becoming wholeness. Everything is in the process of becoming. In this way wholeness becomes a direction, a purpose of reality. Structure, function, meaning or aesthetics are enhanced by the progression to wholeness, which is demonstrably a characteristic of the universe. The characteristics of wholes, to summarise previous chapters, have been identified as:

- Functional internal organization, complexity
- Self direction
- Individual, specific character of its own, emergent property/ies
- Potential for partness or integration with a greater whole

Wholeness can be achieved by increasing internal organization, aspiring to a resolution of the tension between self direction and integration with a greater whole and by recognising and facilitating emergent properties. The unique or specific character and the autonomy of wholeness derive from the intimate relationship between these factors. Wholeness is in the process of emerging as these characteristics interact, intertwine responsively, reciprocally relate. Wholeness is inhibited or destroyed if these characteristics are separated out or if any one becomes dominant.

Having established at least a working notion of wholeness, the next question is, 'how is wholeness related to health and to health care?'

Health and wholeness: good bedfellows?

It was established in chapter one that a call to wholeness is a blind alley for health workers. Merely proclaiming wholeness as a goal is an insufficient base from which to guide practical work for health: it is not possible to set limits to holistic health work nor to assess what ought to be done in the name of holistic health care. This study has established that holistic health care, if it is anything, must be:

- More than recognizing multiple factors as causes of disease
- More than providing an endless stream of alternative therapies
- More than making context a factor in treatment
- More than thorough treatment
- More than withstanding the body-mind split

But is it possible to claim meaningfully that holistic health care is a process of facilitating wholeness? What is the connection between health and wholeness? In order to answer these questions, understandings of health must be explored. Not all views of health are compatible with notions of wholeness, nor are all views of health sufficiently articulated to reveal a practical relationship with a notion of wholeness.

There is etymological evidence of a close relationship between health and wholeness.

Whole: Middle English hool, healthy, unhurt, entire, from Old English hAl; akin to Old German heil healthy, unhurt, Old Norse Heill.

Health: Old English h[EA]lth, from hAl, a wholeness, a being whole; has derivative haelth, Middle English helthe. (<http://www.m-w.com/cgi-bin/dictionary>)

However, the present day meanings are not obviously close and the relationship between these ideas invites investigation.

Seedhouse (1986/2001) has made the following distinctions between theories

of health. In summary, they are:

Health as an ideal state

Health as the capacity to function

Health as a commodity

Health as personal strengths or resources

Health as implicit to cultural understandings of personhood

There are other ideas about health, which may not be developed theories, but nonetheless exist as understandings of health. Examples of two such understandings are:

Health as finding meaning (Frankl, 1946; Stuart, 1999)

Health as quality of life (Raeburn & Rootman, 1998)

The absence of disease

Health, at its most diminished, has been thought of as the absence of disease and creating health has been directed towards eradicating disease and restoring function of the affected part as far as is possible. Seedhouse (1986/2001) criticizes this view of health as too narrow in the following ways:

- Health is demonstrably more than the opposite of disease.
- Health is clearly affected by other obstacles that are not necessarily

diseases (for example, poor working conditions).

There is little congruence with this view of health and ideas about wholeness except that of restoring functional organization that is one aspect of wholeness. Health work aimed at removing disease may promote or restore function and in this way may be said to be aimed at wholeness in a limited sense.

Health as an ideal state

Health at its most expanded has been claimed to be “a state of complete physical, mental and social wellbeing and not merely the absence of disease.” (World Health Organization, 1986) This view of health has been criticized by Seedhouse (2001), as theoretically incoherent and therefore impractical.

- It condemns most, in fact all, of the world's population to diminished health
- It is meaningless to talk about health as an ideal state: objective perfection
- It acts as a distorting myth that inhibits fruitful debate about health
- It falsely represents the possibility of the realisation of all human potential

This view, while mimicking a particular sense of wholeness (perfection, completeness, unimpaired total fulfilment), in fact, manifests all the limitations of a naive call to wholeness. It is well meaning rhetoric but by being totally comprehensive, it is also totally meaningless. While claiming to focus on the ‘whole person’ this view trades on the restorative aspect of wholeness but cannot deliver on its promises. Oliver Sacks describes the charade in this way:

There is, of course, an ordinary medicine, an everyday medicine, humdrum, prosaic, medicine for stubbed toes, quinsies, bunions and boils; but all of us entertain the idea of another sort of medicine, of a wholly different kind: something deeper, older, extraordinary, almost sacred, which will restore us to our lost health and wholeness and give us a sense of perfect wellbeing. For all of us have a basic intuitive feeling that once we were whole and well; at ease, at peace, at home in the world; totally united with the grounds of being; and that we lost this primal, happy, innocent state and fell into our present sickness and suffering. (Sacks, 1982, pp. 26, 27).

The World Health Organisation implies that to offer health, health workers must offer perfect wellbeing. In this view health and wholeness are practically unattainable.

A commodity

The view of health as a commodity to be bought or given, arguably the view of current western health care systems, is one that demonstrates no congruence with ideas of wholeness. This view, on the contrary, masks medical science's inability to address that which is most fundamental to wholeness, self direction, uniqueness and integration or connectedness with other wholes. It seeks health by the diagnosis and treatment of diseases in their individual manifestations. Illness and handicap are seen as the domain of medicine and must be absent to attribute health to an individual. It reduces health to outputs that can be measured, to processes that can be monitored and to levels of substances that can be mechanically topped up or drawn off. It valorises the act of dispensing and elevates the status of the dispenser, denying the recipient any role other than purchaser.

Ideas of wholeness have no place in this view of health. However, the notion of health as a commodity has deeply permeated western society. We expect 'treatment' to restore health, and seek it piecemeal, whether from a medically trained person, an alternative provider or from the health food shop. Problems are seen in an atomistic way, and solutions must be similarly discrete. Health is what you get from receiving health care. Many of us have a learned resistance

to understanding health in any other way.

Personal resources

Health as a stock of personal resources, however, has a deep congruence with ideas of wholeness. The conception of health as deriving from physical, mental or metaphysical strengths either as resilience, the ability to adapt, or as an ability to overcome problems that cause suffering, is very similar to the idea of wholeness as a complex entity with certain characteristics of self assertion and integration. Health in this view is a way of responding creatively, to the obstacles that inevitably punctuate life, a means towards a greater end. Despite the experience of stress or problems of various kinds, a certain functional organization is present, there is evidence of maintaining autonomy and of a balance of self assertion and integrative tendencies. Koestler explains the disequilibrium that results when these personal resources are not present or have been overwhelmed.

...(E)ach part of the living creature, ...has its intrinsic rhythm and patterns of activity, governed by its own built-in code of rules, which makes it function as a quasi-independent unit....In a healthy organism as in a healthy society, the two tendencies (self direction and integration) are in equilibrium on every level of the hierarchy. But when exposed to stress, the self asserting tendency of the affected part of the organism of society may get out of hand – i.e., the part will tend to escape the restraining controls of the whole....There are a wide range of mental disorders in which some subordinate part of the cognitive hierarchy exerts a tyrannical rule over the whole, or in which some chunks of the personality seem to have “split off” and lead a quasi-independent existence. The most frequent aberrations of the human mind are due to the obsessive pursuit of some part truth, treated as if it were the whole truth – a holon masquerading as the whole.(Koestler, 1978, pp. 58,59)

In this view health is equivalent to balance or equilibrium. Maintaining this dynamic state is a variable natural capacity that enables people to withstand many of the vicissitudes of life. Some of these challenges to equilibrium may be diseases, some may be problems of other kinds, homelessness, poverty,

bereavement, loss of employment, adversity of any kind.

However, health is not necessarily compromised by the experience of these challenges. It is only compromised if these challenges overwhelm the equilibrium between the tendency to self assertion and the tendency to integration that is the human weal. Health can be present despite disease and affliction but not in the face of the loss of the balance between autonomy and integration that is a characteristic of wholeness: health and wholeness are very closely related ideas.

The criticism levelled at the personal strengths view of health is one of vagueness. (Seedhouse, 1986/2001). While there is much to recommend it, for the purposes of work for health, this view fails to provide adequate guidelines for practice. It invokes the characteristics of wholeness in the pursuit of health and health care is aimed at restoring the characteristics of wholeness but this view falls short of offering more than a sense of deep congruence between health and wholeness. However, if terms such as 'physical, mental or metaphysical strength' and 'resilience', 'meaning' and 'adaptation' were defined for a particular person or set of circumstances, care given from this view of health could be considered a candidate for the description 'holistic health care practice'.

Health as finding meaning

Health as finding meaning is a variation of health as 'personal resource', the 'mental' or 'metaphysical strength' distinction. Lloyd Geering illustrates that human experience is manifestly a question of meaning.

It was the drift towards meaning which brought each word into being. It is the drift towards meaning which gives each sentence its reason for being expressed....It is the drift towards meaning that has prompted us humans to create from our sense data a world in which to live. The reason we construct a world is our quest for meaning. Words, sentences, stories, worlds – the

phenomena unique to the human animal – all have resulted from this mysterious urge to meaning which has surfaced in human existence. (quoted in Stuart, 1999, p. 22)

Victor Frankl describes the human 'will to meaning'.

Man's (sic) search for meaning is a primary force in his life ... This meaning is unique and specific in that it must and can be fulfilled by him alone.... To be sure, man's search for meaning and values may arouse inner tension rather than inner equilibrium. However, precisely such tension is an indispensable prerequisite of mental health. There is nothing in the world, I venture to say, that would so effectively help one to survive even the worst conditions, as the knowledge that there is a meaning in one's life. There is much wisdom in the words of Nietzsche: "He who has a why to live for can bear almost any how".... mental health is based on a certain degree of tension, the tension between what one has already achieved and what one still ought to accomplish, or the gap between what one is and what one should become.... What man actually needs is not a tensionless state but rather the striving and struggling for some goal worthy of him. What he needs is not the discharge of tension at any cost, but the call of a potential meaning waiting to be fulfilled by him. (Frankl, 1946, pp. 99, 106, 107)

'Meaning' as a noun has two aspects:

...that which is intended; object; intension; aim;

...that which is signified; significance; sense; import; connotation. (Webster, 1986).

Frankl is using the word 'meaning' in both these senses; he is asserting the role of a *significant aim* in the sense of 'a purpose'. He is maintaining the value to health of this 'primary force' in life. This purpose or meaning is unique to each person and can be fulfilled by him/her alone; it is thus of individual nature and will have special characteristics. Frankl addresses the tension between what is, and what is potentially, to be, maintaining that health emerges from this tension. Health is thus seen as equivalent to heeding the call of the sufficiently worthy goal of becoming all you are able to be. In Koestler's work the quest for wholeness, which can be described as a significant aim, is said to involve a

tension too: the balance resulting in a healthy individual. It is clear that, in this view of health as finding meaning, there is a strong congruence with wholeness. However, the tremendous complexity of the relationship between the ideas of wholeness and meaning remains enigmatic. There is no clear relationship to be uncovered yet they are each closely linked with ideas about health.

Health is partly derived from having a sense of purpose.

Wholeness is a purpose.

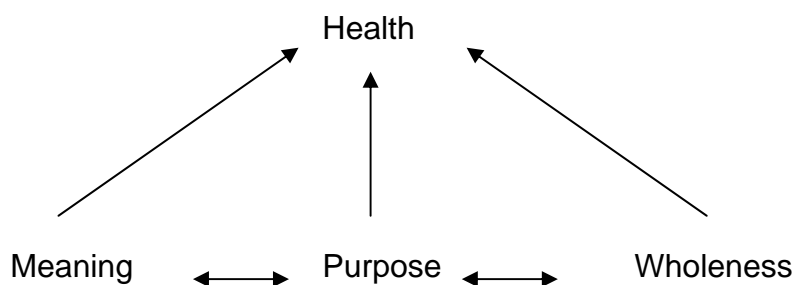
Health problems can be wholeness problems.

Health is partly derived from having a sense of purpose.

Deriving meaning is a purpose.

Health problems can be meaning problems.

Such is the interconnectedness of these notions. Health results from a sense of purpose which is in turn closely related to ideas about meaning and wholeness.



Are meaning problems the same as wholeness problems? It is not possible to say that they necessarily are, but there is evidently a very close relationship between wholeness and meaning and in turn between these ideas and health. The same criticism of vagueness levelled at the personal strengths view of health is applicable in this case. These ideas provide inspiration for locating health in the context of meaning and purpose but fall short of enabling practical guidelines for health work.

Health as a cultural notion

Health as implicit to Maori cultural understanding of personhood makes possible the understanding that health problems are wholeness problems and that health problems are meaning problems. It emphasises the connectedness of body, mind, spirit and family, Te Whare Tapa Wha (how everything comes together: a way of describing functional organization), it explicitly incorporates appreciation of a sense of community (integration), it seeks autonomous expression from western notions of health (self direction, autonomy) and it manifestly demonstrates specific characteristics of its own. It is beyond the scope of this study to make further interpretations of Maori views of health, but clearly there is a congruence between health and wholeness in this understanding. Paradoxically, the strength of any cultural view of health is also its limitation as its applicability beyond cultural bounds is by its nature very restricted. Indigenous understandings of health however, are a global asset both because they ensure the survival of indigenous people and because they provide glimpsings of pre-medicalization understandings.

Health as quality of life

Health as quality of life formed the basis of a major research project commissioned by the Ontario Ministry of Community and Social Services

(Woodill, Renwick et al. 1994). Raeburn and Rootman (1998) have further developed this conception of health. Quality of life is defined as the degree to which a person enjoys the important possibilities of their life. It is said to comprise nine measurable areas, grouped into three broad categories of 'Being', 'Belonging' and 'Becoming'. In this view, health is a *field*: a sub-field of the Quality of Life Field, incorporating the psychological, physical and social components (measurable areas) of quality of life and the effect on these of certain moderating (for example resources, support systems and skills) and certain determinant conditions (for example environmental and personal factors). The focus of work for health is on the factors that determine health, both environmental and personal and on the factors which moderate these determinants.

The health field. (Raeburn & Rootman, 1998, p.61)

The components of the quality of life field that are excluded from the health field are, spirituality, personal growth, leisure, participation, community and ecological factors.

The authors acknowledged a pragmatic need to place limits on what is viewed as health and to differentiate 'health' from 'life'. This is indeed an important differentiation to make but in doing it in this way Raeburn and Rootman have excluded much of what could be claimed to be aspects of wholeness.

In this view, it is the Quality of Life Field that demonstrates greater congruence with wholeness, while health is limited to the equivalent of the biopsychosocial idea. Quality of life is said to be about realizing possibilities, about personal control and the associated dimension of choice (self direction, autonomy). It has the greater share of the 'belonging' category (potential for integration with a greater whole) and the entire 'becoming' category including personal growth (individual character, the self assertion/integration tension). This view raises the possibility that wholeness is a 'bigger notion' than health. Health and wholes are seen to have many (in fact all) the same determinants but the expression of health remains limited to measurable and specific areas. In the pursuit of a definition of health that is 'practical', these authors have promoted ideas of wholeness to some place beyond health.

Is this an accurate reflection of the relationship between health and wholeness? The limitation of this view is surely that *an influence from any dimension of life can affect health*. It is not reasonable to state that health falls only in the biopsychosocial domain. Contexts of community, spirituality and ecology are demonstrably factors in the experience of health (Benson, 1996), and ideas about potential (becoming) are surely fundamental to ideas about health. Katherine Mansfield was able to articulate this clearly and the extract from her work quoted at the start of this chapter is exemplary. It is therefore not useful to limit health by invoking the triumvirate of biology, psychology and society as sufficient. There is more to the experience of health than is communicated in this sub-field of quality of life. This is not the same as saying that 'health' and

'wholeness' are indistinguishable ideas.

It is however, a compelling reason to look at a theory of health that defines the limits to health without excluding the possibility of congruence with wholeness.

Health as Foundations

Seedhouse (1986/2001), having reviewed and categorized through conceptual analysis various theories of health, established that although they contained ideas too divergent to combine into one comprehensive theory, there was a fundamental central idea common to all. This idea is "that health in its different degrees is created by removing obstacles and by providing the basic means by which biological and chosen goals can be achieved" (p. 84). In establishing how health is created, it becomes possible to form a theory about what it is. This theory is called the Foundations Theory of Health. The definition of health that is the core of this theory states that:

A person's (optimal) state of health is equivalent to the state of the set of conditions which enable a person to work to fulfil his or her realistic chosen and biological potential. (Seedhouse, 2001, p. 84)

Stating central conditions necessary for the possibility of health is a feature of other theories of health but the first part of the definition is not merely about precursors of health. It is about equivalence with health. Health is something that increases or decreases with the central conditions. A second difference from other lists of prerequisites for health is that Seedhouse illustrates how these central conditions are always prejudiced. He sets out the central conditions he believes to be relevant, describing how his own values, political philosophy, life experience, observations and academic development have affected his deliberation. This theory of health makes its prejudices explicit and in this way challenges the user to examine their own. There is no reason why some of the conditions could not be altered or redrawn for cultural or other

situation specific requirements. What would be needed to keep faith with the theory would be careful thought and similarly explicit justification.

The central conditions as justified by Seedhouse, are illustrated by the analogy of a stage on which the scenes of life are played out. The stage is made up of boxes that represent the different categories of central conditions.

- 1. The basic needs of food, drink, shelter, warmth and purpose in life (including spirituality and meaningfulness).*
- 2. Access to the widest possible information about all factors which have influence on a person's life.*
- 3. The skill and confidence to assimilate this information.*
- 4. The recognition that an individual is never totally isolated from other people and the external world.*

Seedhouse elaborates on the fourth category:

People are complex wholes who cannot be fully understood separate from the influence of their environment, which is itself a whole of which they are part. People are not like marbles packed in boxes, where they are a community only because of their forced proximity. People are part of their whole surroundings, like cells in a single body. This fact compels the recognition that a person should not strive to fulfil personal potentials which will undermine the basic foundations for achievement of other people. In short, an essential condition for health in human beings who are aware of the implication of their actions is that they have an awareness of a basic duty they have because they are people in a community. (Seedhouse, 2001, pp. 85, 86)

A fifth group of conditions is additional or crisis support. This includes access to life saving and sustaining medical services, to those that restore normal function, to context dependent support in medical crises and to the continuing fulfilment of special needs, the absence of which would constitute a crisis. This category of conditions is only foundational when required, that is when there are

obstacles to achieving potential that cannot be removed or overcome with adequate central conditions.

The stage analogy of the Foundations Theory of Health.

Congruency with holism as described in previous chapters is already evident in this view of health. In both, wholes are seen as fundamental explanatory phenomenon,

- context is seen as giving meaning,
- the dual nature of partness and wholeness is recognized,
- the tension between the assertion of self and the integration of self is

acknowledged.

The characteristics of wholes are evident in:

- The role of connectedness in the achievement of health (functional organization).
- The need for integration with a greater whole (community).
- The role of meaning in achieving health: both purpose and significance, personal meaning (unique character) and understanding of the world.

For convenience this will be called first order congruence.

The second part of the definition is about the way health is manifest, in ability to *realise potential*. Seedhouse states clearly what he means by potential: the inner capacities that each person has. Human potential is a complex phenomenon forged by a combination of what one is able to do, what one chooses to do and what happens in everyday life. It has to do with capacity to do, capacity to be, capacity to realise what is inherently possible. Human potentials are not necessarily objectively positive or negative. They have to do with values and context. The potential to be aggressive may be necessary in defence of a vulnerable person, the potential to be diseased may be the stimulus for exhilarating personal growth.

However, not all human potentials are 'positive' in any sense: humans have potentials for destruction and disintegration in countless guises, but the potentials referred to in this understanding of health are the potentials for enhancement, adapting creatively, for bringing to fruition latent abilities, enabling fulfilling achievements. They are those that in balance produce

flourishing of the individual and or his or her environment.

Work for health is concerned with encouraging normal (in the species typical sense) and positive potentials because these potentials have the effect of opening up possibilities for achieving more potentials, whereas negative potentials reduce the number of possible potentials. (Seedhouse, 2000, p. 106)

Work for health is thus directed both towards ensuring the best possible foundational conditions and towards removing obstacles to the realization of potential. This realized potential then creates more potential in an unending process of realization. Here is a further congruence with ideas about wholeness. Wholeness is *potential realised* as the potential of parts come into relation, to create wholes, which in turn come into relation as parts of a greater whole. Any whole is part of the next whole: there are whole/parts in a never ending progression, each facilitating the wholeness of the next. There is a strong parallel between this process and the way health is realised: as foundational conditions are enhanced and the obstacles to achievement are removed, more potentials are created and realised. Health is the product of this process of fulfilling potentials. Realization of wholeness, as has been established, (Smuts, 1926) leads to ever more complex wholes in an unending process of realization. So in this view health and wholeness are created in similar ways. This will be called second order congruence.

It is at this point that it becomes evident that if work for health is to be practical, limits must be established. The Foundations Theory has changed the way limits to health are defined. Limits need no longer be set by excluding particular domains of life from the health field, but are set by employing the notion of *autonomy as a measure of sufficiency* of these conditions. Work for health is work to create or preserve autonomy.

Autonomy is not merely the capacity to act on particular wishes but a more general capacity to be self-determining, to act to fulfil potentials. The conditions are *foundational*: once an individual has a solid foundation, the way he or she chooses to express their potential is no longer work for health. Work on conditions may be necessary from time to time as health is not an absolute notion. Work for health is required to overcome the gap between an individual's actual state and the foundational goals, but work for health ceases when the goal of health is achieved. Self direction/ autonomy is a characteristic of both health and wholeness. The third order of congruence of health with wholeness is thus evident.

So this view of health reveals a strong congruence with ideas of wholeness. Because of the fully extended nature of the theory, there is a stronger congruence than it is possible to establish with the views of health explored above. It is not however, reasonable to make any more definitive a statement about this relationship even within the Foundations Theory. Health as foundations for achievement is similar to the notion of wholeness as identified in this work and they are created in similar ways. They certainly increase and decrease in synchronization. Health is achieved by fulfilling human potential and wholeness is a human potential. They can even be said to be mutually beneficial and each is achievable by degrees. But they are not the same thing.

Firstly, in the Foundations Theory, health is measurable and very specific goals can be set for its achievement. This is not true in the same way about wholeness: although it is a goal it is not so clearly assessable nor are the ways of achieving it as amenable to specification. Secondly, health is a finite idea. Although human potential can continue to be achieved beyond the specifications of the central conditions, this is not equivalent to getting healthier and healthier. Wholeness on the other hand is the bigger idea. . Even though certain characteristics of a wholeness state have been identified, the very nature of wholes is that they are intrinsically a part of a greater whole in an

endless progression. "There is a creative activity, progress and development of wholes, and the successive phases of this creative evolution are marked by the development of ever more complex and significant wholes." (Smuts, 1926, p. 105)

So a certain measure of *congruence* is the most suitable account of the relationship between health and wholeness. In summary, the first order of congruence comprises the similarities drawn between the nature of the foundational conditions and the characteristics of holism. The mutual assertions of the importance of context, of the role of meaning, of the place of wholes as explanatory phenomena, of the dual nature of part/wholes and the recognition of the tension between self assertion and integration. The second order of congruence is found in the similarity of focus on the realization of potential. The third order congruence resides in the status of autonomy as characteristic of both health and wholeness. So this foundations view of health can be said to make great strides towards understanding health holistically. However, this project is about *health care* and how it can be holistic. As there are different understandings of what constitutes health care, some exploration is warranted.

What is health care?

Understandings of health care are inextricably linked to understandings of health. There is ancient testimony to this. The Greeks traced their understanding of health care to various gods. Asclepius, prime among them, inspired at least two very different modes of health care practice. (Dubos, 1968). The priesthood of Asclepius practiced a form of faith healing inspired by dreams. They offered a place for worship and purification and care, for example anointing, fragrant baths and fasting, in sanctuaries situated near the sea or mountain streams. Natural surroundings, infused with religious power, combined to constitute a particular form of health care.

There was another Asclepian tradition however that emphasised the curative properties of herbs and which dabbled in surgical practices. These were called Asclepiads or lay physicians as they did not belong to the priesthood nor had any connection to the temples.

The medicine these travelling Asclepiads practiced was based on knowledge of anatomy and physiology and was forerunner to Hippocratic medicine. Hygieia and Panacea, daughters of the god Asclepius, were acknowledged as goddesses with healing power representing the skills of the lay Asclepiads. Hygieia symbolized the wisdom of living wisely to remain healthy, thus being concerned with prevention of disease and maintenance of health while Panacea was the inspiration for the belief in the power of treatment with appropriate substances.

Hygieia and Panacea, along with Asclepius, were specifically mentioned in the opening invocation of the Hippocratic oath taken by physicians when they were admitted to the Asclepiad guild. The association of the three deities in the oath indicates that ancient physicians differentiated between prevention and treatment of disease and recognised the importance of both types of medical activity. (Dubos, 1968, p. 55)

The modern medical view of health care is clearly derivative of this lay Asclepiad tradition and much of what is called holistic health care is congruent with the temple Asclepians. Other modern health care dichotomies are evident in these ancient traditions too: the spiritual/ secular, care/cure, body/mind, healing in nature/healing by technology. Health care workers have over the centuries located their practice on one or other side of these divides, usually holding the other in some disdain. However the understanding of health that has emerged from the Foundations Theory enables a radically different conception of health care.

A fully developed theory of health will produce clear guidelines identifying the nature and limits of work for health or health care. However, as described

above, many ideas about the meaning of health are little more than collections of possible contenders for inspiration for health work: ideal states, meaning, fitness for tasks, personal strengths. The dearth of practical aims and principles to guide health work from any of these perspectives has ensured the dominance of the 'treat the disease' version of health care (despite the best efforts of the World Health Organization to instruct otherwise). Notions of health as the absence of disease and health as a commodity have been the fuel for much of what is called health care today. There are, in the organisation of health care, a number of assumptions which powerfully drive the, 'health care = treatment of disease or prevention of disease' model.

It is assumed

- that disease is a special category of problem, in some way privileged over other life problems,
- that it happens by and large to individuals who are in fact separate from other individuals,
- that disease necessarily requires certain experts to eradicate it,
- that medical resources are health resources,
- that adequately trained 'auxiliary' staff are most useful in the service of the medical model,
- that resistance to cure is dooming to health,
- that death is failure.

'Health care' undertaken in the shadow of these assumptions has no potential

for holistic pedigree. In opposition stand the assumptions of the Foundations Theory.

The Foundations Theory assumes that

- disease is only one of many obstacles to health; poverty, skin colour, low education and ecological destruction are obstacles too
- there are identifiable central conditions necessary for health; constant reflection is required to ensure these remain optimal for a particular person
- although there is a dimension of individual experience, individuals cannot be fully understood separate from each other
- health care (or work for health) aims to provide adequate foundational conditions for all people and to remove obstacles to the achievement of potential
- health care is sensibly directed towards *creating* health, and may be carried out by a wide variety of people
- health care is self limiting: adequate conditions create autonomy which must be respected
- there are however fuzzy limits to health care and health care workers need to reflect on appropriate limits in particular situations.

Work for health or health care in this view has several holistic credentials. It maintains the integrity of the person and their context. This context is the source of meaning for the person and includes all that is defining of them. It illustrates

both the resources the person has and the liabilities, which may or may not be clinical. It represents the person whole – that is not as either body or mind or some reconstituted biopsychosocial being. The Foundations approach is a very radical departure from other approaches to health care (other than those of indigenous cultures). The assertion is that a (whole) person is facing obstacles to achieving potential and while ways of removing the obstacle may be either predominantly physical or predominantly psychological, the person as a whole is engaged. Autonomy is recognized as an indication of wholeness: work for health has been successful and is no longer required. The need for equilibrium between self assertion on the part of the individual and for integration with a greater wholeness is recognized. Each person's potential for wholeness is acknowledged. The place of clinical intervention in the name of health is placed in context of other work for health.

Health care in this view is

- work aimed at providing adequate foundational conditions for all people and removing obstacles to the achievement of potential
- work directed towards *creating* health, and may be carried out by a wide variety of people
- self limiting: adequate conditions create autonomy which must be respected

Each of these understandings about health from the perspective of the Foundations Theory is congruent with the ideas about whole-making and characteristics of wholes: increasing functional organization, aspirations of autonomy, and potential for integration with a greater whole. This view of health care as enabling fulfilling potential, bypasses the crippling dichotomies of the medical vs 'other' tradition. It locates the selection of the content of work for

health in the gap between the present state of the central conditions and the desired goal of autonomy. The content of health care work is not primarily driven by disease but by any identifiable obstacle to the achievement of biological and chosen potential. It is therefore not the sole domain of medically trained people. It is not solely orientated by facilities or services available, whether they are medical or non-medical, nor is it driven by the range of skills of any one group of professionals. Work for health is driven by the stated goal of enabling the realisation of potential of each individual and in turn humanity as a whole.

Criticisms of this view, as idealist, are answered by Seedhouse (2001) with acknowledgement and no apology. Work for health is idealistic in inspiration. However, this does not mean that it is practically impotent. Quite the contrary. Very clear health care aims can be derived from an assessment of the central conditions experienced by a person. These aims may or may not require medically trained professionals who by some quirk of language are usually called 'health' care professionals. This is an important distinction for any investigation into holistic health care work. It is more than half a century since George Orwell (1949) illuminated the absurdity of a Ministry of Health concerned primarily with disease, yet we still ignore the absurdity of the modern experience of finding only doctors and nurses at the Family Health Centre, the absurdity of seeing health care as the domain of the disease specialists. Conversely, it is not impossible for a specialist in disease management to espouse a holistic view and offer holistic health care. Holistic health care work aims at the removal of obstacles to achieving potential and facilitates the realization of potential including the potential for wholeness. It is recognizing this potential for wholeness that enables holistic practice.

But what of practical application? Having established that health and wholeness are closely related and having acknowledged that for the present we can say no more than that, what role can wholeness play in health care? How can health workers deal with wholeness? The answer is of course that they cannot. Not in

any direct way. Despite understanding something of what it means, wholeness remains in a real sense beyond the reach of practical manipulation. Wholeness is not something a health worker can prescribe, dispense or produce, for therapeutic gain. It is not even something (as this study demonstrates) that can be comprehensively named, described or expressed. It is enigmatic. It resists capture and deployment. However, it is recognizable. It is possible to describe characteristics that indicate its presence. This work has proposed an inter-related set of characteristics that are the prerequisites for, ingredients of, wholeness. And it is these characteristics that can be addressed in work for health: self direction, integration, organization and emergence of new properties. Wholeness is the purpose or inspiration but in a practical sense, merely its constituents can be addressed. Wholeness is accessible indirectly through work with relationships between its characteristics.

For practical health work, wholeness is about the relationship between parts. Smuts focused on the latency of parts, their potential to be more. A whole is something “in which all the parts appear in a subtle indefinable way to subserve and carry out the main purpose or idea” (Smuts, 1926, p. 28). Parts precede wholes and have within them and between them capacities that are unfulfilled potentials. So this is not the mechanistic manipulation of parts that are presumed to add up. It is with a new understanding of parts as having unfulfilled potential that can, in relationship, be manifest in emergent properties. Just as health in the Foundations Theory is indirectly produced or achieved by removing obstacles to fulfilling potential, so wholeness is indirectly produced by conceding and working with the potential of parts. Just as health is the inspiration for work to remove obstacles to achievement, wholeness is the inspiration for working with the holistic potential of parts.

In work for health, partness is apparent in two different ways.

- there is the loss of wholeness, damage, disintegration, functional

- disorganization, disequilibrium, loss or absence of autonomy: in work for health it is this aspect of partness that needs to be addressed
- there is the incipient whole or part with potential yet unrealised that can be nurtured or brought into relation to form new wholes, either therapeutically or compensatory.

Holistic health care is work addressing both these aspects of partness and in this indirect way facilitating wholeness.

So Parts it is

In summary, the characteristics of parts have been identified as:

- Parts have unrealised potential, they are limited or incipient wholes
- Parts can actively come into relation with other parts to form novel properties
- Parts have a tendency to wholeness, towards creative synthesis

Smuts sees parts as creative of wholes.

The parts so co-operate and co-function towards a definite inherent inner end or purpose that together they constitute and form a whole more or less a distinctive character, with an identity and ever increasing measure of individuality of its own. (ibid. p 107)

Holism can thus justifiably be said to entail a belief in the creative potential of parts.

Here (in a living system) all action...is holistic, not only that of the whole itself, but also that of the parts. The stamp of Holism is impressed on the activities of the parts no less than on the... whole itself. The (whole) and its parts are reciprocally means and ends to one another; neither is merely self regarding, but each supports the other in the moving dynamic equilibrium which is called life. (ibid. p. 210)

If this idea is applied to health care, we come to the conclusion that holistic health care is a belief in the creative potential of individuals and even parts of individuals, to realise potentials in the face of challenges to wholeness. We have discussed health problems as wholeness problems and have asserted that wholeness problems are to do with parts not achieving their potential. Holistic health care is care aimed at facilitating the relationships between parts that enable emergent properties to manifest: it is aimed at removing obstacles to wholeness by working to ensure the adequate function, self direction and integration of parts in order that wholeness may emerge.

An immediate objection to this view could be that under these conditions all health work is inevitably holistic health work. This is demonstrably not so. Not all health work is inspired by the belief in the creative potential of parts. Health work inspired by the commodity meaning of health or by the absence of disease model of health is commonly directed at *a part* in isolation or with consideration of other parts in a mechanistic, 'add on' manner. These views of health see health as restored piecemeal by the intervention of specialists in one particular field or another. Of course there are degrees of severity of this 'the part as a separate entity' view and most health care disciplines will claim to take a broader view. They will claim to consider more than just the organ or body system that is presented as a problem: they may take into account the circumstances of the patient, their family, even their culture and spiritual connections. What differentiates a holistic approach to health care is the *belief in the creative potential* of these parts as active participants in the process towards wholeness: toward functional organization, self direction, self-assertion and integration. Holistic health care entails a commitment to the following

understandings:

- Health problems arise from the *context* of life.
- They are meaningfully and inextricably entwined in this context.
- As parts of this context they derive their meaning from other parts and from the whole.
- Partness can be diminished by bringing it into relation with other parts that can lead to wholeness (enhanced function or meaning).
- When parts come together as creative potential, emergent properties appear; health is one of these emergent properties.
- Even in the face of damaged, diseased or decrepit parts, there are other parts which can be brought into relation to facilitate wholeness.
- There is always, even to a time of death, creative potential that can be mobilised.

Holistic health care invokes the creative potential of whatever 'partness' can be said to exist in the situation and aims at directing this potential towards wholeness. This means there is an emphasis on possibility even in the most dire of circumstances. For example Ian Gawler (2003) has named hope as one of the cornerstones of holistic health care and it is evident from this exploration that he is justified in his claim. He describes his own experience of being diagnosed with cancer by an oncologist as a damning by statistics. He was given no reason to hope. In wanting hope, he was not asking for unrealistic comfort, he was asking for belief in the creative potential of 'partness'. He had

resources of all kinds which he was able to apply to his situation. Some of these resources were already known to him and others were revealed as he faced the challenge of surviving cancer.

Aiming to maintain or increase health by focusing on these resources, developing them, nurturing them as *parts with potential* is congruent with the understanding of holistic health care outlined above. This is not instead of medical or scientific intervention although it may be if these fail. Even if his cancer had proved to be fatal he believes that this creative potential would have led to a 'better' death, one of inner peace, having engaged wholeness despite affliction.

There is room for different interpretations in this view of holistic health care.

- The creative potential can be seen as immanent or transcendent; part of a material process of becoming or as a spiritual process of becoming.
- The 'whole' is not specified objectively but can be explored in context.
- Which parts are identified as being needed or available for facilitating wholeness is dependent on context.

There is another important consideration. One of the major questions posed by this study is 'what are the limits to holistic healthcare?' Addressing this important issue entails two groups of questions.

1) What parts must be included? What parts are to be the focus?

2) How much treatment is warranted? Until what point is treatment appropriate?

The idea of wholeness as 'everything' threatened to render holistic care the same as 'life care' and led to the misunderstanding that to be holistic one has to deal with every aspect, 'the whole person', or with an unending list of treatment modalities. But this work has established a different view: holistic health care is about recognising and facilitating wholeness, which is achieved by working with the relationship between certain characteristics. Seeing wholeness in a person and their situation is not the same as 'treating the whole person'. If this distinction is obscured we get the ludicrous situation of health workers feeling bound to be seen to be dealing with body, mind, social, spiritual and environmental issues with every patient.

Working holistically does not preclude choosing the most appropriate parts to address: there may be many and there may be few, but any health care work must address a limited range. Which parts are chosen to become the focus of holistic health care will be driven by the interaction between patient and health care worker and will best be based on a joint assessment of the potentials most likely to produce wholeness. Consulting a health worker about gout need not entail an in-depth investigation into the spiritual life of the patient, but it may. The range of life domains assessed as being integral to creating health may be narrow as in the case of surgery to remove a mole or broad in the case of rehabilitation of a spinal cord injury, but should be reached mutually where possible. If the patient is unconscious or truly unable to participate in this process for any reason, it of course does not violate any holistic tenet to treat those parts that would apparently render the most autonomy.

Establishing *which* parts are the focus of health care is providing limits in one sense, but what about the extent of treatment, how much health care work is appropriate? Parts provide this limit too. Health care viewed as addressing the potentials of parts is limited to action to bring partness to wholeness. But, it may be objected, whole-making has been conceived of as an endless process, each whole achieved simultaneously being/becoming part of greater wholes. What

limits can there be to health work that is focussed on wholeness? When parts demonstrate the 'leap' to wholeness, identified in chapter five, holistic health care is over, is no longer warranted. Once characteristics of functional organization, self direction, self assertion and integration become apparent, from the inter-relationship of the selected parts, wholeness can be said to have emerged. Having reached the level of adequate foundations, any further process towards future wholeness is beyond the call of health care.

So in conclusion, we have a basic template for holistic healthcare. The Foundations Theory has been used as an exemplar of how health work can be holistic. What the Foundations Theory makes explicit is that work for health is strengthening the foundations that are a necessary part of every person's reality but not all there is to that reality.

In summary, by focusing on resources in this way, the Foundations Theory prompts health workers to holistic care.

Firstly, it makes visible those characteristics of wholeness we have identified: the presence of self assertion tendencies (box one) and integrative tendencies (box four), the individual, special character of the person and the functional organization of all that makes this person's reality (all four boxes). Working with this view of health makes possible the facilitation of wholeness in health care by utilizing the creative potential of parts.

Secondly, positing autonomy as the measure of sufficiency for health parallels the same role of autonomy in creating wholeness. Holistic health care is about facilitating autonomy and then respecting autonomy as the person moves to achieving the characteristics of wholeness in a healthy life.

Thirdly, it makes no necessary distinction between body and mind. Implicit in this understanding of health is that assaults on health will have both physical

and emotional results. What is important is the resources that are available or can be made available to mitigate or deal with the assault.

Fourthly, it makes visible the assertion that an individual can have degrees of health despite suffering disease or disability. By listing the resources that the person has available to deal with obstacles to health, there is an implicit indication that these are important 'parts' that can be nurtured and harnessed in the pursuit of wholeness.

Fifthly, it clearly identifies health as an emergent property: something that emerges from the relationship between various parts (identified as foundational) as a creation. In this sense, health is not provided, it is created.

For those looking for a holistic understanding of health that can inform their work, the Foundations Theory provides sufficient philosophical justification while avoiding the pitfall of too prescriptive a view.

Chapter Nine

Holistic Health Care: working with the creativity of incipient wholes

The Knot.

In the heart of the queen anne's lace, a knot of blood.

For years I never saw it,

years of metallic vision,

spears glancing off a bright eyeball,

suns off a Swiss lake.

A foaming meadow: the Milky Way;

And there all along, the tiny dark-eyed spider

sitting in the whiteness of the bridal web,

waiting to plunge his crimson knifepoint

into the white apparencies.

No wonder the eye, healing, sees

For a long time through a mist of blood.

Adrienne Rich. (in The Norton Anthology of Poetry. Eastman, 1970, p. 1179)

A fundamental premise of this thesis has been to support the view that the way we see reality deeply affects the way we approach it. Common sense, hardly worth saying, chorus the many. Maybe, but in the headlong rush for 'evidence', Science is apt to forget this. In any case, the consequences of this view are not immediately very helpful. Thinkers have explored the possible relationship of knowledge and reality without discovering an unequivocal heart to it. We have 'scientific' camps and 'mystic' camps at extreme ends of the measure and some who believe that ultimately these will be revealed as the same point. There is no resolving this mystery. However, by acknowledging that whatever point on this spectrum we find our thinking located, it will affect how we process our experience, we open ourselves to the potential of reframing our experience if we reframe our mode of thinking. The crux of this thesis is that to practice holistic health care, we need to think about health and health care holistically. The previous chapters have explored what thinking holistically might mean and this is the major contribution of this work. But having read them attentively an earnest and thoughtful health care worker asks with some exasperation what might 'doing' holistic health care in a practical sense look like?

The disenchantment with orthodox medicine discussed in chapter one is fuel for the plea for other ways of working and for the details of the tasks necessary for the change. While exploring the philosophical shifts that such change entails is *the core work* for the change, the modern western health worker is in a predicament. She may feel the disenchantment and have grasped something of the idea of context and connectedness as important but without adequate time or mentoring is not able to do the conceptual investigation that is the core work. All too often, as evidenced in the literature, she is seduced by a technique or set of techniques that embody this connectedness in some way and she simply incorporates this into her list of services. It is with this real health care predicament in mind that this final chapter is written.

Some practical questions that a thoughtful health worker might ask about providing holistic health care are:

1. What should I do to be more holistic in my practice?

It would be simple to be a holistic health worker if it were merely about 'doing' certain things. Health work is after all about 'doing' things and it is understandable that in order to clarify the distinction between holistic and non-holistic care, you demand a list of do's and don'ts. However, as the deliberation in the preceding chapters demonstrates, these differences lie in the thinking behind the doing. It is about how one sees the world and this influences *the way* we do things. For example, if we work from an understanding of reality as the separate, object bound, increasingly predictable world, in which what you see is what you get, it is possible that the history we take from a person in our care (who will henceforth respectfully be called 'the patient') will be quite different from one taken by someone who views reality as a web of intimately inter-related phenomena between which cause and effect flow back and forth. If we work from an understanding of health as a commodity, we will not be able to mobilize characteristics of wholeness that the Foundations view makes possible. That is why it is not as simple as 'doing certain things'. It is more to do with a style of thinking. At the simplest distinction, one is linear and one more weblike.

It is not as easy (or useful) to *prescribe* ways of thinking as it is to prescribe certain actions. This is not to say that health care training institutions do not try. For example, I remember being told as a student, "If you hear the sound of thundering hooves, don't think stampeding zebras." The moral of the story was meant to be, "think of the most likely reasons for, or consequences to, a situation." (It had to be explained to me that horses would be the more likely reason). But the message implied was, that being effective involved learning a list of connections and that with experience, we would be less likely to make

'outrageous' suggestions. There is of course some truth to this but there are some crippling consequences if it is applied beyond the most concrete of situations. Thinking holistically is being able to pick more than the most likely, most obviously apparent reason or consequence.

It is also more than merely adding to the list of the likely consequences or reasons. The skill needed for practicing holistically is how to address the interconnectedness of things, particularly how to keep the connectedness in mind, while at the same time making a sensible/insightful decision about which parts to consider as the crux of the obstacle to achieving potential. To some extent the slogan 'think globally, act locally' captures this idea but it is how one 'acts locally' that ensures holistic health care in its fullest sense. And it is this that is behind your request for a list of do's and don'ts. Some holists would say that such lists belong to the mechanistic world in which cause and effect have a simple linear relationship and in which there is a great deal of predictability when in fact we are operating in a world of unique combinations that generate novel and unexpected outcomes.

My preference is the concessive view which acknowledges the relative 'truth' of each of these understandings. In fact I see them in a reciprocal relationship. In the inorganic world (at least the world above atomic level) certain laws and predictions that follow from them are evidently true but as we consider the functions of life and mind we become less able to be predictive. There are properties of life and mind that are mysterious. Science (in its mechanistic guise) has tried to solve these mysteries as if they are merely puzzles. I feel that with too much emphasis on lists of things to do, we can do the same with health care. If each health care problem is seen as a puzzle where we can automatically clearly see and recognize the pieces that passively await rearranging, we still hold a mechanistic view.

Admittedly this exposes me to the charge that in order to be holistic in our work we need to concede that there are factors at work that are not within our control, even awareness. I think holists do hold this view but there are sound reasons for it. This view derives from the recognition of the existence of emergent properties. These are characteristics or properties that become manifest when parts come into relationship, that were not present in the parts in isolation: hence the phrase 'the whole is more than the sum of the parts'. It is recognizing the possibility of this 'more' that is fundamental to a holistic view. So if I am pressed for a list of guidelines to providing holistic health care, it would begin with:

- Give thought to how the world seems to you.
- Think about the possible relationships between things.
- Look closely at surprising outcomes.
- Resist the tendency to consider only what you can measure.
- Practice changing your focus from detail to big picture and back.
- Hold *connectedness* in mind as a real property of everything.
- Think about/explore the concept of *potential*.
- Ask yourself questions about your understandings of partness and wholeness.

This is a 'big ask' for a busy practitioner but the sense of it will soon become apparent. Just as having a thorough understanding of health afforded by the

Foundations Theory discussed in the last chapter brings coherence to practice, clarifying your thoughts and honing the skills needed to meet the guidelines above will bring coherence to your understanding of holistic care.

Holistic health care is more about how you frame your practice – the thinking you need to do before you try to approach health holistically, than having a list of essential components or basic elements. It is about how you think about reality.

The ability to practice holistic care follows from deliberating about the relationships between partness and wholeness. If once this deliberation has been underway for some time, you begin to make sense of the phrase ‘the whole is more than the sum of the parts’, you will be on the way to being able to practise holistically. If not, stick with what you are good at, situations in which knowledge brings predictability: there are plenty of them in health care and they are often very effective. An antibiotic will cure infection, a bed bath will make someone more comfortable, *Depo Provera* will prevent pregnancy, *Fluoxetine* will probably relieve depression. This is the kind of health care many people seek and it has been largely successful depending of course on what one sees as the purpose of health work. It is just not a holistic way of providing health care. (This of course is not to say that any of these prescriptions may not feature in a holistic approach but there will certainly be ‘more’ to the provision than these).

If we are to ‘do’ some thing to make our practice more holistic, we must develop skills of flexible focus. One of our perceptual skills is the ability to focus attention, figure-ground perception. Without it we would not be able to select particular stimuli for attention and our entire reality would be some assaulting, orderless chaos. We have a sense that a more inclusive, ‘holistic’ way would improve our health care practice because we realise that we have become ‘too good’ at focusing attention. So good that our thinking has ossified in this mode

and we tend to see everything as separate objects, isolated events, and treat them in this way. So, we need to practice changing focus, into the detail, out to the big picture.

An obvious analogy is using lenses to see more clearly. When you look down a microscope and change the focus, you get completely different planes of the reality and you can range through these with ease. The concept of depth of focus, that range of focus that can be achieved with more light in photography is another useful image. In our practice we can aim for an increased depth of focus in which the detail and the background can be clear and for a good focus dial that takes us into the picture and out again with ease.

So what is 'holistic' about this way of looking at things? Well, it is not all there is to a holistic view but it facilitates a holistic view. To explain this more clearly let's us name the detail, the part and the big picture, the whole. If our focus can move freely between the part and the whole, we will be in a position to explore the relationship between them.

2. But I still think that holistic care must be about including as many factors and providing as many skills as possible.

There are people who think that it is, and they pursue holism by increasing their skills and adding to their repertoire of techniques but this may have no more result than offering a greater range of alternatives. A practitioner may think that if she includes certain 'doings' beyond what is traditional, and does so because she wants to be more helpful than usual, she is practising holistically. I think we denigrate the idea of holistic health care if we see it as adequate justification for claiming holistic practice that some random add-on therapy was helpful. All things we do can have inadvertent outcomes both good and bad but we need a sounder basis for health care than this. I reiterate my precaution against the

belief that learning more techniques or offering a wider range of therapies ensures holistic health care in its fullest sense. In order to realise the difference between mechanistic and holistic thinking we need to do more than become proficient at a range of therapeutic techniques. We must expect more from those who claim to practice holistically. I would expect a sound rationale based on a view of reality that places primary emphasis on relationships and in particular *recognizes the creative potential* of these relationships. This creative potential is manifest when parts come together in particular relationships and new characteristics appear that were not constituents of the parts in isolation. Holistic health care is about recognising both the potential of parts and the characteristics of wholeness. It is not enough to just 'do' or offer more things.

3. Surely there must be a basic recipe, a method you can explain to all would-be health workers

I can hear your frustration at what appears to be an evasive answer. I have felt this myself. But it is the very mercurial nature of the idea of holism that makes it fascinating and that sets it in contrast to views that are black and white. I want to put to rest this idea of a recipe. While there are pointers, even some guidelines, there is no recipe. Having a good recipe does not make a chef. To me, if we accept, and then focus on, the creative processes in every situation we will see how rulebooks have a limited use. If we view each situation (skillfully selected interaction of parts) as having creative potential we will make sure that we keep our rulebooks for only that part of the situation that is genuinely predictable or they will obscure the uniqueness from us. Rather we must hone our skills at recognising creative potential, at facilitating its realization, at making the connections that render the most health.

To explore another analogy, one can ask for a list of suggested equipment, a map, even a guide as one embarks on an intrepid journey if it is a journey that has been made before. If we believe it is a new journey, unique in significant

ways, we will use our prior experience, our equipment lists and whatever information is available about the likely terrain but we will be ready for surprises, ready to see the intricacies of the journey, ready to use our skills in ways exactly appropriate to the conditions we find.

If what you are asking is, 'in every therapeutic encounter, what are the basic things to consider?' I would say that holding the creative potential of connectedness in mind as a basic property of everything would be a good starting point. The perceptive capacity to recognize connectedness and potential for connections is fundamental to holistic health care. It is about the potential inherent in certain arrangements and our awareness of this potential. We simply can't influence in a *direct way* anything of which we are not aware. We all go through life influencing things in many ways of which we are oblivious. But health care is not primarily about this kind of influence (although if the truth be told much good achieved in treatment comes from the inadvertent expression of reassurance or comfort or moments of shared humanity). I think that we have more chance of noticing things if we are prepared to concede they may exist. In the case of emergent properties we have more chance of recognising them if we understand their nature. Colin Wilson called the extent to which we are unaware, the St. Neot's Margin and holistic health care is about developing skills to counter this and to apply them to health care. Holism is about seeing 'more'.

4. What are emergent properties and how is understanding them useful in health care?

I have claimed that when parts come together in particular relationships something new happens. Observation reveals that in some circumstances there are properties of the whole that the parts do not have. These are called emergent properties. For example, to go back to the image of the microscope, we may be looking at parts of a cell that inter-relate to form a unicellular

organism that has properties of life that the parts do not possess. Not all wholes have these emergent properties, some wholes are simply a collection of parts that have some limited kind of relationship, for example a pile of sand is only a collection of grains which have a proximity relationship.

In health care we are usually dealing with the kind of wholes that have emergent properties, with parts that have potential for emergent properties. That is, the relationship between the parts of health care situations can be reasonably expected to yield emergent properties if they are brought together in a particular way. As an example, I think it is useful to view health as an emergent property. Viewed from the perspective of the Foundations Theory, certain basic conditions (parts) are brought together and potential for achievement emerges.

You may wonder what it is that distinguishes emergent properties from mere consequences and this distinction is at the heart of understanding holism's application to health. Consequences are effects, results, outcomes in the broadest sense. Emergent properties are a particular kind of outcome, not exactly predictable, that reveal *new* characteristics that the parts do not have, that change the parts in some way. If you think of the different teaching situations you have experienced over the years, some parts (students) inter-relate to create a group presence and impetus that is just not apparent when they are separate individuals. There are other classes that develop no such animation and the group remains largely a collection of parts (individuals), each engaged in their own individual 'wholeness'. The 'group life' is an emergent property and it will change the parts in irreversible ways. A skilled teacher is able to facilitate this process and be part of creating emergence.

Just as emergence depends on the inter-relationship between students and between teacher and students, I think holistic health care in its fullest sense, engages the patient as a part of this exploration of partness and wholeness and the creative process of bringing about emergent properties. After all, the

relationship between provider and recipient has creative potential often untapped in more mechanistic health care situations. If the provider does not acknowledge the potential of her partness in relation to the partness of the patient, she will not be aware of the fullest extent of the creative possibilities in this relationship. For example she may only see her expertise at prescribing helpful medication and not the therapeutic potential of her deep listening skills or of the fact that her personal experience gives her a unique view of otherwise unlikely connections.

You may challenge me by saying that emergence is nothing more than simple change and this objection is understandable. However, I am certain of the creative dimension to emergence that does not exist in all kinds of change. Red litmus can change blue, a glass can be filled, rosters can be altered, furniture can be rearranged, a student can learn Grey's Elogy, all without manifesting this quality of emergence I am pointing to. But some of these examples have more potential for emergent properties than others. Change in litmus paper colour has added nothing that the parts did not bring to the situation, filling a glass of water as an isolated act would have no emergent characteristics either. Changing the order of names on a list may not either, but changing who works with whom and when could produce the creative change I am talking about. Furniture rearranged could be just for 'a change' but it could lead to better communication in a family, without this being the original motivation for the change. Much of what we learn can be assigned to the 'knowledge acquired to be regurgitated' category. It simply leaves us superficially changed. However, we have all experienced the excitement of a sudden insight that 'changes everything', new understandings have emerged from the parts we were grappling with. Popper has described this process well.

Holistic health care focuses on the creative potential of the relationship between parts and on the new properties that are apparent. These emergent properties are related to flourishing. Health is, in the Foundations view, about flourishing. Some of the changes listed above could have negative consequences. Conflicts

may be created in the work place, the family could avoid the rearranged room and the student may be put off poetry forever. In these events no emergent properties would be forthcoming and no flourishing would be apparent, no health could have been created. An example is the side effect of a drug being so debilitating that it truly negates the value of its use and no emergence is possible.

It can be argued that it is possible to create health without conscious attention to the creative potential of parts. I can be given an instep for my shoe to enable me to walk more comfortably, I can get an injection for tendonitis that enables me to play my beloved tennis or have surgery for endometriosis to remove debilitating symptoms. If we understand health care to be creating autonomy (and we do) it is possible to do this in a mechanistic way to the satisfaction of many. However, to the extent that health is created, emergence *is* occurring. It is happening unnoticed. In health care, we are working towards flourishing, towards enabling the most positive potential to be released. Understanding the relationship between parts and wholes can help us to be more conscious of the process of creating health.

You may be concerned that conceding the possibility of emergent properties is just a form of hoping for the best. Holism in health care is sometimes accused of naive optimism, as being the 'Pollyanna' of health care, and perhaps this is worth thinking about. By focusing on the creative potential of all situations, do holists deserve this scorn? Are holists trying to turn all outcomes to good by only focusing on creativity? I think the difference lies between settling for, and avoiding settling for, the pessimistic outcome. Avoiding settling for the pessimistic outcome is not denying its possibility, it's just not settling for it. By this I mean maintaining a belief that there are creative responses to all situations and that ultimately we can find meaning in whatever the outcome is.

Consider the example of the difference between a physician who believes that

she knows exactly the outcome/consequences of her diagnosis/treatment and one who phrases the outcome allowing the possibility of emergence. One may give a life expectancy of a few months as part of her diagnosis and arrange palliative care believing this to be her duty. The other who has shed her St Neot's blinkers and is looking beyond the predictable, may help the patient to explore the creative possibilities of their situation. She may respond to the patient's sense of urgency and encourage him to ask all sorts of creative questions. There may be experiences to be had, people to meet, opportunities to explore, each for the possibility of emergent properties. This physician is aware that the patient may collapse inwardly and so her attention is focused on expanding his sense of creativity. With various innuendo, this has been called, 'keeping hope alive'. Those who are disparaging see it as extending denial but those who practise it claim that no matter what the outcome is in fact, maintaining this actively creative outlook ensures the very best outcome for the patient. Parts are being brought into relationships: wholeness is created.

5. How can I tell the difference between a part and a whole?

The skill of holistic health care is developing the sensitivity to make these distinctions, all the time knowing that they are in no sense real things. Parts and wholes do not in themselves exist anywhere. This sounds absurd but think of a developing foetus: each phase is inextricably part of the next phase which is part of the whole process of life. To identify a state in time, the third trimester for example, as part of the whole is to understand its place in the whole. But it will also have characteristics of wholeness too. These characteristics were discussed in the preceding chapters: increasing complexity and organisation, increasing self direction and of course increasing capacity to be part of a 'greater' whole. I think partness is in evidence when there is potential to be more (more autonomous, more integrated, more organized) and wholeness is in evidence as these characteristics become manifest. Partness is in a way becoming whole to be part of yet another whole. For this reason wholeness is

not something that can indisputably be claimed to have been reached. It is something to work or move towards with the knowledge that integration with greater wholes, a new manifestation of partness, is inherently an aspect of any whole. The important inspiration for health work is the creative potential of the relationship between parts and their capacity to produce the emergent properties we see in wholeness. It becomes possible to see how the parts fit together to make the whole, and how the context of the whole influences the parts.

6. But I thought holism was about wholes, not parts: Wholeness as everything in undivided flux

Strangely for a concept that implies completeness, unity, oneness even perfection, there is more than one way of conceptualising wholeness. I have explored these in chapter four and, within the limitations of thought as a way of understanding wholeness, concluded that it is not possible to *decide* between them. It is as if different facets reveal themselves as distinct only to remerge or display an adjacent facet which seeds doubts about the autonomy of the first. Wholeness is in a sense incomprehensible.

In the history of ideas, the view of wholeness as unity of everything has played a role and remains a view defended by mystics. It maybe 'the ultimate view', how reality 'really is'. It may be that having this awareness of the unity of everything is something we have as children and then 'forget' or unlearn. It may be that as we encounter the end of life this awareness returns. It may be that when all is said and done, this awareness never truly leaves us, it just becomes buried in perception of separateness. However, in practical, everyday health care we need to have more than this spectre of wholeness. Unless through some faith tradition, transpersonal practice or experience of profound personal realization we are able to say with integrity that we have changed this spectre into reality for us, we can no more employ it in our health care practice than we

could claim to be wise having read a book about wisdom. Reaching a personal sense of wholeness as everything *is not the same* as dabbling in acupuncture or herbal medicine and calling the resultant conglomerate holistic health care. So what other way can wholeness be approached? If we look around for exemplary wholes, while we do not find unequivocal wholeness, we do find *characteristics* that are increasing in a direction away from partness towards wholeness. It seems to me (and a few other people) that these characteristics are organisation, self direction, and capacity to integrate with a larger/greater whole. Each of these can become manifest in a gradual way and increase in intimate relationship with each other leading to the emergence of new characteristics or properties. I think that it is their appearance that signifies the change from partness to wholeness. Now this is a difficult bit to explain.

I do not want to give the impression that I think there is a real saltus or jump in a concrete sense from partness to wholeness, that parts and whole states exist in some fixed way. But I think partness is in evidence when there is potential to be more (more autonomous, more integrated, more organized) and wholeness is in evidence as these characteristics become manifest.

But of course there is a rub. The understanding of the relationship between parts and wholes I have outlined includes the realisation that wholes are simultaneously parts of greater wholes. And so the question arises, 'is the whole ever complete?' Are we not in fact talking about the spectre again? I think that the role of the spectre is illustrated here: we can never quite grasp it but it is always present. Many who term themselves holists have found themselves simultaneously denying that wholeness is ever complete and talking about ultimate states in the next breath. It is a question of trying to express the idea of direction, but not wanting to or being able to describe the destination other than to say it is more like this or that than we are now. For example. Smuts consistently denied he was describing some endtime whole but the last chapters of his book are littered with references to 'the ultimate wholeness'.

Even Darwin had this problem:

And as natural selection works solely by and for the good of each being, all corporeal and mental endowments will progress towards perfection. (Darwin, 1998, p. 368)

Does 'ultimate wholeness' or 'perfection' exist? Being a holist does not depend on the ability to answer this question (nor of course is it possible to answer to the satisfaction of everyone) but it would be crass to deny that each of us has some uncommunicable sense of it. In moments of heightened awareness, we may even have this feeling consciously. However, this feeling is not enough (in a particular sense of enough as, 'the *only* thing one needs') to be practically helpful in health care settings. There are at least two pitfalls if we have only the view of wholeness as unity of everything:

- 1.) It fails to address relationships: how constituents affect each other is ignored.
- 2.) There is no possibility of identifying newness or creativity: it is all swallowed up, all concealed in the bland consistency of blanc mange.

Whatever the 'reality' of it, our experience of the world includes change, creation, newness and potential for more. Change is our perceived reality and so the problems we address in health care are an opportunity to work with change. New relationships bring about this change. I think that it is the potential unleashed by new relationships that is, or should be, the focus of holistic health care.

Mystics may disagree with me and would have ways of dealing with the idea of everything, oneness, the changeless change, the undivided flux. They will see us as imprisoned by our cognitive limitations until we seek enlightenment. Until we do, the understanding of wholeness as the increasing of certain

characteristics is the practical view. It enables holistic work for health to be 'do-able' which was the first challenge issued in this chapter. However, if health care is merely aimed at increasing these characteristics of wholeness as discreet goals without some sense of the 'wholeness of everything', it would remain mechanistic healthcare, a list of aims achieved. Nothing more.

The idea of wholeness is an enigma. It is both the inspiration and the undergirding of holistic health care but the actual work is done with parts.

The skill of the holistic worker is to hold both partness and wholeness in their focus and to know that doing so 'changes everything'.

7. If holistic care is a way of looking at health care, does it really exist in any real sense?

Does holistic care exist as a distinction in the same way as blue exists as a distinction from cold? We could say that it doesn't exist unless we make it exist. If the necessary conditions you have been trying to come to grips with are met, health care can be deemed holistic. It's an idea and as such does not have to exist in any real way. However, you have touched on an interesting possibility. When the term holism was first coined, it was to account for what the author felt was a *real force* in nature evident both in evolution and in our daily lives. The idea that there is a tendency in nature towards complexity, organisation, increasing self direction and inevitable integration with greater wholes, was fundamental to the original understanding of holism.

Of course there are rigorous arguments against this idea and opponents do have the advantage that such a force is not measurable. However, as long as it is not confused with the 'ghost in the machine' idea, a separate governing, non-material force that resides in things, I think there is room to entertain the idea of a *tendency* to wholeness. The physiology of wound healing is an

example that goes some way to illustrating this idea. Following trauma, circumstances may

frustrate the healing process, excessive blood may be lost or infection may set in, but the tendency of the organism is to heal; it in fact fights to heal and often succeeds. We can do things to help it and to minimise the effects of infection but we couldn't heal something unless there was a tendency to heal. Some would say it is inaccurate to call it a tendency: it is just a list of instructions embedded in the cells that is sparked off mechanically. I would reply that it doesn't matter, in this instance, what exactly makes it happen, it does happen, and with surprising reliability.

My understanding of tendency to wholeness is no more mystical than this. I cannot prove that there is in reality such a process (there is no known biochemistry of wholeness as there is biochemistry of healing) but I can point to much evidence that suggests it: the evident direction of complexity in evolution, the novelty of emergent properties, the striving I see in nature for self direction and integration. After some thought I have come to accept that it is possible to have a sense of a tendency to increasing wholeness, in perhaps the same way as when we are growing up we have a developing sense of self, without being exactly clear where it is or how it will turn out.

Ultimately though, it is possible to formulate arguments against these interpretations of what is happening in reality. While it is possible to be a holistic health care worker without conceding any real nature to this tendency, (maybe easier because explaining a belief in a tendency to wholeness to science is impossible), I think that it is a reasonable assumption that there exists a creative process that we can 'tap into'. And in any case, I think there is more to be gained by exploring this possibility than by treating everything as isolated parts that combine in no more creative a way than simply adding their characteristics.

8. OK, so give me examples of holistic practice: How are these skills useful, how do they produce more health?

In chapter one we met Michael, the young boy with asthma. I was not satisfied that adequate explanation was offered as to what made the treatment he was offered holistic. However, the understanding that has been revealed in this study about the creative potential of parts provides a new way to assess the extent to which his treatment was holistic.

He could have been nebulized and given more Ventilin or Flixotide or other combination of medication, given an emergency number and a follow up appointment. Instead, Dr Gordon recognized the potential in harnessing Michael's tendency to wholeness. He explored the creative potential of the relationship between the various parts that he deemed relevant: anxiety, diet, allergies, peer and parental relationships, energy levels, self esteem, obstacles to academic achievement. He engaged Michael in partnership, he provided information, he used humour, he placed Michael's experiences in the context of his life. He also used traditional Chinese medical principles in his diagnosis and treatment and spinal manipulation. In chapter one, I was not sure how to capture the essence of holistic health care and I asked the following questions.

- Is it a different way of seeing 'the problem'?
- Is it a different way of seeing 'the person'?
- Does it involve a different way of seeing health?
- Is it the inclusion of environmental, familial, social, psychological, and life style factors?

- Is it the use of Traditional Chinese Medicine? (or any traditional medicine for that matter?)

I presumed that it must be to do with the content of the practitioner's beliefs, and certainly these play a part, but it is more to do with the practitioner's awareness of the potential for emergent properties when parts are related creatively. The use, along with western diagnostic techniques, of traditional medicine is not defining of holistic health care: it is incidental. Equally the use of hydro therapy or relaxation, which were not suggested (but may have been), could not ensure the treatment was necessarily holistic even though they are considered to be 'mind-body' therapies. The inclusion of a wide range of aetiological factors is not defining either. Fewer factors could have been identified by the pair without the treatment losing holistic nature.

The crux of the holistic nature of treatment is this: Dr Gordon addressed characteristics of wholeness, the increasing complexity of Michael's world, the tension between his need for self direction and for integration. Dr Gordon banked on liberating some powerful energy in this young man. He used the changes in diet, help with learning, and opportunity for Michael to explore anxiety as the salient parts to bring together to foster this energy. He demonstrated faith or expectation that Michael had potentials he could bring to bear to increase autonomy, parts that could be moved towards wholeness. He was prepared to explore the obstacles to the wholeness and to respectfully remove those parts inhibiting flourishing, an anxious Mum, a sugar-saturated diet, Michael's own anxiety. In new combinations he introduced a sense of commitment to becoming stronger, a growing independence, some new information and an acknowledgement of the stresses of adolescence. Dr Gordon called forth characteristics of wholeness in Michael. He offered holistic health care.

Trying to understand holistic health care using an example like this has two

severe limitations.

1) Describing an isolated health care intervention cannot really do justice to an approach that relies for its identity on how the practitioner thinks.

2) We run the risk that what the practitioner does or prescribes is mistaken for the essence of holistic care.

For example, recall the story of Greg, the 55 year old with diabetes. The health worker/s involved with his care may have carried out all the suggested actions in a therapeutic plan.

- help Greg resolve his financial difficulties,
- persuade the wound clinic to give him the product he wants,
- talk to the nephrologist about hope and optimism,
- organize treatment for depression,
- introduce meditation and guided imagery,
- concentrate on good wound care management using alternative methods,
- help Greg to see that the control of his diabetes is a partnership and that he has some responsibilities,
- introduce Greg to a support group of diabetics,

- get his extended family to help his wife with the care of her mother, or suggest herbal remedies for stress,
- lobby the drug company for cheaper growth factor or the government to subsidise it,
- encourage the friend to take a more active role in ensuring Greg carries out his self-care routine,
- raise awareness of diabetes in the community.

But unless this health worker has some understanding of health that incorporates the acknowledgement of the creative potential of parts and the characteristics of wholeness, it is not possible to say that holistic health care is being offered. A comprehensive list of all possible actions is not necessarily holistic health care. Quite the contrary, the nephrologist or the surgeon doing the amputation may have a fundamental understanding of the creative potential of parts and bring this understanding to bear in her treatment plan. An interview with Greg could communicate to him a sense of wholeness to be brought forth. An experience of being listened to (self direction), an invitation to partnership (integration), an acknowledgement of his fear of being whittled away (a threat to his autonomy), and an assurance of the commitment of the team to mobilizing the resources he needs will go a long way towards Greg having some experience of wholeness. If Greg feels that there is recognition of the unique aspects of his life experience and that there are creative possibilities and potentials for achievement for him despite his severe medical condition and his fear, this addresses this wholeness. There is some chance that Greg can move from despair and rage to some form of acceptance and hope if he is offered this kind of care.

Understanding holistic health care will not necessarily change what the surgeon

'actually does': pre and post-operative interviews, appropriate surgical procedures, next patient. But having this understanding will affect deeply Greg's experience of treatment. He will feel more than the sum of his severe health problems. For these reasons it is more helpful to describe the process that results in holistic care than the outcome or therapy prescribed which can only give some indication of what might have been the practitioner's thinking.

Usually in a health care setting some problem or group of problems is presented.

Remember the first responsibility as a holistic health care worker is to do the work that enables a 'connected view' of the world: a view that recognizes the web-like relationships of nature and one that accommodates the possibility of the creative potential of the relationship between parts and wholes.

With some kind of understanding about the creative nature of relationships, the next responsibility is to explore the context of what is presented. To take a holistic view we need to use our capacity to change focus, to range across the possible connections, both the obvious and the less apparent. We need to be skilled at viewing the presented problem from various ways and particularly skilled at listening to the meaning the problem has for the patient. The skill of the holistic practitioner is in *how perceptive they can be* to the significant connections. This may involve a very different focus from the presented problem or the focus may be more obviously centred around the presented problem: it depends. Whatever the skilfully selected focus is, it is these connections/relationships that become the terrain of work for health. Deciding on the 'key parts' is a central skill. Remaining open to incorporating others is a condition.

I think a holistic practitioner will be constantly vigilant for other possibilities and will certainly be alert for signs of wholeness, (which have been identified in the preceding chapters) self direction, organisation and capacity to integrate and for the new and spontaneous properties that emerge from this move to wholeness.

She will be 'tuned in' as it were, even hyper-alert to the creative possibilities that will become apparent. It is this ability to recognize the creative potential of literally every situation, even the most apparently dire, that is fundamental to holistic health care.

Of course this means a certain understanding of potential. For example, if the working notion of holism is about creative potential, increasing organisation, self direction and integration, how does one work holistically with old people or those whose bodies and even minds are degenerating prematurely? Doesn't wholeness as creative potential, organisation and self direction at least, pall a bit? The answer lies partly in good health care practice of any kind: maintaining function at the highest level possible in the circumstances. In addition, from a holistic health worker's view point, there remain possibilities for emergent properties from the inter-relation of any remaining parts, and health work will entail 'rearranging' the parts in ways that facilitate the most wholeness. Wholeness is not about perfection, it is about potential: there is always potential for integration, even if all potential for self direction is exhausted.

The holistic health care worker will be sensitive to how each new part revealed can change the whole. She will need to decide which parts need to be eliminated, which need to be changed, what needs to be added, and what needs to be arranged or rearranged— all the time being aware of the emergence of new properties, all the time aiming to increase characteristics of wholeness. She will be looking for the best organisation of the best selection of parts – and by best organisation the health worker must mean that organisation that seems

most likely to be able to produce emergent properties. For example, I see autonomy as an emergent property of the relationship between, even the tension between, self assertion and integration. Autonomy is created from the inter relation of our need to be a separate self and our need to belong to a greater whole.

With this emphasis on the notion of 'the best selection' and 'the relationship of parts', and non specified 'emergent properties' you may have concerns that this is too vague a set of requirements for delivering health care. You may feel there is not enough prescriptive structure to reliably ensure its efficacy. For example, you may think that this kind of health care exposes the patient to all sorts of charlatans who offer whimsical aetiological explanations and use unproven 'therapeutic' alternatives. This is not the kind of health care that I am describing as holistic but it may seem that there is no objective way to distinguish the fey from the physician. However, I think that the ability to give a coherent account of a theory of health will distinguish these practitioners and make their rationale for health work transparent to the discerning patient.

So how can I tell a holistic practitioner from others, you may ask? If, as we have said, the defining features of holistic health care reside in the thinking of the practitioner, they are relatively difficult to assess other than by direct experience or at least having access to the practitioner's writing. This form of encounter is the way we gain reliable understandings of the styles of all health care practitioners and as an adjunct to reputation and interview, it is the only reliable way. I don't think one can necessarily establish holistic pedigree by scrutiny of the final prescription but some indicators would be:

- whether the prescription is the provider's stock response
- what attention is given to the unique factors of the situation

- the willingness of the provider to listen deeply to the patient (hackneyed I know, but so woefully absent in mechanistic care)
- what degree of commitment the provider shows to the patient's view/meaning of what has happened
- whether the provider concedes the possibility of creative potential for emergent properties in relationships. i.e. she/he expects more than the sum of the parts

Claims to treat 'the whole person' should immediately ring alarm bells for someone in quest of holistic care. It is, in my opinion a major indicator that the practitioner has done little or no thinking about what this could possibly mean. No practitioner can work with *all* the parts of a person nor offer all therapeutic techniques. What a holistic practitioner is good at is identifying the parts, in new combinations of which the greatest possible degree of health will be created with the characteristics of wholeness in mind. Addressing wholeness in a person, i.e. a person's capacity for characteristics of wholeness (no matter what actual condition they are in) is different from the claim to treat 'the whole person'.

9. How would I evaluate this? How would I know my purpose is achieved?

There are few objective measures of health as understood in this way and indeed they are hardly necessary. Each of us has a very reliable sense of whether we are experiencing less organisation, less self direction and less capacity to integrate with the wholes we identify with. Each of us is fairly sensitive to the creative energy that accompanies emergent properties. The conversations that occur between a truly holistic health worker and a patient will reveal the direction of the flourishing. I am reminded of Oliver Sack's

description of our intuitive sense of lost wholeness.

There is, of course, an ordinary medicine, an everyday medicine, humdrum, prosaic, medicine for stubbed toes, quinsies, bunions and boils; but all of us entertain the idea of another sort of medicine, of a wholly different kind: something deeper, older, extraordinary, almost sacred, which will restore us to our lost health and wholeness and give us a sense of perfect wellbeing. For all of us have a basic intuitive feeling that once we were whole and well; at ease, at peace, at home in the world; totally united with the grounds of being; and that we lost this primal, happy, innocent state and fell into our present sickness and suffering. (Sacks, 1982, pp. 26,27)

Health care may not be able to restore this wholeness but each of us will be very sensitive to changes within us that move us in the direction of wholeness.

10. But there are questions of efficacy that relate to unscientific treatment methods

If holistic health care is to be a useful notion, we must resist the temptation to think of orthodox medicine as 'sensible' and holistic health care the turf of 'wacky alternatives'. I have gone to some lengths to tease out an understanding of holistic health care that can be embraced by any health worker no matter what their professional background. However, at present holistic and orthodox are different camps and often deeply distrustful of each other. The use by holists of methods that have not undergone rigorous scientific analysis is the major criticism offered by the orthodox fraternity and must be conceded to have some validity. The philosophical investigation I have done has not been primarily about efficacy: other methods are required. However, efficacy and safety issues are very important and cannot avoid all reference. Loss of health exposes people. And at this very time they are confronted by an apparently endless array of possible treatments. How can one know which will ensure 'the best outcome'? This is not necessarily a problem confined to the alternative options. Even so-called established treatments can be offered without success.

There is however, an additional problem for holistic health care. It is fair to ask whether believing that there are connections that have creative potential could be dangerous unless these connections can be proved beneficial; how do we police the efficacy of the treatment offered if we accept that looking for connections may entail unorthodox, even untested techniques? (These questions are not without irony, as it is often to the milder and more person friendly therapies that people, tired of the ravages of chemo and radiotherapy or other long term orthodox treatment, often turn). At least part of the solution lies in open dialogue about what constitutes good health care practice, and I mean philosophy of practice.

Putting the consensus on efficacy issues aside for a moment, (this will always be a whipping boy in professional boundary conflicts) if practitioners can agree on principles that underpin health work, for example from the Foundations Theory of health, there is no reason why a holistic health practitioner would be anymore likely to make unsafe or damaging connections than an orthodox practitioner would. If, in good faith each is attempting to help to produce the most autonomy possible, in theory there would be no room for experimental, harmful or even ineffectual treatment. Holistic health workers, as we have begun to define them, would not see duping people with phoney cures or endangering people with toxic treatments as work for health. However, of course cranks and charlatans do exist in all areas of health care and do prey on the vulnerable.

It is a matter of opinion whether holistic or orthodox health care is the greater perpetrator of this tendency. You could argue that there are more official controls on orthodox medicine but even a cursory look at the pharmaceutical industry raises questions about how autonomy of patients can possibly be foremost in their minds. In practice, the question, '*is this treatment likely to achieve greater autonomy for this person?*' should be the guiding question for all health work. That there are few scientific validation studies on the modalities holistic healers sometimes use, is only a problem if there is absolutely no effort

made to explore the reliability of their therapeutic potential. Science's ways are not the only ways of learning about efficacy.

I am not endorsing or condemning any particular therapeutic technique. I am attempting to point to a philosophical base, commitment to which will go a long way towards demonstrating the practitioner's intention to practice in good faith. We must avoid the trap of seeing 'good' and 'bad' practice as central to defining holistic health care. I think that there are therapeutic potentials that can be realized if a holistic approach is taken and of course there will be health care offered that is more or less holistic, but I would stop short of declaring that health care offered from a mechanistic stance is necessarily bad. However, if someone claims to offer holistic health care, bad practice would be:

- To do so without any deliberation about partness and wholeness
- To do so without a commitment to continuing work to practice the skills of recognizing connectedness, ranging the focus of your attention, recognizing emergent properties
- To do so because one has added an eastern technique to one's skill list
- To do so because it is commercially marketable
- To do so because it is part of some professional boundary issue
- To use the term as an umbrella for some new splinter skill we have included in our repertoire of services

Continued and open dialogue is useful in helping establish one's own ideas about health and what constitutes a therapeutic process and outcome.

Discussion about how to recognize good practice in all health care will enable patients to protect themselves from charlatans and avoid zealous, magic bullet shooting, proselytisers for some one minute wonder. Sadly, there is little that can be done about 'mistaken belief' in either kind of practitioner.

Conclusion. Health Care: Atomism to Holism

Holistic health care is not something that you can decide one day to be good at. Certain skills of thinking are needed. Holding the relationship of partness to wholeness in mind takes practice. Making insightful decisions about which parts are crucial for the health work at hand is an art that needs to be developed. Making decisions to exclude some parts, or combinations of parts, as less likely to be fruitful and produce emergent properties, is a skill too. We have agreed that we can't include everything nor can we in all honesty treat 'the whole' person. However, it is not impossible to deal with wholeness in a person: that enigmatic but deeply felt yearning for self direction, organisation and integration. It is a skill not only to be able to recognize the fundamental connectedness of all parts/wholes but to discern which relationships nurtured will generate more characteristics of wholeness. As awareness develops of the connectedness of things, of the relationships between parts and their potential to create new properties, the capacity to practice health care holistically will be enhanced.

This investigation into the notion of holistic health care has revealed the difficulties facing a health worker who wishes to practice holistically. Identifying the deficits in the thinking displayed in the literature about holistic health care during the last two decades is less challenging a task than attempting to reveal a robust theoretical underpinning for this notion or even a method of exploring the possibility of this underpinning. There are strong intuitions about wholeness and the part it plays in understandings of what it is to be human and indeed of reality itself. Being able to make sense of these intuitions and connect them in the service of health care is a task that this work has no more than begun. A

stand has been taken that declares superficial lists of modalities, splinter skill additions of one or more eastern or traditional therapies, or the use of 'wacky alternatives', to be insufficient justification for calling health work holistic. The outline of an understanding of wholeness as a potential with certain characteristics had been drawn. But in order to develop a robust theory of holistic health care more work needs to be done.

There are more questions to answer: for example:

If one has an entirely material view of what it is to be a person, how can wholeness remain a potential in the face of debilitating disease and death?

What is the relationship between characteristics of wholeness in a health care worker and their capacity to mobilize these characteristics in others?'

To what extent can emergent properties be generated actively by a skilled worker?

There is investigation into the tendency to wholeness to be undertaken, there are many interdisciplinary conversations to be had. The mystic's view of wholeness remains a powerful inspiration, for understandings of reality and exploration of it can only heighten our sensitivity to the profoundly interconnected universe we inhabit.

This work has established that to keep our understanding of health a holistic one takes intellectual and emotional work. Attempting to understand the creative but deeply mercurial nature of the notion of holism, when our training has steeped us in mechanistic thinking, takes effort. Developing awareness of wholeness is a skill: One that must be mastered if holistic health care is to be more than a slogan.

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