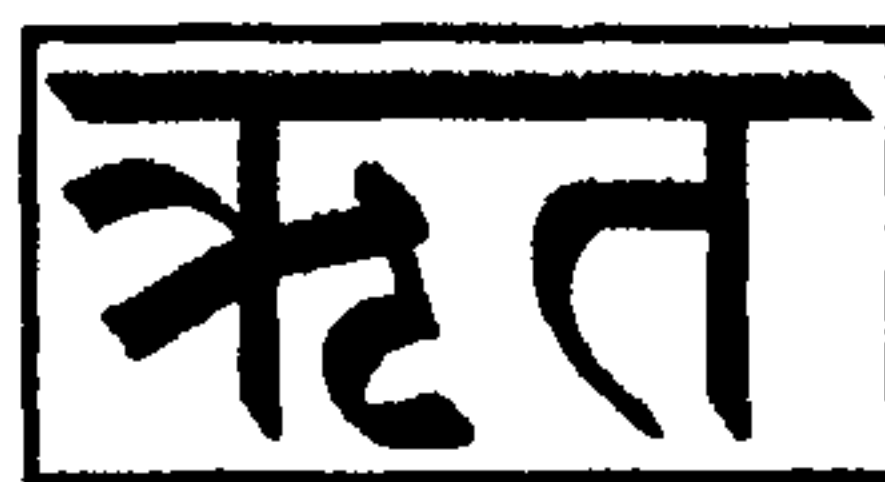


A
Critical Analysis
of Robert Pirsig's
Metaphysics
of Quality

Thesis submitted in accordance with the requirements
of the University of Liverpool for the
degree of Doctor in Philosophy by
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November 2004

Abstract

The purpose of this thesis is to critically evaluate one of the first indigenous forms of Zen Buddhism to appear in the United States: namely Robert Pirsig's 'Metaphysics of Quality' (or 'MOQ'). In Chapter 1, the anthropological origins of Pirsig's system is first considered with specific reference to the epistemological and ontological notions of 'objectivity' and Strawson's criticism that Pirsig's understanding of Cartesian metaphysics is a straw man. After investigating Franz Boas' positivistic type of anthropology (primarily in reference to the work of Margaret Mead) this chapter then deals with Pirsig's suggested methodology for this area (namely a sympathetic type of participant observation) and his related claim that the field would be improved by a value based metaphysics such as the MOQ.

A critical synopsis of the MOQ is then provided in Chapter 2 commencing with an overview of the system and its philosophical heritage to enable a reader unfamiliar with the MOQ to locate it within traditional academic philosophy. This includes an analysis of Pirsig's inductive and 'reductio ad absurdum' arguments that support his claim that Quality is the fundamental element of reality, his assertion that Quality and value are synonyms and his argument that it is more coherent to hold the latter as more ontologically fundamental than mind and/or matter. I then turn to the primary components of the MOQ: namely Dynamic Quality and the four static quality levels. Pirsig asserts that the static levels can be placed in an absolute moral hierarchy and employs the notion of cosmological evolution as the basis of this construction. Subsequent to this, I then investigate some objections to this hierarchy and scrutinize Pirsig's claim that his system improves on James' notion of pragmatic truth. Finally, in this chapter, a favourable comparison of Pirsig's system with Spinoza's monism and post-modernist thought is provided.

In Chapter 3, I employ Pirsig's system in order to deal with the mind-matter problem and its related difficulties (such as 'Hume's Principle', free-will's relationship to determinism and Chalmers' 'hard question') in reference to the work of Thomas Nagel, F.S.C. Northrop, Whitehead, Hume, Popper and Bertrand Russell. Because the MOQ deals with these problems in a wider metaphysical context than Cartesian orientated systems, I make the case that the MOQ is able to achieve further headway with these metaphysical difficulties. As such, the thesis concludes that Pirsig's system is largely a positive development for metaphysics though, as a prescriptive moral system, it would benefit from the inclusion of an increased emphasis on compassion (as understood by traditional Buddhism), environmental concerns and other social issues such as racial discrimination. Subsequent to the Epilogue is an appendix examining time in relation to the MOQ - an important metaphysical subject originally overlooked in Pirsig's texts.

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Acknowledgements

The following people have made an important contribution to the intellectual quality of this text: Robert Pirsig, Professor Stephen Clark, Professor Michael McGhee, Professor Howard Robinson, Professor David Cooper, John Middleton, Gavin Gee-Clough, Dr Robert Harris, Paul Turner, Dr Piers Stephens, Bodvar Skutvik, Eric Priezkalns, Professor Henry Gurr, Dr Pauline Phemister, Professor Oliver Leaman, Torkel Franzen, Mark Maxwell, Scott Buchanan, the MOQ.org Discuss contributors and, last but not least, my students.

In the context of technical assistance, I am indebted to Frances Ali, Wendy Pirsig and Richard Wilde (who assisted with numerous administrative requests), Kevin Lawrence, Dr Barry Dainton and Edward McWatt (for assistance with IT difficulties), Carol McWatt and Shirley Hadley (for reading over sections of the text for readability) and Pamela Peacock (for the lending of over a hundred philosophical texts). It would also be amiss not to mention the financial assistance from my parents and the trustees of the University of Liverpool's Joey Wiseman Scholarship.

Notes

The acronyms 'ZMM' and 'MOQ' (and the capitalisation of Quality and LILA) are the standard ones used by Robert Pirsig and, for the sake of uniformity, the ones employed throughout this thesis.

The use of square brackets [within a quote] indicates a non-original addition.

In this thesis, 'Eastern' refers to the countries of East Asia, for instance, India, Japan, Malaysia, Tibet and China. 'Eastern philosophy' denotes the traditions of Buddhism, Confucianism, Hinduism, Jainism and Taoism while the term 'Western philosophy' denotes the Anglo-American and Continental traditions.

A reference *without* a page number usually indicates a single paged document such as an item of correspondence or an internet article. In line with modern university policy, IT resources have been employed for research purposes though it should be noted that, where possible, only reputable education and media databases (such as the websites of Liverpool's Philosophy Department, the BBC and the Guardian) have been referenced.

Preface

The central issue we confront today is to re-invent the sacred.

(Navarro Scott Momaday)

The Metaphysics of Quality (or ‘MOQ’) is a programme by the popular philosophy writer Robert Pirsig¹ first expounded (in a primitive form) in the 1974 best-seller *Zen & the Art of Motorcycle Maintenance* (ZMM)² and subsequently developed in his second text *Lila: An Inquiry into Morals* (LILA). The metaphysical programme introduced via these texts can be perceived as one of the first indigenous forms of Zen Buddhism to appear in the United States since the appearance of Buddhism in North America over a century ago. In ZMM, Pirsig investigates what has been meant by the term ‘Quality’ in English Departments over the centuries and builds up (largely through inductive means) to the conclusion that Quality is equivalent to the Buddhist notion of ‘emptiness’. On the other hand, LILA is a deductive text and after investigating the problems in the field of anthropology, Pirsig deducts a new metaphysical division of ‘Quality’ into Dynamic and static forms. As Pirsig (1993) confirms:

ZMM has, in some ways, what is the most important part of the MOQ which is the build-up. It is an inductive book. LILA is a deductive book... ZMM is a build-up from the inductive experience of the narrative into this final word – ‘Quality’ - into what is the essence of the MOQ.

¹ Robert M. Pirsig studied at the University of Minnesota receiving a B.A. (1950) in chemistry & philosophy and an M.A. (1953) in journalism. In addition, Pirsig studied Indian philosophy during 1950 at Benares Hindu University. Publications include *Quality in Freshman Writing* (1961), *Zen & the Art of Motorcycle Maintenance* (1974), *Cruising Blues & Their Cure* (1977), *Lila* (1991) and *Subjects, Objects, Data & Values* (1995).

² The full title of ZMM is *Zen & the Art of Motorcycle Maintenance: An Inquiry into Values*.

Essentially, the MOQ postulates that reality is essentially composed of ‘values’, hence by inference, ‘Quality’ (in the *evaluative* sense of the word) is the fundamental building block of the world. Excepting this postulation, Pirsig seeks to avoid providing a precise definition of Quality though he clearly considers moral properties to be as readily perceivable as any other. Hence, one of the defining characteristics of his work is that rather than dislocating ethics from other fundamental studies, moral truths are assumed to be as readily derivable from our perceptions as are other truths (such as those found in the natural sciences).

The following thesis argues that the MOQ is a positive development for academic philosophy. It commences with a brief chapter that investigates the theoretical and practical problems in traditional American anthropology’s notion of objectivity that provided the initial catalyst for Pirsig to refine his metaphysical ideas. To clarify that it is essentially objectivity in the epistemological sense that Pirsig is concerned with, a section distinguishing between the epistemological and ontological senses of objectivity is provided. This chapter then deals with Strawson’s objection that Pirsig’s understanding of Cartesian metaphysics is a straw man and then examines Pirsig’s suggested methodology for anthropology (namely the participant approach of Verne Dusenberry). It concludes that Pirsig was correct, certainly to some extent, in his claim that the field would be improved by a value based metaphysics as the latter facilitates scientific generalisation (as understood by Poincaré) and the recognition of the polysemic elements in social behaviour.

Chapter 2 is devoted to examining the components of the MOQ in detail. In Section 2.1., there is an overview of Pirsig’s system and its philosophical heritage to

allow a reader unfamiliar with the MOQ to locate it within traditional academic philosophy. After briefly mentioning other philosophers who have similarities to Pirsig's work (such as Heidegger and Bergson) we study the three principal influences recognised by Pirsig as underlying the MOQ: these are Zen Buddhism, the work of William James and the work of F.S.C. Northrop. Amongst other issues, testimony from Zen Buddhists, mathematicians and physicists which claims that harmony (which Pirsig equates with Quality) is the essential nature of the universe is examined together with some difficulties in these claims. In Section 2.2., the history of Pirsig's initial classroom experience in defining Quality is explored followed by an analysis of his 'reductio ad absurdum' argument to prove that Quality exists. This section concludes by considering various problems in Pirsig's use of the term 'Quality' as an equivalent of 'emptiness'. In Section 2.3., I then explore Pirsig's further assertion that Quality and value are synonyms and his argument that it is more coherent to hold they are ontologically more fundamental than mind and/or matter while, in Section 2.4., I examine Pirsig's claim that the MOQ is neither a form of idealism or physicalism. In Section 2.5., we first turn to the mystic component of the MOQ, namely Dynamic Quality and the reasons Pirsig provides for why it must remain undefined. In further sub-sections, I analyse the arguments why Pirsig decided to metaphysically divide Quality between Dynamic and static forms, and after noting some possible improvements to his terminology, examine the four static levels of Quality. Pirsig asserts that these levels can be placed in an absolute moral hierarchy and employs the notion of cosmological evolution as the basis for this. I therefore investigate how Pirsig employs this hierarchy together with some objections to evolutionary theory. Subsequent to this, I consider his claim that this hierarchy improves James' notion of pragmatic truth and then provide new

comparisons of Pirsig's system with Spinoza's monism and with post-modernist thought.

With the components of the MOQ in place and some examples of how it operates given in the previous chapter, Chapter 3 employs Pirsig's system (with support from Northrop's work) to deal with the mind-matter problem. This commences by investigating the scientific ideas of Galileo and Newton which gave rise to Descartes and Locke's notions of mind and matter. Subsequent to this, I then examine related difficulties to the mind-matter problem (such as the problem with free will and determinism, causation, Hume's Dilemma and Chalmers' 'hard question' of consciousness), the traditional solutions to these difficulties and the MOQ solution to these. Due to a number of factors (though largely by employing Searle's advice that the Cartesian setting of the debate requires replacement), I build the case that Pirsig's system is able to make better headway with these problems than previous metaphysical proposals. Finally, the notion of time is a subject matter absent in Pirsig's formulation of the MOQ so, in an effort to rectify this omission, reference is made (in a separate appendix) to the notion of change, the Newtonian theory of time, the latest theories of space-time (such as M-Theory) and the implications of these for Pirsig's system.

It is my concern primarily to consider the validity of the elements composing the MOQ. As the system differs from traditional metaphysics by making values fundamental, it should be no surprise that this postulation has wide-ranging consequences for its depiction of reality. My analysis concludes that though traditional philosophical concepts (such as causation and truth) are given

unconventional meanings in Pirsig's writing, there is an advantage in his idiosyncratic system, once it becomes familiar, in that it has an internal coherence lacking in previous metaphysics. I, therefore, adopt a position which gives a limited and reserved approval for Pirsig's work though his mode of argument often leaves much to be desired – certainly from an analytic point of view.

Chapter 1: Why Pirsig devised the MOQ

'I'm not objective about Indians,' [Dusenberry] said. 'I believe in them and they believe in me and that makes all the difference. They've told me things they've said they never told any other white man because they know I'll never use it against them. It's a whole different way of relating to them. Indians first, anthropology second... 'That limits me in a lot of ways. There's so much I can't say. But it's better to know a lot and say little, I think, than know little and say a lot.' (Pirsig, 1991, p.33)

1.0. INTRODUCTION

It is my concern here to consider the anthropological³ background underlying the development of the MOQ and the metaphysical difficulties in this field that Pirsig's system was devised to resolve. As such, this chapter commences with a section that introduces his term for Cartesian metaphysics ('subject object metaphysics' or 'SOM') that Pirsig refers to in the context of anthropology. In Section 1.2., there is a brief piece arguing that Strawson's claim that SOM is a straw man is misleading, in Section 1.3., the theoretical problems (namely access to the first person view of subjects and the lack of scientific generalisation) with SOM orientated anthropology are explored while, in Section 1.4., practical problems with this approach are examined in reference to the work of Margaret Mead. Finally, in Section 1.5., the more 'value-friendly' approach of participant observation (which is favourably compared by Pirsig with Boas' methodology in anthropological research) is examined in reference to the work of Verne Dusenberry and Evans-Pritchard.

Evidently, after completing ZMM, Pirsig originally planned to advance a thesis demonstrating the Native Indian and European roots of contemporary American

³ 'The word *anthropology* itself tells the basic story - from the Greek *anthropos* ("human") and *logia* ("study") - it is the study of humankind, from its beginnings millions of years ago to the present day.' (American Anthropological Association, 2000)

culture rather than produce another philosophical text. This was revealed in an interview with the *Washington Post*, a few months after ZMM's publication:

I'm trying to examine the interface between cultures. If ZMM was a prolegomenon to any future metaphysics, this book⁴ tries to apply the metaphysics of Quality worked out in ZMM to anthropology. (Pirsig, 1974b)

However, during the course of researching American anthropology, Pirsig's original design was revised due to the metaphysical difficulties that became evident in this field: 'The whole field seemed like a highway filled with angry drivers cursing each other and telling each other they didn't know how to drive when the real trouble was the highway itself.' (Pirsig, 1991, p.55) The MOQ was, therefore, written to provide a better metaphysical foundation for anthropology and, as such, became the focus of Pirsig's second text.⁵

1.1. THE NOTION OF OBJECTIVITY IN BOAS' WORK

In LILA, Pirsig specifically locates the metaphysical difficulties of American anthropology with the 'objective' methodology found in the cultural strand of the field.⁶ As such, we need to clarify what Pirsig understands by *objective* in the context of anthropology as a failure to clarify this distinction does not assist his arguments. Firstly, it should be noted that Pirsig does *not* employ 'objective' in the

⁴ Bodvar Skutvik (2001), a correspondent of Pirsig's, notes first hearing about LILA in 1981:

'When I first heard from him he said that the new book was complete but needing some revision... it took another ten years before it was published.'

⁵ Other explanations provided by Pirsig (2001d) include the improvement of the philosophy elucidated in ZMM and 'the need to resolve the problems of his life'.

⁶ According to the American Anthropological Association (2000) there are five major strands of American anthropology. They comprise cultural anthropology (which compares the knowledge, values, and traditional ways of different societies that have been transmitted from one generation to the next non-genetically), linguistic anthropology, biological anthropology and archaeology. Cultural anthropology remains the dominant strand of the field in North America.

sense of an 'object' of thought (such as an *idea* of a tree) *nor* of a grammatical object (e.g. a noun that is affected by the action of a verb within a sentence). Nevertheless, from a careful reading of ZMM, LILA and the anthropological texts referred to by Pirsig, it appears that he employs the two principal definitions of 'objective' illustrated by David Bell (2002, pp.310-12).⁷ As such, it is apparent that the primary definition referred to for, the greater part of, ZMM and LILA is ontological and relates to the inorganic and biological objects of the natural sciences. However, when discussing 'objectivity' in the context of American anthropology, Pirsig primarily refers to an epistemic definition correlating with the understanding of the term promoted by the 'founding father' of American anthropology, Franz Boas.⁸

Undoubtedly, due to a university education in the natural sciences when positivism was at its height during the 1870-80s, Boas stressed that anthropology required freedom from any subjective bias that could distort the accuracy of a report

⁷ **'Among the various notions of objectivity that philosophers have investigated and employed, two can claim be fundamental. On the one hand, there is a straightforwardly ontological concept: something is objective if it exists, and is the way it is, independently of any knowledge, perception, conception or consciousness there may be of it...'**

'There is, on the other hand, a notion of objectivity that belongs primarily within epistemology. According to this conception, the objective/subjective distinction is not intended to mark a split in reality between autonomous and dependent entities, but serves rather to distinguish two grades of cognitive achievement... Here objectivity can be construed as a property of the contents of mental acts and states.' (Bell, 1992, p.310)

⁸ Franz Boas (1858-1942) studied philosophy, mathematics, physics and geography at the universities of Heidelberg and Bonn, before completing a doctorate in physical geography at Kiel in 1881. Boas signed on to an anthropological expedition to Baffin Island in 1883, expecting that he would document the close adaptive fit of Eskimo cultures to their extreme climate. However, his experiences in the arctic led him to the contrary conclusion that social traditions, not environmental factors, exerted the dominant influence over their behaviour. From this point onward, his anthropological work concentrated on the cultural aspects of human beings. Boas began to teach classes at Columbia University in 1896 and became the University's first Professor of Anthropology in 1899. By the mid-1920s, Boas and his students were in charge of every major American university anthropology department. (American Philosophical Society, 2002)

- an approach which asserts:

That the social scientist can be a disinterested and objective observer of events and processes in society... One of the central propositions of this tradition, usually referred to as *positivism*, is that a clear distinction can be drawn between factual and evaluative statements. (Walton, 1982, p.18)

The adoption by Boas of a positivistic stance (in the context of anthropological methodology) is confirmed by two of his students, Alfred Kroeber⁹ and Walter Goldschmidt.¹⁰ Kroeber (1959, p.vi) notes that:

It is indubitable that science was his religion. He called his early convictions materialistic. Science could tolerate nothing 'subjective'; value judgments - and by infection even values considered as phenomena - must be absolutely excluded.

While Goldschmidt (1959, p.3) adds:

When we are in the field, I am sure that most of us wonder how it feels to be a participant in the culture we are studying – to have multiple wives, say, or to undergo initiation. One feels that such emotions were rarely evoked in Boas: he would address himself to the reasons for giving a potlatch,¹¹ but would not have wondered how he himself would have felt about giving one. To Boas, anthropology was not concerned with the individual qua individual: with man's loves and hates, with his endeavours and frustrations. Being unconcerned with the individual, he did not see society as an interaction among individuals.

Considering that these quotes are taken from a centenary celebration of Boas' work consisting largely of sympathetic contributions from his students, it seems highly likely that Pirsig's account of Boas as a positivist is accurate.

However, having noted the above, it always isn't clear whether Pirsig is putting forward an ontological claim about objectivity or a methodological one partly due to

⁹ Alfred Louis Kroeber (1876-1960) was the first student of Boas and the second Ph.D. in Anthropology (at Columbia University) in the United States.

¹⁰ Walter Rochs Goldschmidt (1913 onwards) is currently a Professor Emeritus at the University of California, Berkley, and U.C.L.A., in both Anthropology and Sociology.

¹¹ A potlatch is a present giving ceremony of Native American Indians. (Collins Concise Dictionary, 1982, p.1047)

a lack on his part to explicitly state whether a particular section is concerned with ontological or epistemological issues and partly due to the ambiguity of Cartesian metaphysics (termed by Pirsig as 'SOM'). This ambiguity is noted by Searle (1992, p.19) and, in the following quote, by Cooper (2002a, p.214):

When we refer to people, methods and opinions as objective, the contrast is with ones that are biased, partial, prejudiced and the like. Objectivity of this kind is, one might say, an epistemic virtue, something to be striven for if knowledge is to be effectively and reliably acquired. But we also speak... of entities, properties and values as being objective. Here, the rough intent is that something is objective if it exists or obtains independently of what people may think, experience or feel. Expressions like 'objective judgement' and 'objective proposition' are therefore ambiguous. The former, for example, may refer to a judgement arrived at in a suitably impartial, detached manner, or to one that concerns an objective state of affairs - the price of a wine, say, as opposed to its quality.

It is apparent that for SOM the notions of 'subjectivity' and 'objectivity' are assigned as *metaphysical* terms (referring to types of reality such as mind and matter) in addition to being assigned as *epistemological* terms (referring to ways of knowing; as in the 'spectatorial' accounts of knowing criticised by Heidegger). A further SOM semantic construction of note is that being a 'subject' (for instance, being a centre of consciousness) is not usually considered problematic but (with the simple addition of a seemingly neutral suffix) being 'subjective' (as a criticism of being engaged in conscious activity that will lead to an incorrect relation with an object) is. On the other hand, it is considered problematic to treat people like objects but unproblematic (in most contexts) to treat them 'objectively' (i.e. without prejudice). In this context, to treat people 'objectively' entails that they are *not* treated as 'objects'. On the other hand, it can be argued that it is only by subjectively identifying and empathising with their subjects that anthropologists, for instance, can arrive at fair-minded, informed and more 'objective' accounts. Yet, this shows an ambiguity in SOM as we observe

'subjective' knowledge (gained through empathy and identification) mysteriously becoming 'objective'.

Furthermore, the term 'subjective' can be employed pejoratively in two distinct contexts. In one context, to assert that a certain statement is 'subjective' is to suggest that the statement is 'unrealistic' and 'non-empirical'. For instance, a lack of support in non-mental reality for a statement could be considered by an empiricist as an instance of poor thinking. In another context, to state that a certain statement is 'subjective' is to suggest that the statement is 'arbitrary' or 'unreasonable'. For instance, a rationalist would possibly use the term in this context to suggest that an opponent keep to logical patterns of thinking in an argument rather than use intuition or feelings. It is apparent, therefore, that in the empiricist view, you are 'objective' when your statements *correspond* correctly to non-mental reality while, for a rationalist, you are 'objective' when your statements *cohere* together through employing the correct procedures for analysis, categorization and drawing inferences.

Moreover, it is apparent that the terms 'subject' and object' are usually *complementary*, in that a knowing mind is a 'subject' insofar as it is aware of an 'object' while an object is termed an 'object' insofar as it stands or, at least, can stand, in a certain relation to a subject. On the other hand, the terms 'subjectivity' and objectivity' are usually perceived as being *opposed*, in that as one increases, the other decreases. Finally, as noted above, an 'object' can be an object of thought, a grammatical object or a physical object. It should be noted that the above illustrations are by no means exhaustive so, in consequence, pinning down the

meaning of particular SOM terminology can be often like catching the proverbial 'greased pig'.

Considering the ambiguities surrounding subject-object terminology, it comes as no surprise to discover that Pirsig (2002h, p.502) was considering a complete jettisoning of SOM terms when constructing the MOQ: 'My earlier view, when I was concentrating on the confusion of subject-object thinking, was to get rid of them entirely to help clarify things.' However, this stance had slightly softened by the time *Lila's Child*¹² was published in 2002:

Later I began to see it's not necessary to get rid of them because the MOQ can encase them neatly within its structure - the upper two levels being subjective, and the lower two, objective. Still later I saw that the subject-object distinction is very useful for sharply distinguishing between biological and social levels... At present, I don't see that the terms 'subject' and 'object' need to be dropped, as long as we remember they are just levels of value, not expressions of independent scientific reality. (Pirsig, 2002h, pp.502-03)

Nonetheless, keeping in mind the ambiguity evident in SOM terminology (as well as the logical positivists' concern that most, if not all, metaphysical problems are due to a lack of clarity in philosophical language) there remains a case for limiting the MOQ estate to its own distinctive 'value terminology'. However, Pirsig felt it necessary to refer to SOM (even as a metaphysics that requires revision or replacement) to explain why the MOQ was established, though -as discussed in the next section - the principal criticism by an academic philosopher concerning the MOQ (upon its publication in 1991) was partly exacerbated by Pirsig's particular employment of SOM terminology.

¹² *Lila's Child* (2002h) is an edited collection of the posts that were originally displayed at the semi-official Pirsig discussion group (www.moq.org) with a number of 'post-debate' annotations (usually corrections) added by Pirsig for each of the issues discussed.

1.2. STRAWSON'S CONTENTION THAT SOM IS A STRAW MAN

Largely due to Pirsig's own imprecise use of SOM terminology, Strawson (1991) makes the claim that SOM is not a position held by *any* philosopher:

In [LILA] Pirsig pursues the obscure question he raised in ZMM. What is Quality? ...He keeps attacking something called 'subject-object metaphysics'. But this is a straw man,¹³ a position held by no one. And since his own position is partly defined by its contrast with a straw man, it appears equally brittle and insubstantial.

Strawson is certainly correct in asserting that no academic philosopher explicitly labels themselves as an 'SOM philosopher'. Moreover, Pirsig (1991, pp.157-58) leaves his argument open to criticism by providing only a few examples of SOM philosophers¹⁴ and inventing his own term for SOM even though numerous terms familiar to academic philosophy already exist for it. As Wilber (1999, p.58) observes:

The old paradigm that everybody doesn't want is the enlightenment paradigm, which is also called the modern paradigm. It has dozens of names ...the Newtonian, the Cartesian, the mechanistic, the mirror of nature, the reflection paradigm.

It appears, therefore, that Strawson's claim that SOM is a straw man only has validity because SOM lacks a dominant term in Western philosophy though ironically, much of modern philosophy such as the post-modernist movement (e.g. the work of Richard Rorty who terms SOM the 'mirror of nature' paradigm) can be perceived as a reaction against it. This being so, the actual straw man is Strawson's

¹³ 'Straw Man occurs when an opponent takes the original argument of his/her adversary and then offers a close imitation, or straw man, version of the original argument; "knocks down" the straw man version of the argument (because the straw man, as its name implies, is a much easier target to hit, undermine, etc.) - and thereby gives the appearance of having successfully countered/overcome/answered the original argument.' (Thomas, 1997)

¹⁴ Descartes, Locke, Hegel and, the logical positivist, Herbert Feigl.

criticism¹⁵ though, having stated this, it would assist with Pirsig's arguments if he referred to the academic philosophers already concerned with SOM (such as Heidegger and Merleau-Ponty) and, depending on context, clarified which type of SOM (i.e. epistemological or ontological) he was referring to. This issue is discussed further – with specific reference to Descartes - at the end of Section 2.1.1. and in Section 2.5.2. though, in the meantime, we will return to the problems of Boas' methodology that concerned Pirsig initially.

1.3. THEORETICAL PROBLEMS WITH BOAS' METHODOLOGY

The primary difficulty for Pirsig with Boas' particular approach of cultural anthropology is that it tends to prevent the emergence of general theories:

Boas, by superimposing the criteria of the physical sciences upon cultural anthropology, had shown that not only were the theories of the armchair anthropologists unsupported by science but that any anthropological theory was unsupported by science, since it could not be proved by the rigorous methods of Boas' own field of physics...

The whole field of anthropology was rigged and stacked so that nobody could prove anything of a general nature about anybody. No matter what you said, it could be shot down any time by any damn fool on the basis that it wasn't scientific. (Pirsig, 1991, p.55)

This disagreement in traditional American anthropology is confirmed by Lewis (1961 p.v) who notes that a number of issues in the area are a matter of controversy and 'even expert opinion is responsible for conflicting judgments'. He further contends that to avoid 'continuous quotation and counter-quotation' in just one anthropology text requires being 'drastically selective with the immense amount of

¹⁵ Certainly, Strawson (1991) is careful to end his review with this caveat: 'Perhaps I am trapped in some dead theoretical outlook; perhaps Pirsig won't be properly understood for 50 years yet.' As Thomas (1997) contends, Strawson's accusation is actually a 'straw dog' which 'occurs when a deliberately constructed straw man turns out to be the truth.'

material available'. According to the anthropologist, Professor William G. Davis¹⁶ (2003), matters have not improved since Lewis' era:

The contention between 'objective' and 'subjective' approaches in anthropology is very serious, and has been the source of actual administrative division in several departments of anthropology - including my own. Although the science/humanity divide in anthropology has been with the field as long as it has existed, the development of postmodern 'theory' in the 1970s brought the issue to the core of the field - largely because it was directly relevant to the main research enterprise of cultural anthropology, ethnographic field work.

Clyde Kluckhohn¹⁷ (1959, p.24), notes that even Boas eventually realised that the notion of scientific generalisation within the field was problematic as attested by a comparison of Boas' own papers between the beginning of his career (1880-90s) and its closing stages (1930-40s). From these, (and Kluckhohn quotes from two papers in each respective period) it is apparent that Boas' own enthusiasm for discovering the general laws which supposedly govern human culture gradually waned.

After a careful re-reading of Boas' collected papers (1940)¹⁸ we are convinced of one thing: he started with enthusiasm for the discovery of laws of cultural development – as might have been expected of one with his training and background - but was reluctantly forced to a different position. (Kluckhohn, 1959, p.24)

¹⁶ William G. Davis received his doctorate in anthropology at the University of California, Berkeley in 1969 and is presently Professor Emeritus of anthropology at (his namesake) University of California, Davis. Davis (2003) notes Geertz's influence:

'My own work in anthropology was strongly influenced by my early mentor, Clifford Geertz, during the short time that he was on the faculty at UC Berkeley. At that time, Cliff was working on various aspects of the culture-economy nexus, and that is the direction in which I continued. By the 1970s Cliff had rejected all that earlier work as simplistic "economism" (his term), and was developing the view that the goal of anthropology must be the study of a culture's subtle meanings.'

¹⁷ Clyde Kay Maben Kluckhohn (1905-60) graduated at the University of Wisconsin in 1928. He was awarded his M.A. at Oxford University in 1932 and obtained his Ph.D. at Harvard in 1936. Kluckhohn is known primarily for his studies of personality, culture and the Navajo Indians. (Columbia University Libraries, 2004)

¹⁸ This collection by Boas is titled *Race, Language and Culture* and is published by Macmillan, New York.

This conclusion is supported by another student of Boas', Margaret Mead¹⁹ (1959, p.29), who confirms that 'He feared premature generalization like the plague, and continually warned us against it.'

Anthropologists thought they had kept the field 'scientifically pure' by this method, but the purity was so constrictive it had all but strangled the field. If you can't generalize from data there's nothing else you can do with it either. A science without generalization is no science at all. Imagine someone telling Einstein, "You can't say 'E=mc².'" It's too general, too reductionist. We just want the facts of physics, not all this high-flown theory.' (Pirsig, 1991, p.55)

The assertion of Pirsig that 'a science without generalization is no science at all' is supported by the mathematician Henri Poincaré²⁰ (1905, pp.140-41) who contends that:

It is not sufficient merely to observe; we must use our observations, and for that purpose we must generalise... Science is built up of facts, as a house is built of stones; but an accumulation of facts is no more a science than a heap of stones is a house.

It appears that Poincaré draws on the analogy of stones in houses to demonstrate that it is the *relationships* between facts in addition to the facts in themselves that renders them scientific. In addition, Poincaré (1905, pp.142-43) argues that generalisation is necessary to maintain scientific accuracy:

Experiment only gives us a certain number of isolated points. They must be connected by a continuous line, and this is a true generalisation. But more is done. The curve thus traced will pass between and near the points observed; it will not pass through the points themselves. Thus we are not restricted to generalising our experiment, we correct it; and the physicist who would abstain

¹⁹ Margaret Mead (1901-78) earned her B.A. in Sociology at Barnard College in New York. She then studied at Columbia University for an M.A. and Ph.D. She was a member of the American Academy on Arts and Letters and taught at Columbia University, New York University, Emory University, Yale University, The New School for Social Research, University of Cincinnati and The Menninger Clinic. Mead authored some twenty books and co-authored an equal number. (Flaherty c.2001)

²⁰ Jules Henri Poincaré (1854-1912) was a mathematician, physicist and philosopher of science. Thought as the greatest scientist of his time by Bertrand Russell, Poincaré assisted Einstein with the formulation of the special theory of relativity in 1905. (Murzi, 2001)

from these corrections, and really content himself with experiment pure and simple, would be compelled to enunciate very extraordinary laws indeed. Detached facts cannot therefore satisfy us, and that is why our science must be ordered, or, better still, generalised.

Moreover, Steven Lukes²¹ (1981, pp.397-98) argues that the social sciences (such as anthropology) are not suited to a positivistic methodology because the objective facts of social behaviour are hidden from the third person viewpoint and so require considerably more interpretation than is demanded in the natural sciences. In consequence, there can be fundamental disagreement between individual scientists concerning the *meaning* of a particular agent's behaviour. This is elucidated by Professor Davis (2002):

One problem that afflicts learning about the meaning that is associated with the symbols of another culture is that a given symbol often has *several* meanings (i.e., symbols often are '*polysemic*'), so that a specific symbol may have different meanings depending on the context in which the symbol is used. As that is the case, we often have to be very deeply knowledgeable about a culture, in order accurately to interpret a symbol's meaning in a particular social situation. For example, the wink of an eye is a common polysemic symbol. It may signal a flirtation, it may draw unspoken attention to an act by another person, it may invite complicity in a conspiracy, and so on.

To summarise, objectivity is usually feasible within the natural sciences as an external viewpoint is sufficient to grasp an accurate understanding of behaviour. Conversely, for the study of people, there exists an internal polysemic element of meaning which is not directly observable to the scientist. As such, this additional variable (or dimension) adds a possibility of inaccuracy absent from the study of (purely) natural objects. Lukes (1981, pp.403-04) illustrates this by comparing liberal pluralism and Marxist theory in regards to the role of the state in modern

²¹ Steven Lukes is the Centennial Visiting Professor of Sociology at the London School of Economics and Professor of Sociology at New York University.

society:

These alternative sets of theories are at odds at many levels, including the methodological, epistemological, moral and political: indeed, one might even say that one issue between them is the question of what is real and what is apparent. For the marxist, liberal pluralism conceals the reality of capitalist domination; whereas, for the liberal, marxist theory postulates exploitation and contradictions where none exist.

For instance, Lukes notes that a Marxist might perceive the existence of political parties, general elections and the associated activity of democratic societies as evidence of the capitalist class creating the *illusion* of genuine, free and political activity while a liberal pluralist would take the existence of political parties etc. as *genuine* evidence of responsive and neutral government.

The meaning of a given symbol can only be grasped in relation to a larger set of symbols in the culture, and cultures must be examined deeply and extensively in order to understand those subtle meanings. (Davis, 2002)

In contrast to Lukes, Ernest Nagel²² (1961, p.410) adopts the position that though the objective facts of social behaviour require interpretation (i.e. ‘a large number of characterizations sometimes assumed to be purely factual descriptions of social phenomena do indeed formulate a type of value judgement’), it doesn’t entail that at least some of the differences between social scientists involving value judgements aren’t resolved by the procedure of controlled inquiry. Nevertheless, even Nagel (1961, p.408) recognises that this obstacle is ‘undoubtedly more acute in the study of human affairs, and the difficulties it creates for achieving reliable knowledge in the social sciences.’ As a solution, he suggests that the accuracy of interpretation can be improved, at least to some extent, by encouraging ‘the mutual exchange of free but responsible criticisms of ideas’ between academic communities.

It would be absurd to claim that this institutionalized mechanism for sifting warranted beliefs has operated or is likely to operate in social inquiry as

²² Ernest Nagel (1901-85) was University Professor Emeritus of philosophy at Columbia University, New York.

effectively as it has in the natural sciences. But it would be no less absurd to conclude that reliable knowledge of human affairs is unattainable merely because social inquiry is frequently value-orientated. (Nagel, 1961, p.409)

Though no doubt having sympathy for Nagel's approach, Pirsig is more radical and argues that a metaphysical revision that fully recognises social inquiry as not just 'frequently value-orientated' but *primarily* value-orientated is required. Is Pirsig correct in his approach? Possibly yes - as shown in the study of the Samoans by Margaret Mead – probably the most renowned research based on Boas' methodology. This study certainly indicated that not only was a lack of generalisation a problem for the 'objective approach' of the Boas school, but in addition its veneer of scientific credibility (given by its basis in nineteenth century positivistic science) hid some highly suspect methodology. However, the latter was eventually uncovered by the Australian anthropologist Derek Freeman²³ despite his initial support and interest in Mead's work. Due to this interest, Freeman completed his first anthropological fieldwork in Western Samoa in 1943 and continued his studies in this geographical area throughout the remainder of the decade. In 1965, he resumed his own researches on the Samoans returning to the village of Sa'anapu and visiting Manu'a, the main location of Mead's research. These enquiries eventually led to Freeman refuting Mead's conclusions and were published in 1983 as *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*. (Fox, 2001) The next section, therefore, briefly gives the background to Mead's research in Samoa and then explores Freeman's criticisms of this in detail.

²³ Emeritus Professor John Derek Freeman (1916-2001) studied philosophy and psychology as an undergraduate at Victoria University College, Australia during the 1930s. At Victoria, he was introduced to anthropology and became inspired to perform research in the Pacific. Freeman obtained his doctorate at Cambridge University in 1955. Shortly after its completion he was appointed Senior Fellow in the Research School of Pacific Studies at the Australian National University at Canberra. (Fox, 2001)

1.4. PRACTICAL PROBLEMS WITH BOAS' METHODOLOGY

In 1917, two of Boas's students, Alfred Kroeber and Robert Lowie, without presenting any kind of empirical evidence, proclaimed that there was an unbridgeable "abyss" between cultural anthropology and biology. It was in an attempt to obtain evidence for this ideological stance that, in 1925, Boas directed another of his students, the 23 year old Margaret Mead, the task of studying heredity and environment in relation to adolescence among the Polynesians of Samoa. In consequence, Mead arrived in American Samoa at the end of August 1925. After two months studying the Samoan language in the port of Pago Pago, she spent just over five months in the islands of Manu'a before heading back to New York in March 1926 via Australia and France. In 1928, Mead's studies were published as *Coming of Age in Samoa* and soon became a best seller translated in numerous languages: 'For those who went through college in the USA in the 1930s, *Coming of Age in Samoa* was "not only required reading but a classic of universal truths".' (Freeman, 1996)

Reflecting Boas' work, Mead (1928, p.11) claimed that adolescent behaviour in humans was explicable primarily in terms of the social environment.

The anthropologist, as he pondered over his growing body of material upon the customs of primitive people, grew to realize the tremendous role played in an individual's life by the social environment in which each is born and reared. One by one, aspects of behaviour which we had been accustomed to consider invariable complements of our humanity were found to be merely a result of civilisation, present in the inhabitants of one country, absent in another country, and this without a change of race... Neither race nor common humanity can be held responsible for many of the forms which even basic human emotions as love and fear and anger take.

Mead concluded that it was social factors rather than biological ones which caused a discordant puberty in Samoan society. Despite the controversy over Mead's

conclusions, this work launched her anthropological career and presented to the public, for the first time, the idea that adolescent development could be shaped by cultural demands and expectations.

However, when Freeman travelled to Samoa in 1940 after becoming interested in Samoan culture after reading Mead's book, he eventually concluded that her research findings were problematic despite initially accepting her claims.

It was not until I had become fluent in Samoan, had been adopted into a Samoan family, and having been given a manaia title,²⁴ had begun attending chiefly courts, that I became fully aware of the discordance between Mead's account and the realities I was regularly witnessing. When I left Samoa in 1943, after a stay of three years and eight months, it had become apparent to me, through prolonged inquiry, that Mead's account of the sexual behaviour of the Samoans was in egregious error. But I had no idea at all how this happened... So, in 1965, after a meeting with Dr Mead at the Australian National University in 1964, I returned to Samoa for just over two years to research in further detail every aspect of her account of Samoan behaviour. (Freeman, 1996)

It was during this latter period of research that Freeman (1983, pp.65-71) discovered that:

1. Mead admitted lacking knowledge about fieldwork before visiting Samoa;
2. Had failed to study the Samoan language before her arrival;
3. Lived apart from the Samoans while on their island of Ta'u;
4. Lacked any economic and political participation in Samoan village life (though this was because they banned women from their assemblies);
5. Moreover, in consequence of the latter, had scant opportunity to witness any religious or social ceremonies and, finally;
6. Spent only nine months on the islands.²⁵ This period of observation compares unfavourably with the decades spent by other Western observers of the Samoans

²⁴ In January 1943, Freeman was adopted as the son of the talking chief, Lauvi Vainu'u of Sa'anapu and had conferred upon him the high chief title of Logona-i-Taga, 'a title he bore proudly throughout his life'. (Fox, 2001)

²⁵ In 1992, Freeman (1996) discovered that Mead had spent less than seven months on the

such as the anthropologist George Brown and the nineteenth century missionaries Pratt, Turner and Powell.

Freeman (1983, p.115) relates that Mead defended her findings in 1969 by suggesting that the specific island of T'au had possibly been an unusual anomaly from the typical arguments, 'rivalries, and the sensitivity to slight and insults that other observers had reported as characteristic of Samoan society both before and after the time of her research.' This is possibly true but to return to Poincaré's explanation of scientific accuracy, if only one or two 'snapshots' are taken of 'the subject studied', the scientist is often 'compelled to enunciate very extraordinary laws indeed' and the true patterns (i.e. the *general* behaviour) of the subject/s is overlooked. Unfortunately, it appears that Mead's work with the Samoans is illustrative of this latter difficulty.

When Freeman returned to American Samoa in 1987, he was introduced to one of the travelling companions of Mead's that she had interviewed for her research.

She was Fa'apua'a Fa'amu, who, in 1926, had been Margaret Mead's closest Samoan friend. In 1987, at 86 years of age, she was still in full command of her mental faculties. Fa'apua'a's sworn testimony to Galea'i Poumele²⁶ was that when Mead had insisntently questioned her and her friend Fofoa about Samoan sexual behaviour, they were embarrassed, and - as a prank - had told her the exact reverse of the truth. (Freeman, 1996)

Not only were Mead's interviewees playing a prank on Mead, it became evident in 1992, when Freeman was able to research all of Mead's Samoan papers at the Library of Congress, that (unknown to Boas) Mead had entered into a private arrangement with the Bishop Museum of Honolulu to also undertake ethnological research on the museum's behalf. In consequence, her work for Boas was neglected

islands, two months of her nine month trip actually being spent in Australia and the south of France.

and (according to the documentary evidence) her interview on March 13th 1926 with Fa'apua'a and Fofoa was the only one undertaken in connection with the sexuality of Samoan teenagers.

We have the clearest possible evidence of this in a letter that Mead wrote to Boas the very next day. In it she tells Boas that in Samoa there is no 'curb' on sexual behaviour during adolescence - this being precisely the false information which, as a prank, had been communicated to her the previous day by Fa'apua'a and Fofoa. A few days later, Mead wrote to Boas again saying she was ready to leave Samoa. Her planned investigation of the sexual behaviour of the adolescent girls she was supposed to be studying was never undertaken. Instead, she relied on the totally false information with which she had been hoaxed. (Freeman, 1996)

In contrast to Mead's 'very extraordinary' work, Freeman (1983, p.114) notes that the writings of Pratt, Turner and Powell 'make up an enormously rich fund of information on Samoan culture and behaviour' and this is, undoubtedly, partly due to the decades (rather than months) that they spent with the Samoans. Their accounts (as well as research performed subsequent to Mead's research) indicated that Samoan society to be less harmonious than she alleged. In other words, any unusual behaviour had less effect on the generalisations that the missionaries and other anthropologists established.

Nevertheless, though Mead's research experience and techniques were limited, Boas still remained content to promote her findings as they undermined opponents who supported hereditarian (i.e. biological dominated) doctrines. He never changed this theoretical stance as illustrated by his 1934 entry in the *Encyclopaedia of the Social Sciences*. This states that 'the genetic elements which may determine personality' are 'altogether irrelevant as compared with the powerful influence of the

²⁶ The Secretary of Samoan Affairs.

cultural environment'. (Freeman, 1996) However, in light of recent discoveries in genetics (for instance, Mandel's 1990s work which indicates that there are 'about 3,000 genetic diseases' directly affecting behaviour in some way) this conclusion now appears unlikely.

We now know that Mead and Boas were massively mistaken. Boas died in 1942. By that time Oswald Avery and his colleagues were already actively exploring the characteristics of DNA, which had been discovered as long ago as 1869. Since the determination of the chemical structure of DNA by Crick and Watson in 1953, an event ranked by John Maynard Smith as 'the most important discovery in biology since Darwin', genetics and molecular biology have flourished in the most prodigious way. (Freeman, 1996)

1.5.0. THE PARTICIPANT OBSERVER APPROACH OF DUSENBERRY

Whether, or not, Mead's unfortunate experience would be avoided with a different anthropological tradition is difficult to know for certain. However, Pirsig does provide the participant observation approach of Verne Dusenberry²⁷ as an illustration of the type of anthropology that more epitomises the MOQ ethos (by being more 'value friendly') and it does seem plausible that Dusenberry would have avoided Mead's errors – primarily because he spent considerably more time becoming acquainted with his subjects.

²⁷ James Verne Dusenberry (1906 – 1966) received a Bachelor's Degree at Montana State College, Bozeman in 1927, a Master's at Missoula in 1956 and a Ph.D. in anthropology from the University of Stockholm in 1962. Dusenberry first had personal contact with the Indians of Montana in 1937. From 1963, Dusenberry taught anthropology as an associate professor at the University of Montana, Missoula until securing a position in 1965 as the first Director of the Indian Studies Institute of the Glenbow Foundation, Calgary, Alberta. He was adopted into the Flathead tribe in 1937 and, unusually for a white person, was named to the Northern Cheyenne Council of Forty-four in the early 1950s. (Bauer, 2000) / (Dusenberry Crow, 1998, pp.2-3)

'The only subject he spoke about with any sincere enthusiasm was Indians, and particularly the Rocky Boy Indians, the Chippewa-Cree on the Canadian border about whom he was writing his Ph.D. thesis in anthropology. He let it be known that except

In contrast to the relatively brief period of seven months that Mead studied the Samoans, Dusenberry investigated his subjects (the Chippewa-Cree of Montana) for over a decade before submitting a doctorate on their culture.²⁸ A further divergence from Mead was Dusenberry's closer participatory approach on the lines of Evans-Pritchard work²⁹ with the Azande and Nuer tribes of southern Sudan in the 1920s and 30s. Famous for his humanitarian attitude, Evans-Pritchard thought it important to consider local people's opinions and believed that anthropologists should analyze societies as ethical historical processes rather than the machine-like objects of the Boas tradition.

There's this pseudo-science myth that when you're 'objective' you just disappear from the face of the earth and see everything undistorted, as it really is, like God from heaven. But that's rubbish. When a person's objective his attitude is remote. He gets a sort of stony, distant look on his face. The Indians see that. They see it better than we do. And when they see it they don't like it. They don't know where in hell these 'objective' anthros are at and it makes them suspicious, so they clam up and don't say anything... or they'll just tell them nonsense... which of course a lot of the anthros believe at first because they got it 'objectively'. (Pirsig, 1991, p.32)

As noted above, the latter seems to have been Mead's primary difficulty with the Samoans.

for the Indians he had befriended for twenty-one of his twenty-three years as a teacher he regarded all these years as a waste of his life.' (Pirsig, 1991, p.31)

²⁸ In his Ph.D., Dusenberry (1962, p.9) notes that he had 'been closely associated with the Indians of Montana' for twenty-five years. This was published in 1962 as *The Montana Cree: A Study in Religious Persistence*. A revised edition with a new foreword by his daughter, Lynne Dusenberry Crow, was published in 1998.

'Dusenberry... opposed the static "objectivity" he saw in other anthropologists because it shut out a deeper intellectual understanding that came from his friendship with the Indians... I suppose this could be called "Dynamic intellectualism".' (Pirsig, 2002h, p.497, note 149)

²⁹ See Evans-Pritchard, 1937.

In the 1950s and early 1960s, Dusenberry was the advisor for the Indian students at the Montana State College in Bozeman. This was an entry point for him to visit their families, participate in Indian ceremonies, run errands and be an advocate for them when dealing with state officials. 'He spent all the weekend and vacation time he could on the reservations... completely losing himself into the ways and personalities and secrets and mysteries of these people he loved a hundred times better than his own.' (Pirsig, 1991, p.32)³⁰ The accuracy of Pirsig's account is supported by Dusenberry (1962, p.15) himself:

I am not an outsider but one of them. And my knowledge of the group grows as my acquaintanceship widens... I have made friends, I have talked to many different individuals, I have participated in several activities, and I have intuitively absorbed much information about these people – much more than is possible for me to analyze.

Dusenberry's daughter notes further that her father was actually adopted as a son *and hereditary heir* by the Pend d'Orielle tribal chief (Mose Michelle) who was, otherwise, fatherless.

Verne always emphasized to me the distinction between being... given a name by a *tribe* – done to honor an outsider – and Verne's personal family experience with the Michelles... [They] did not regard him as 'Indian' rather than 'white'. He was simply their son, with the family and community implications that this involved. He was welcomed into the ceremonies... and he shared in the stories, laughter, and daily family life. (Dusenberry Crow, 1998, p.2)

Dusenberry's close participatory approach is not suitable if relatively rapid findings are desired and, possibly, such methodology compromised his impartiality.

³⁰ David L. Thomas (2000), a resident of Montana, whose Uncle was the 'Chief of Indian Law Enforcement for the Bureau of Indian Affairs' in the area during the 1950s and 1960s recalls the following:

'I grew up regaled with his "Indian tales" at family gatherings... If Dusenberry was truly [sic] accepted into the Indians "heart of hearts" he was indeed a rare individual and one of no more than an handful in all of the West.'

There does appear to be a difficulty between how to interpret a different culture without becoming too immersed within it though as John Mitchell (senior humanitarian adviser to the British Red Cross) observes, even after 60 years, the humanitarian aid community still haven't developed a method of inquiry that can discover the 'truth' about its subjects that is better than the type of participatory approach employed by Dusenberry and Evans-Pritchard.

Why is this? The first problem is how to develop a method of inquiry that can best discover the 'truth' about its subject. Evans-Pritchard met this challenge by drawing on English fieldwork empiricism and the traditions of French speculative theorising... The humanitarian aid community is currently working hard to make itself more accountable through the concept of evaluation... But is evaluation more effective in holding agencies to account in the modern humanitarian world than chickens and poison were in the Azande culture?³¹ ...the answer is probably no, at least not yet. (Mitchell, 2002)

Moreover, as noted above with the work of Mead, a brief period of study will be affected by anomalies to a greater extent and, with the issue of trust in mind, a member of an observed group is less unlikely to invent nonsense for an anthropologist who explicitly puts the group's interests before the research.

I have tried to get the depth of feeling of the Crees' religious values as well as a picture of the world view of their religion. From a short questionnaire, I felt that I would be unable to do so. Furthermore, rapport is necessary in any case, for without the rapport, the results of a questionnaire might be severely questioned. Indians tend to be suspicious of filling in blanks for strangers: many times they resent doing so even when they know the person in charge. And more important to me, they are likely to give the answer they feel the investigator wants rather than their own honest responses. (Dusenberry, 1962, p.16)

³¹ As observed by Evans-Pritchard (1937, pp.120-145), at the heart of the Azande culture lay an oracle that operated by feeding benge (a type of poison) to a baby chicken. The Azande would seek to answer vital questions and events (such as the success of a marriage, a large-scale hunting trip or the placing of a new house) depending on whether or not, the chicken died. After much reflection Evans-Pritchard concluded that, among other things, the oracle was a primitive though effective accountability mechanism. 'No important venture is undertaken without authorization of the poison oracle.' (Evans-Pritchard, 1937, p.121)

1.5.1. MODERN DEVELOPMENTS IN PARTICIPANT OBSERVATION

It is evident that Dusenberry's particular type of participant approach is becoming established in the study of North American Indians. As Dusenberry Crow (1998, p.7) observes, a number of modern anthropologists (for example, Goulet, Okely, Scollon & Scollon, Tedlock & Tedlock and Ridington) now regard it as essential that anthropologists actually share the personal experience of their subjects (rather than just relying on traditional methodology such as interviews). This approach is being taken even further by contemporary American tribes who are encouraging their own people (rather than cultural outsiders) to control anthropological projects.

T.J. Ferguson, in a paper delivered in 1997 in the Opening Session of the 62nd Annual Meeting of the Society for American Archaeology noted that 15 tribes have assumed THPO³² responsibilities for their reservations and that 57 tribes are actively involved in tribally based archaeological research and historic preservation programs. This is an enormous change from only a decade ago. (Jones & Walker, 2000)

Jones & Walker (2000) also observe that anthropology can even prosper in this new world.

Working directly with tribes has potentially enormous benefits for anthropology. Not only do we keep learning, but we come to better understand Native American perspectives concerning data and interpretation.

Finally, the more subjective (or 'value friendly') approach of participant observation in anthropology possibly compels an anthropologist from falsifying data concerning a group who they may perceive as, first and foremost, friends (or even 'family') rather than scientific subjects. As the character of Dusenberry³³ states:

³² Tribal Historic Preservation Offices.

³³ When asked if the quotes attributed to the character of Dusenberry were the words of the "real" Dusenberry, Pirsig (2004h) replied: 'These are my own words restating what I remember he thought.'

‘So that’s why I’m not objective about Indians,’ he said. ‘I believe in them and they believe in me and that makes all the difference. They’ve told me things they’ve said they never told any other white man because they know I’ll never use it against them. It’s a whole different way of relating to them. Indians first, anthropology second... That limits me in a lot of ways. There’s so much I can’t say. But it’s better to know a lot and say little, I think, than know little and say a lot.’ (Pirsig, 1991, pp.32-33)

1.6. CONCLUSION

In light of Mead’s research, it does appear reasonable to believe that the scientific accuracy of social research obtained through Boas’ objective methodology is distorted by a lack of generalisation and a failure to fully recognise the polysemic element of cultural symbols which – as shown in Dusenberry’s and Evans-Pritchard’s approach of participant observation - require considerable time with a culture to be able to translate correctly. If this is indeed the case, then Pirsig’s argument that the methodology of cultural anthropology can be enhanced if it recognises that an anthropologist primarily deals with social values (rather than ‘objective’ facts) would appear to have merit. However, Pirsig’s proposed solution goes further than this simple recognition and (turning positivism on its head) suggests that the best way to view *all* of reality (and not just the social reality of the anthropologist) is in a value context. As such, instead of removing or reducing values to facts, as a positivist might do, Pirsig reduces all facts to some type of values. The next chapter, therefore, examines the merits of this relatively radical proposal (i.e. the MOQ) and the justifications that Pirsig provides for its construction.

Chapter 2: The Metaphysics of Quality

It is easy for scientifically trained people to see that an external deity that creates everything is just an imaginary being sustained by social tradition. It is much more difficult to see that an external objective world that creates everything is also just an imaginary being sustained by social tradition.

The Metaphysics of Quality is a third conjecture that can be made about the source of sense data. It does not contradict a deityless religion such as Buddhism. It does not contradict an objectless interpretation of science such as Niels Bohr's Complementarity. But it has an advantage over both of these in that it solves the ancient intellectual problem of good and evil. By so doing it helps to make the world a better place to live in. (Pirsig, 1999b)

2.0. INTRODUCTION

As discussed in the preceding chapter, the principal reason for the development of the MOQ was to revise the metaphysical foundations of American anthropology which had developed from the positivistic orientated approach of Franz Boas. The first issue worth noting is that though the criticisms provided by Pirsig's in reference to American anthropology are relatively straightforward, his metaphysical solution to resolving these problems is radical. As such, this places Pirsig's system largely outside traditional philosophy which usually limits the fact-value distinction to whether values can be defined in terms of facts (i.e. naturalistic and transcendental theories) or not (i.e. nihilistic or emotivist theories). The justifications (which are primarily metaphysical) for why Pirsig established a system where *all* facts are reduced to types of values is therefore provided in the following.

This chapter, then, commences with an overview of the MOQ with specific reference to the programme's foundations in East Asian philosophy, American pragmatism and the work of F.S.C. Northrop. The section on these foundations clarifies the MOQ's relationship with Zen Buddhism, the employment of James'

radical empiricism and pragmatism in the MOQ's notions of epistemology and Northrop's emphasis on reconciling the values of East and West. The subsequent two sections deal with Pirsig's notion of Quality and value which are related to a pure empiricism which, it is argued, distinguishes the MOQ from idealism and scientific realism. The particular components of the MOQ are then examined together with how they work with the theory of cosmological evolution which Pirsig employs as a framework to distinguish moral judgements on absolute grounds despite his employment of a pragmatic theory of truth. I then conclude this chapter by scrutinising his claim that this improves on James' (relativistic) pragmatism and also argue that it improves on Spinoza's monism (which is similar to the MOQ in a number of respects) and more plausible than recent post-modernist thought.³⁴

2.1.0. THE 'METAPHYSICS OF QUALITY'

As already noted, the term 'Metaphysics of Quality' (or 'MOQ') is the formal term given to Pirsig's monist system which is developed from the postulation that mental and physical properties are manifestations of value (rather than values being a property of a subject *or* object). The study of value, traditionally termed axiology, can be divided into two core branches: *ethics* which concerns morals and *aesthetics*

³⁴ While keeping in mind Northrop's caution against presuming that identical terms in different philosophical systems necessarily have the same meaning. For instance, the term 'mind' for Descartes and Locke refers to an internal mental substance (as distinct from an external material substance) while 'mind' for a Buddhist philosopher, of the *Cittamatra* tradition, refers to all apprehended factors (whether physical or mental) given in immediate awareness.

'The philosophically important thing about any common-sense term as it enters into any philosophical theory is not its bare dictionary meaning, but the particular contextual meaning usually unique to the philosophical system in question. Philosophical materialists, idealists, dualists and neutral monists all admit the existence of what common sense denotes by the term "mind," yet there is all the difference in the world in the ways in which they analyze and conceive of this datum.' (Northrop, 1947, p.80)

which concerns the beautiful (and unsightliness) originating in art and nature. As Pirsig would no doubt contend, a correct understanding of the Good is valuable because it allows one to construct an answer to the ancient question of ‘How are we to live our life?’

Ethics is commonly divided into two branches: normative ethics and meta-ethics. Normative ethics addresses the moral worth of particular behaviour while meta-ethics seeks to understand the underlying character of ethical evaluations. In consequence, the MOQ can be perceived both as a system of normative ethics (in that a hierarchy of values is put forward as a guide for behaviour) and also as a meta-ethical system (in that the essential nature of these values are examined). As a meta-ethics, the MOQ is a type of *ethical intuitionist* moral realism in the sense that it holds that there are irreducible moral properties which are real and that, on occasion, an intuitive awareness of them is possible (as indicated by the MOQ’s code of Art elucidated in Section 2.7.2.). As such, this indicates the MOQ is not a type of *ethical naturalist* moral realism (which holds that there are real moral properties but ones which are reducible to entirely non-ethical properties) nor *ethical subjectivist* moral realism (which holds that moral statements are rendered true or false by the attitudes and/or conventions of observers) nor *non-cognitivism* (which holds that ethical sentences are neither true nor false because they do not assert genuine propositions) nor *moral scepticism* (which holds that ethical sentences are generally false because the claim that there are objective values in the meaning of ordinary ethical sentences is also false).

As such, the whole universe is perceived by Pirsig as being a moral order:

Because Quality is morality. Make no mistake about it. They're identical. And if Quality is the primary reality of the world then that means morality is also the primary reality of the world. The world is primarily a moral order. (Pirsig, 1991, p.100)

Though, at face value, sounding strange, the underlying thought of Pirsig here is a desire to properly integrate ethics (which are usually considered subjective) with the natural sciences (which are usually thought of as objective) within one metaphysical system. In consequence, the natural sciences are considered by Pirsig as a study of Quality patterns: 'That atoms are static patterns of quality means that atoms can be static patterns of God without losing any of their empirical objectivity.' (Pirsig, 1995b) This is not to say that Pirsig doesn't realise that it seems strange to assign morality to these realms. This stretching of the term 'morality', though on face value appearing awkward, is designed to avoid the metaphysical problems that occur when reality is divided between an objective amoral realm and a subjective moral realm. If values can't be reduced down to facts without metaphysical difficulties then possibly the reverse reduction is worth considering.

In the MOQ, then, reality (as a whole) is denoted by the term '*Quality*' which Pirsig divides into *Dynamic Quality*³⁵ and *static quality*.³⁶ 'Quality' (with a capital 'Q') is used to denote reality (by which Pirsig regards as the totality of what exists)

³⁵ In LILA, the term 'Quality' is interchangeable with the term 'Dynamic Quality' when a mystic viewpoint is taken. The reader should also be aware that the terms 'static quality' and 'Dynamic Quality' were absent in ZMM.

³⁶ Pirsig (1997d) also considers the terms 'patterned' and 'unpatterned' as synonyms for 'static quality' and 'Dynamic Quality' though these terms are usually avoided due to a problem of ambiguity with 'unpatterned':

"Unpatterned" might work as well except that "unpatterned" suggests that there is nothing there and all is quiet. There is nothing in the sense of no "thing", that is, "no object", and the Buddhists use nothingness in this way, but the term Dynamic is more in keeping within the quotation, "Within nothingness there is a great working", from the Zen master, Katagiri Roshi.'

in addition to its traditional context as a term for excellence (how Pirsig came to this conclusion is examined in Section 2.3.) while Dynamic Quality denotes the unconceptualised part of reality. Consequently, the term ‘Dynamic Quality’ is not meant to be a concept but only a referring term:

It’s important to keep all ‘concepts’ out of Dynamic Quality. Concepts are always static. Once they get into Dynamic Quality they’ll overrun it and try to present it as some kind of a concept itself. (Pirsig, 1997e)

This comment reflects Pirsig’s concern that a shift from considering the Good as an ineffable ‘unconditioned’ to a Platonic idea would entail leaving it open to metaphysical devaluation. This type of devaluation is located by Pirsig (1974a, p.380) with Aristotle’s development of dialectics (*dialectica*) in the *Topics (Topica)* and *On Sophisticated Refutations (De sophisticus elenchis)*:

Once the Good has been contained as a dialectical idea it is no trouble for another philosopher to come along and show by dialectical methods that areté, the Good, can be more advantageously demoted to a lower position within a ‘true’ order of things, more compatible with the inner workings of dialectic. Such a philosopher was not long in coming. His name was Aristotle.

Once such a process occurs, mind or matter is usually returned as ontologically fundamental instead of the Good and, as such, a metaphysics ceases to be a ‘metaphysics of quality’ but becomes a form of SOM.

As it’s impossible for Dynamic Quality to be ‘captured’ completely by the intellect, it is managed by being ‘divided’ into smaller slices of static analyses – static quality patterns. Though the latter enables an agent to act with a degree of certainty and confidence, there can be a risk of overlooking the nature of continuous change within reality and is, no doubt, why Pirsig places an emphasis on the Dynamic. The nature of static patterns is examined in Section 2.5. while Dynamic Quality is examined further in Section 2.1.1. and Section 2.4. In order to assist the

reader to locate Pirsig's Dynamic-static division I direct them to Spinoza's (1677, Part One) analogous division between *natura naturans* (active nature) and *natura naturata* (passive nature). Both Dynamic Quality and *natura naturans* are self-determined (as the underlying 'substrata' of everything) while static quality and *natura naturata* are the forms (or modes) dependent for their existence on the former.³⁷ This division and how Pirsig arrived to it is also examined in Section 2.5.0. while further comparisons between Spinoza and Pirsig are provided in Section 2.8.

According to Pirsig's references in ZMM and LILA, the MOQ incorporates elements of Zen Buddhism, Taoism, James' pragmatism and radical empiricism and the work of F.S.C. Northrop.³⁸ Before we turn our attention to the particular components of the MOQ, further details of these traditions are given in the next three sub-sections. In the meantime, it is also worth noting that other comparisons can be made between Pirsig's work and Spinoza's monism (as mentioned above), Hume's ideas on causation, Bradley's Absolute, Henri Bergson's ideas on creative evolution, the phenomenology of Husserl and Merleau-Ponty, Heidegger's notion of Being, Whitehead's notion of prehension, Popper's propensities, Derrida's notion of 'Differance' and Putnam's pragmatism. Though these philosophers (with the

³⁷ Further elucidation of Dynamic Quality, static quality as well as comparisons between Spinoza's work and the MOQ are given later in this chapter.

³⁸ Filmer Stuart Cuckow Northrop attended Beloit College, Yale and then Harvard University, receiving his doctorate in 1924. He later studied at Trinity College, Cambridge and became Sterling Professor of philosophy and law at Yale University in 1947. In addition to this post, he was a visiting professor at the universities of Iowa, Michigan, Virginia, Hawaii and Mexico. The author of numerous journal articles, Northrop published six works including *Science and First Principles* (1931), *The Logic of the Sciences and the Humanities* (1947), *The Meeting of East and West* (1946), *The Taming of the Nations* (1952), *European Union & United States Foreign Policy* (1954) and *The Prolegomena to a 1985 Philosophiae Naturalis Principia Mathematica* (1985).

exception of Husserl and Derrida) are touched upon in this thesis – to varying degrees – each would merit further comparison with Pirsig’s MOQ.

There are now some well-established studies of the ‘eastern’ influences on Heidegger, and on connections between Merleau-Ponty and certain Buddhists. This would seem to help further inquiry into the relationship between Phenomenology and the MOQ. In addition, despite Heidegger’s wholesale rejection of American Pragmatism (as ‘mere instrumentalism’ in contrast to ‘poetics’), the ontological development proposed by Pirsig offers an important bridge to Heidegger’s Being... Merleau-Ponty’s late work... tries to develop concepts which reconcile dynamic being (he sometimes called it ‘wild being’) with the nature of embodiment. Levinson for one has related this directly to Nagarjuna... For all their differences, Pirsig’s MOQ and Derrida’s work share both deep and broad similarities as well. Derrida’s notion of ‘Differance’... is one example. (Summers, 2004)³⁹

2.1.1. TAOISM & ZEN BUDDHISM

Firstly, before examining the East Asian component parts of the MOQ in more detail, it’s worth being aware that the ‘Chinese have seldom subscribed to the view that adhering to one religion precludes adherence to another’ (Blofeld, 1978, p.90) while Cooper (1996, p.17) notes that in India ‘...thinkers from one school sometimes share more with those from a second than with their fellows.’ Moreover, as Zen Buddhism⁴⁰ can be perceived as a later combination of Taoist and Mahayana⁴¹

³⁹ Dean Summers is a film studies lecturer at the University of Central Lancashire, Preston. Much of his academic work involves the philosophers mentioned in this paragraph.

⁴⁰ Rahula (1959) makes the important point that Buddhism is a realistic philosophy:

‘Buddhism is neither pessimistic or optimistic. If anything at all, it is realistic, for it takes a realistic view of life and of the world. It looks at things objectively (*yathahhutam*). It does not falsely lull you into living in a fool’s paradise, nor does it frighten and agonize you with all kinds of imaginary fears and sins. It tells you exactly and objectively what you are and what the world around you is, and shows you the way to perfect freedom, peace, tranquillity and happiness.’

⁴¹ Mahayana can be translated as the ‘Great Vehicle’. Exponents of this major form of Buddhism believe you should assist all beings reach enlightenment. It is usually contrasted with the Theravada tradition (termed pejoratively ‘Hinayana’ or the ‘Lesser Vehicle’ by Mahayana Buddhists) where enlightenment of the individual self is given priority. (Cooper, 1996, p.43)

Buddhist thought, the Eastern ideas employed in the MOQ appear in more than one school.

The influence of Taoism on Pirsig's work is noted by his connection of Quality with the Tao:

Phædrus went over to his bookshelf and picked out a small, blue, cardboard-bound book.... It was the 2400-year-old *Tao Te Ching* of Lao Tzu.⁴² He... studied it to see if a certain substitution would work. He began to read and interpret it at the same time. He read: *The quality that can be defined is not the Absolute Quality. That was what he had said. The names that can be given it are not Absolute names. It is the origin of heaven and earth. When named it is the mother of all things... Exactly.* (Pirsig, 1974a, pp.252/253)

Blofeld⁴³ (1973, p.23) expands on the meaning of the word 'Tao':

Literally meaning 'way' or 'path', it was later used by the... Taoists to mean a combination of the undifferentiated unity from which the universe evolved; the supreme creative and sustaining power which nourishes the myriad creatures; the way in which nature operates; and the course which men should follow in order to rise above worldly life and achieve harmony with the Ultimate.

The similarity of 'Tao' with 'Quality' is apparent as both refer to an ultimate reality involved in the evolving creative process of the universe. Furthermore, Di Santo and Steele (1990, p.103) advance the 'Whiteheadian' observation that Taoism perceives objects as essentially being slower processes than what we identify as events. This emphasis on the Dynamic is similar to Pirsig's conceptual representation of reality and is noted by Di Santo & Steele (1990, p.103) in reference to the *yin* (female nature) and *yang* (male nature) principles of Taoism:

⁴² The key text of Taoism (the *Tao Te Ching*) was allegedly written down by Lao-tzu in the sixth century B.C.E. after being requested to write down his wisdom by a city gatekeeper when leaving behind his old life as a royal historian (in the state of Ch'u). According to legend, Lao-tzu was an older contemporary of Confucius. (Blofeld, 1973, p.20)

⁴³ In *The Secret and Sublime*, the Englishman John Blofeld describes many of his experiences of Taoism (as a translator) during his residency in China in the 1930s and 1940s. A few chapters concentrate on Tao philosophy and, in particular, the meaning of the word 'Tao'.

They refer to dynamic principles whose interaction accounts for all that exists and occurs in the universe. The dynamic character of those principles should be underscored: Yin and yang are not static; they are elemental processes.

Though Pirsig does not explicitly refer to the notions of yin and yang, the emphasis of these principles on balance and harmony forms an essential component of the MOQ. This emphasis on the ontological reality of harmony is given throughout Pirsig's work (especially ZMM) and indicates why the MOQ is a form of moral realism (i.e. where moral truth is grounded in the nature of things) rather than a subjectivist or an emotivist theory of ethics. For Pirsig, therefore, sentences containing terms such as 'good' are expressing a genuine proposition.

It is this harmony, this beauty, that is at the center of it all... It is the quest of this special classic beauty, the sense of harmony of the cosmos, which makes us choose the facts most fitting to contribute to this harmony. (Pirsig, 1974a, p.268)

This view is supported by Nagarjuna (c.300a, p.275) who relates 'nothingness' to the underlying harmony of the universe:

***Sunyata* (non-dual understanding) as the principle of comprehension is the true principle of harmony. The harmony worked on the basis of *sunyata* is the highest kind, and of all the ways of establishing harmony, this is the best. This harmony excels all others.**

The Zen arts, when practiced carefully, are designed to reveal the fundamental harmony (the 'artless art') inherent in nature.⁴⁴ As Suzuki (1958, p.xiv) implies (in the context of *ikebana*):

The art of flower arrangement is [ultimately]... the expression of a much deeper experience of life. The flowers should be arranged in such a way that we are reminded of the lilies of the field, whose beauty was not surpassed by Solomon in all his glory. Even the modest wild flower, named *nazuna*, was regarded with reverence by Basho, the Japanese *haiku* poet of the seventeenth century. For it proclaims the deepest secret of nature, which is an 'artless art'.

⁴⁴ Cooper (1996, p.61) observes that the concept of harmony also 'sets the parameters' for the Chinese arts.

As far as harmony is concerned, Gustie Herrigel⁴⁵ (1958, pp.32-33) states the following:

It is no easy schooling, not a finger exercise, but a school of experience. The technique should be assimilated, but not overestimated. Practising with the heart, harmonious wholeness of body, soul and surroundings are the important things.

Note that it's not a subjective feeling that is being discussed here but the underlying harmony of 'the cosmos':

One must be quite clear that the right attitude has nothing to do with mood. That which underlies this art and needs to be experienced is in itself formless, but it takes on form as soon as you try to represent it symbolically. And it is just this spiritual form that constitutes the essence of flower arrangement. By adhering strictly to the cosmic pattern, the artist learns, in accordance with the Eastern attitude of pure, unpurposing surrender to the laws of the cosmos, to experience them through and through. (Herrigel, 1958, pp.119-20)

Evidence that the universe's harmony is more than just subjective whim is supported by the research experience of physicists and mathematicians.

Mathematics... isn't merely a question of applying rules, any more than science. It doesn't merely make the most combinations possible according to certain fixed laws. The combinations so obtained would be exceedingly numerous, useless and cumbersome. The true work of the inventor consists in choosing among... a large number of solutions to a problem... on the basis of 'mathematical beauty,' of the harmony of numbers and forms, of geometric elegance. (Henri Poincaré quoted in Pirsig, 1974a, p.268)

Moreover, Poincaré (1907, p.14) further argues:

What we call objective reality is, in the last analysis, what is common to many thinking beings, and could be common to all; this common part, we shall see, can only be the harmony expressed by mathematical laws. It is this harmony then which is the sole objective reality, the only truth we can attain.

⁴⁵ The German Professor Eugen Herrigel (1884-1955) taught philosophy at the University of Tokyo during the 1920s and 1930s. While there, he became interested in Zen and so was one of the first Westerners to take up the art of archery under a Zen master for six years while his wife Gustie studied the Japanese art of ikebana. In the 1950s, both published books about their respective experiences.

The particle physicist John Polkinghorne observes (1996, p.103) that harmony enters the picture the moment scientists talk among themselves: “*It must be right*” is the way [scientists] feel about an elegant and insightful idea, often long before the empirical adequacy of the theory has been verified to a degree sufficient to warrant such a conclusion.’ Polkinghorne cites the example of the mathematician, Paul Dirac (who was awarded the Nobel prize in 1933 for his work in quantum mechanics) and Einstein⁴⁶ who believed that his theory of special relativity was ‘just too good to be wrong’ before subsequent experiments confirmed his confidence.

This search for beautiful equations is more than a mere mathematical aestheticism. The reason that we believe that we find the best explanation of physical phenomena in this way derives from our experience that such theories have time and again proved to have a fruitfulness extending far beyond the original phenomena for which they were invented. In science, the beautiful is the good because it has proved to be the fertile. Dirac’s lifetime search for beautiful equations is an object lesson that this is so, as is Einstein’s discovery of general relativity through a similar eight-year quest. (Polkinghorne, 1996, p.105)

These Kantian⁴⁷ sentiments are also supported by the theoretical physicist, Richard Feynman (1965): ‘Imagination reaches out repeatedly trying to achieve some higher level of understanding, until suddenly I find myself momentarily alone before one new corner of nature’s pattern of beauty and true majesty revealed’.

⁴⁶ To illustrate this, Pirsig (1974a, p.114) quotes Einstein (1954, pp.221-22) from his April 23rd 1918 speech at Max Planck’s 60th birthday party:

‘Man tries to make for himself in the fashion that suits him best a simplified and intelligible picture of the world. He then tries to some extent to substitute this cosmos of his for the world of experience, and thus to overcome it... He makes this cosmos and its construction the pivot of his emotional life in order to find in this way the peace and serenity which he cannot find in the narrow whirlpool of personal experience... The supreme task... is to arrive at those universal elementary laws from which the cosmos can be built up by pure deduction. There is no logical path to these laws; only intuition, resting on sympathetic understanding of experience, can reach them.’

⁴⁷ ‘Kant himself shows in the *Critique of Judgement* that there exists a unity of the imagination and the understanding and a unity of subjects *before the object*, and that, in experiencing the beautiful, for example, I am aware of a harmony between sensation and concept, between myself and others, which is itself without any concept.’ (Merleau-

Polkinghorne (1996, p.103) does caution that such aesthetic appreciation is not always correct though it remains 'confirmed astonishingly frequently in our experience'. Moreover, even if the universe contains a real harmony which guides and enables scientists to write coherent laws, it appears to be set in tension with a chaotic disharmony (from black holes to disease to wars) which is less predictable and ugly. Furthermore, Cooper (1996, p.59) notes that 'harmony' is a 'vague and amorphous' term which leads to the problem of translating an understanding of it into practical terms for everyday Western life.

When Buddhist thought eventually arrived in China during the sixth century, it assimilated elements of Taoism so establishing Zen Buddhism. The Japanese word *Zen* is an abbreviation of the word *zenna* which is a transliteration of the Chinese word *chan-na* (usually abbreviated to *chan*), which, in turn is a transliteration of the Sanskrit word *Dhyana*. 'Zen' translates as 'meditation', or more precisely, the awareness achieved through meditation. (Downing, 2001, p.25) If the traditional anecdote is believed, Zen originated at the *Flower Sermon* when the Buddha silently held up a flower to his followers. The gathering was still waiting with baited breath for his wise oration except one person, Kashyapa, who simply smiled. A special transmission of understanding had apparently occurred between Kashyapa and the Buddha who walked down to Kashyapa and handed him the flower. Subsequently, the Buddha conferred upon Kashyapa the honour and task of being the first Zen patriarch. Even if fictional, the message of the account is that the 'enlightenment experience doesn't depend upon words and concepts for its flowering.' (Di Santo & Steele, 1990, p.122)

A more plausible account for the beginning of Zen is located in the sixth century C.E. with Bodhidharma, the twenty-eight patriarch⁴⁸ who is noted for introducing the Zen tradition to China. The adherents of Zen were concerned that the original message of the Buddha's teachings had become distorted with the Madhyamaka Buddhists (who advanced a dubious distinction between *nirvana* and the phenomenal world) and the Pure Land Buddhists (who identified *nirvana* with a theistic heaven populated with divine Buddhas). The latter belief was in direct opposition to the Buddha's original teachings that enlightenment was open to everyone in mundane reality. (Cooper, 1996, p.214)

By the seventh century, the Zen tradition itself divided into the Northern school of *Gradual Enlightenment* and the Southern school of *Sudden Enlightenment*. The Northern school emphasised the traditional practice of seated meditation (*zazen*) to reach enlightenment while the Southern school put an emphasis on a variety of novel techniques such as the koan, shouts, slaps and even sudden blows with a stick. (Di Santo & Steele, 1990, pp.122-24) Subsequent to Zen's founding in Japan during the twelfth century, it quickly reached maturity; the 'Gradual Enlightenment' tradition being continued by the Japanese *Soto* school and the 'Sudden Enlightenment' tradition being continued by the Japanese *Rinzai* tradition. It is the latter tradition with its belief that enlightenment can occur even when engaged in everyday activities (such as flower arranging or motorcycle maintenance) that the MOQ develops:

The Dynamic reality that goes beyond words is the constant focus of Zen teaching. Because of their habituation to a world of words, philosophers often do not understand Zen. When philosophers have trouble understanding the distinction between static and Dynamic Quality it can be because they are trying

⁴⁸ 'Patriarch' refers to the line of Buddhist authority going back to the Buddha.

to include and subordinate all Quality to thought patterns. The distinction between static and Dynamic Quality is intended to block this. (Pirsig, 1997e)

This distinction is supported by Cooper (1996, p.215) who notes that Zen enlightenment (and enlightenment found in other mystic philosophies) usually requires an 'intuition' that is beyond the capability of philosophical articulation. In addition to meditative techniques employed in monasteries, this is through disciplines such as to *ikebana*, sword fencing, the *Noh* play, *haiku* poetry, ink brush painting, rock gardening and archery. It's not the discipline itself that's of specific importance but the understanding achieved when the discipline is properly undertaken. As Suzuki (1953, p.5) notes:

One of the most significant features we notice in the practice of archery, and in fact of all the arts as they are studied in Japan and probably also in other Far Eastern countries, is that they are not intended for utilitarian purposes only or for purely aesthetic enjoyments, but are meant to train the mind; indeed to bring it into contact with the ultimate reality.

The Dynamic Quality viewpoint of the MOQ corresponds to the notion of *sunyata* or nothingness⁴⁹ as understood by Nagarjuna⁵⁰ (a *Mahayana* Buddhist philosopher) while the static quality viewpoint (*sammuti-sacca*)⁵¹ of the MOQ corresponds to

⁴⁹ 'Empty' in the sense of lacking inherent existence i.e. the indeterminate or the world of Buddhas; literally, the realm of understanding or wakefulness. 'The root-word *buddh* means to wake up, to know, to understand.' (Nhat Hanh, 1987, p.13) This viewpoint considers that the nature of reality is fundamentally indeterminate and interconnected. Out of the indeterminate arise the determinate aspects that are usually conceptualised in the West as subjects and objects.

⁵⁰ Though scholars now believe the name 'Nagarjuna' refers to events that occurred to more than one person, a philosopher of that name definitely existed in the second century C.E. His principal philosophical work was the *Madhyamakakarika*. Williams (1989, p.55) notes that: 'Nagarjuna is the first great name in Buddhist thought since the Buddha, and for that reason (among others) he is sometimes referred to as the "second Buddha".'

⁵¹ The 'conditioned' is everything dependent (or caused) by *sunyata* (which is 'unconditioned').

sunyavada (i.e. the conditioned component or world of *maya*).⁵² *Sunyavada* describes all the conceptions of reality including metaphysical views, ideals, religious beliefs, hopes and ambitions.⁵³ However, despite employing Buddhist and Taoist *philosophy*, Pirsig rejects the more esoteric practices of these traditions such as alchemy, divination, magic nostrums, oracles, exorcists, praying to spirits and rain making⁵⁴ and discards the notion of reincarnation in order to avoid using supernatural⁵⁵ explanations in the MOQ.

For scientists, the mind of the Buddha and the Mind of God are usually the same, even though the Buddha was an atheist. I think it is extremely important to emphasize that the MOQ is pure empiricism.⁵⁶ There is nothing supernatural in it. (Pirsig, 2000e)

Though there's no *atman* (soul) in the MOQ, a sense of responsibility for one's actions remains because the MOQ recognises that our present behaviour has an affect on other people (as observed in environmental effects such as global warming) and will have effects on subsequent generations (such as the radioactive waste produced by nuclear industry). A number of Buddhist philosophers do have sympathy with

⁵² Literally 'illusion' but only in the sense that it is illusory to believe that people and the objects of their world are permanent, independent and unchanging.

⁵³ Real in the sense of being useful conceptualisations but illusory in the sense of having independent or absolute existence. As the eighth century philosopher Shankara related to a student who asked him if you should run if being chased by a mad elephant: 'Yes, because you're part of the same illusion!' (Di Santo & Steele, 1990, p.61)

⁵⁴ I'm not totally convinced that the latter practices should be rejected 'out-of-hand' as the monks who maintain such practices are often the wisest in the context of the 'mundane world'. This is supported by Blofeld, 1973.

⁵⁵ Pirsig (2000p) uses the following definitions of supernatural:

'I agree with these dictionary definitions of supernatural: 1. Of or relating to existence outside the natural world. 2. Attributed to a power that seems to violate or go beyond natural forces. 3. Of or relating to a deity. 4. Of or relating to the immediate exercise of divine power; miraculous. 5. Of or relating to the miraculous. I should add that Shunryu Suzuki has quipped that Zen is "supernatural" in the sense of being super natural, that is, more natural than what is usually meant by natural.'

⁵⁶ Pirsig's assertion concerning the MOQ as a pure empiricism is examined in Section 2.3.

Pirsig's view because the belief in the *atman* is primarily an element of Hindu thinking. However, if Buddhism (as a religion) had initially rejected this belief outright when it developed from Hinduism, it's possible that it would have proved too radical a departure, at that stage, for widespread acceptance within Indian culture.

With a wider cultural background to appeal to, Pirsig can be less concerned about rejecting the idea of the *atman*. If anything, the soul (in the MOQ) can be loosely regarded as purely the intellect and survives an individual's death through books, rituals, folklore and, more latterly, electronic media. According to Ninian Smart (1989, p.60), the Buddha, when approaching death, instructed his followers that though all compound things are impermanent, his teachings would remain. If this account is accurate, the MOQ is simply keeping to the Buddha's teaching in this regard.⁵⁷ Moreover, it appears that Pirsig is simply taking into account Northrop's (1947, p.305) concern that a universally based metaphysics should be 'replacing traditional provincial and faulty doctrines with new theoretical assumptions more in accord with the nature of things as revealed by the advance of scientific knowledge.'

As a development of Zen Buddhism, *it's critical to realise that the MOQ can be perceived as reflecting the circle of enlightenment* found in Buddhist thought where an adherent (such as a young monk) begins at 'the world of form' (typically perceived at this juncture dualistically, as in SOM) and proceeds to an understanding of 'formlessness' (termed 'Dynamic Quality' by Pirsig) to obtain 180 degrees enlightenment. The student then returns with this new knowledge into 'the world of

⁵⁷ Hagen and Rahula also confirm that the Buddha rejected any notion of the *atman*.

form' to achieve full (or 360 degrees) enlightenment or Buddhahood (in which Dynamic Quality is perceived via the static quality patterns).

In Buddhism, the world can be described in terms of 'The First Principle', sometimes called 'Formlessness' or 'nothingness' or 'freedom' which parallels the treatment of Quality in ZMM. The world can also be described in terms of 'The Second Principle' of 'Form' or 'order' which parallels the treatment of quality in LILA. In Buddhism, form and formlessness, freedom and order, co-exist. (Pirsig 1999a)

i.e. one should not be seeking to arrive at recognising Dynamic Quality but to a more profound understanding. 'The teaching of emptiness is actually an affirmation of the dynamic interconnectedness of all things.' (Burton, 2001, p.178) The treatment of Quality through ZMM (its formlessness) and LILA (its forms) can, when taken together, be read as reflecting the circle of enlightenment,⁵⁸ both texts are constructed as Western versions of a Zen koan⁵⁹ (literally puzzling story or question)⁶⁰ in order to assist a more Western-orientated mind achieve enlightenment.

Everybody knows what quality is. Some people know that they know it, and other people, particularly Freshman rhetoric students, don't know that they know it. This is in accord with the Soto Zen Buddhist doctrine that everyone is enlightened. What occurs at 'enlightenment' is the falling away of the illusion that one is not enlightened. But the enlightenment has been there all along, (Pirsig, 1997d)

To use Pirsig's terminology, enlightenment as such entails an awareness of Dynamic Quality through static quality patterns. This is illustrated by Cooper (2002b, p.18):

⁵⁸ As ZMM and LILA, when taken together, follow the whole circle of enlightenment, Pirsig felt little need to write any further texts though he has assisted in explanations of his work through texts such as *Lila's Child* (2002h) and the first version of this thesis - published on the Internet in 2003.

⁵⁹ Koans are designed to break the idea that an understanding of reality is necessarily gained through rational means.

⁶⁰ 'LILA was originally conceived of as a case-book in philosophy. "Does Lila have Quality?" is its central question. It was intended to parallel the ancient Rinzai Zen koans (which literally means "public cases,") and in particular, Joshu's "Mu," which asks, "Does a dog have a Buddha nature?'" (Pirsig 2002d)

When enlightened [a person] is once again aware of the mountains as genuinely present, but in a quite different register of awareness from his original, naïve one. It is not simply that he appreciates their dependent status: rather he has become capable of those 'double exposures' through which a mountain both 'dissolves' into and 'condenses' a world, and is both a unique, palpable particular, yet an expression of a 'wondrous' and 'advancing' whole.

This latter point is reflected by Heidegger who advanced the argument that Plato (and subsequent Western philosophers until Nietzsche) were in error when separating *Sein* from *Seiendes*. According to Northrop (1946, p.450), this is a critical separation because it is with Plato that Dynamic Quality (given the Platonic term 'the indeterminate dyad') was first deemed to be untrustworthy and, therefore, secondary to the static Forms:

Thereby, the aesthetic and emotional factors in man's nature, and in the nature of things, were designated as mere appearances and trivial; and the emotional and aesthetic foods which the nature of man needs for its sustenance were deprecated and ignored. The Greek and medieval Roman Catholic cultures had somewhat the same effect, when following Democritus and Plato they branded the sense world as giving spurious knowledge, and when following Plato and Aristotle they identified the undifferentiated aesthetic continuum [Dynamic Quality]... with the principle of evil: restricting trustworthy knowledge and the idea of the good and the divine to the unseen theoretic component. This had the effect also of making the cultures of East and West incompatible.

The account of Northrop's given here is a summary of an extensive argument given in *The Meeting of East and West* and, at the very least, indicates the scope of ambition that Pirsig perceives in the MOQ's ability to reconcile Eastern and Western thought. As a consequence, only a general portrait of the philosophical traditions from the East and West is offered by Pirsig resulting in a number of issues and traditions given cursory treatment or even being overlooked. For instance, there is no mention of post-modernism (which only came to the fore after Pirsig's university education) or Buddhist logical principles such as the tetralemma (typically employed as a teaching tool for the enlightenment of student monks) which was formulated by

Nagarjuna and further developed by Vasubandhu.⁶¹ The basic structure of the tetralemma is:

A is true
A is not true
A is both true and not true
A is neither true nor not true

This formulation is a tool towards understanding concepts such as the not-self (or *anatta*) doctrine that is not handled particularly well by binary logic. So, as with every static value pattern, the notion of the ‘self’ in Buddhist philosophy is not simply considered an ‘illusion’ or an entity (as claimed by some Christian understandings of the ‘soul’) with an inherent self-existence.

That is, everything exists by being related to everything else (‘dependent co-origination’ is the usual term), but does not exist by itself. There is no way to state this in a way that conforms to Aristotelian logic. Hence the need for the logic of contradictory identity. The self exists by negating itself, as Nishida puts it. So, the phrase ‘the self is an illusion’ is just as much an error in Buddhist philosophy as ‘the self exists’. The traditional Buddhist formulation is the tetralemma:

**One cannot say that the self exists.
One cannot say that the self does not exist.
One cannot say that self both exists and does not exist.
One cannot say that the self neither exists nor does not exist.**

(Roberts, 2004)

Though he doesn’t *knowingly* employ the logic of the tetralemma, Pirsig does share numerous ontological beliefs with Buddhist philosophy such as Nagarjuna’s

⁶¹ ‘I may have heard of or read of the Tetralemma of Nagarjuna back in 1950 but it didn’t stick with me, possibly because it seemed like too much of an Indian intellectualization. As I wrote to Paul Turner, Indian logic and Greek logic developed independently. When I, trained in Greek logic, first confronted Hindu philosophy, I got the very strong feeling all these Hindu savants had a screw loose somewhere. That attitude has obviously changed, but possibly the Tetralemma was forgotten because of that feeling.’ (Pirsig, 2004a)

(c.300a, p.251) perception that the unconditioned (or Dynamic) is the fundamental nature of the conditioned (or static):

In their ultimate nature things are devoid of conditionedness and contingency belongs to this level. This very truth is revealed by also saying that all things ultimately enter the indeterminate *dharma*⁶² or that within the heart of every conditioned entity (as its core, as its true essence, as its very real nature) there is the indeterminate dharma. While the one expresses the transcendence of the ultimate reality, the other speaks of its immanence. The one says that the ultimate reality is not an entity apart and wholly removed from the determinate, but is the real nature of the determinate itself.⁶³

This passage reflects the empiricist basis of both the respective philosophies of Nagarjuna and Pirsig and recalls the original deductions made by the Buddha that an understanding of reality (and the human condition therein) is better achieved from first analysing the changing perceptions that are experienced immediately *before* any postulated realm (such as Platonic Forms). There is a parallel here to Descartes's methodology⁶⁴ in obtaining definite knowledge though the Buddha was more radical in his ontology than Descartes by rejecting the notion of a determinate self.⁶⁵

⁶² The *primary* moral imperative in Pirsig's system is to follow the written or unwritten dharma.

⁶³ Cooper (2002b, p.7) notes that philosophers, such as Nagarjuna and Suzuki, who interpret Buddhist texts on nothingness are also architects of that notion.

⁶⁴ During his meditations, Descartes was struck by the sharp contrast between the certainty of mathematics and the controversial nature of philosophy, and so eventually reached the conclusion that the sciences could yield results as certain as those of mathematics. *De homine*, the earliest of a series of works concerned with employing this methodology was completed in Holland around 1633. Unfortunately, this occurred on the eve of the condemnation of Galileo so when hearing of the latter's fate (at the hands of the Inquisition), Descartes immediately suppressed the text which was consequently only published posthumously.

⁶⁵ Rahula (1959, p.55) verifies that it's accurate to think of the 'self' as being real in the 'static' or conventional sense (*sammuti-sacca*) so though it is non-existent from a Dynamic viewpoint (*svabhava-sunyata*), it's acceptable to 'use such expressions in our daily life as 'I', 'you', 'being', 'individual', etc'. According to Rahula, the Buddha taught that a clinging to the self as static and permanent is the primary cause of *dukkha* (which is usually translated as 'suffering').

'The word "I" like the word "self" is one of the trickiest words in any metaphysics. Sometimes it is an object, a human body; sometimes it is a subject, a human mind. I

However, having noted this, it is worth clarifying that Pirsig does not rely on some form of radical scepticism (such as Cartesian doubt) as a starting point for either his metaphysics or epistemology but rather sensory experience. Certainly, for Pirsig, other than the certainty of Dynamic Quality, there isn't any attempt to construct the type of certainties (such as the existence of God) that Descartes (1641) hoped to prove but rather high quality provisional assertions of a pragmatic nature. As such, he rejects the Cartesian 'mirror of nature' (i.e. the notion of the mind as a mirror that reflects a single 'objective' reality) in the formulation of his metaphysics and employs a Dewey-orientated notion where 'culture is no longer dominated by the ideal of objective cognition but by that of aesthetic enhancement... where the arts and sciences would be "the unforced flowers of life".' (Rorty, 1980, p.13)

If subjects and objects are held to be the ultimate reality then we're permitted only one construction of things - that which corresponds to the 'objective' world - and all other constructions are unreal. But if Quality or excellence is seen as the ultimate reality then it becomes possible for more than one set of truths to exist. Then one doesn't seek the absolute 'Truth.' One seeks instead the highest quality intellectual explanation of things with the knowledge that if the past is any guide to the future this explanation must be taken provisionally; as useful until something better comes along. One can then examine intellectual realities the same way he examines paintings in an art gallery, not with an effort to find out which one is the 'real' painting, but simply to enjoy and keep those that are of value. (Pirsig, 1991, p.103)

Though Pirsig draws on the pragmatist tradition of his home country to flesh out his understanding of truth and knowledge, it is specifically William James' radical empiricism and pragmatism that he draws on rather than Dewey's pragmatism. As such, James' work is examined in the next section.

believe there are number of philosophic systems, notably Ayn Rand's "Objectivism," that call the "I" or "individual" the central reality. Buddhists say it is an illusion. So do scientists. The MOQ says it is a collection of static patterns capable of apprehending Dynamic Quality.' (Pirsig, 2002h, p.533)

2.1.2. THE MOQ & WILLIAM JAMES

Pirsig's notion of Quality loosely corresponds to James' 'neutral monism' which asserts that mind and matter are different manifestations of 'pure experience'.

'Pure experience' is the name which I gave to the immediate flux of life which furnishes the material to our later reflection with its conceptual categories. Only new-born babes, or men in semi-coma from sleep, drugs, illnesses, or blows, may be assumed to have an experience pure in the literal sense of a *that* which is not yet any definite *what*, tho' ready to be all sorts of whats; full both of oneness and of manyness.⁶⁶ (James, 1912, pp.93-94)

Consequently, for James, there is no separation of subject and object (or knower and known) at the moment of immediate perception.

To be radical, an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced. For such a philosophy, *the relations that connect experiences must themselves be experienced relations and any kind of relation experienced must be accounted as 'real' as anything else in the system.* Elements may indeed be redistributed, the original placing of things getting corrected, but a real place must be found for every kind of thing experienced, whether term or relation, in the final philosophic arrangement. (James, 1912, p.42)

In examining James's definition of 'radical empiricism', it is apparent that the MOQ is an empiricist theory in the radical tradition. Nevertheless, though Pirsig and James agree that subjects and objects are abstractions derived from experience, James provides a reason for this belief absent from Pirsig's work. This is the recognition that subjects and objects are concepts that refer to the same 'piece' of 'immediate experience' though in different contexts:

If the reader will take his own experiences, he will see what I mean. Let him begin with a perceptual experience, the 'presentation,' so called, of a physical object, his actual field of vision, the room he sits in, with the book he is reading as its centre...

In one of these contexts it is your 'field of consciousness'; in another it is 'the room in which you sit,' and it enters both contexts in its wholeness, giving no pretext for being said to attach itself to consciousness by one of its parts or aspects, and to outer reality by another. (James, 1912, pp.11/13)

⁶⁶ In reference to James' definition, Pirsig (2000c) adds the following qualification: 'Pure experience is neither innate or external. That bit of information comes later.'

Though James' account is plausible in assuming that the 'field of consciousness' is just an abstraction *in another context* from the same piece of experience as 'the room in which the reader is sat', there does not appear to exist such a duplication with thought (with possibly the exception of speech). Moreover, Pirsig (2000e) argues that by referring to the same 'piece' of 'immediate experience' (as James contends) the conceptualisation process has already begun:

I think the MOQ would say there is no 'piece' of pure experience. By the time it has become a piece it is already a static pattern. To call a perceived book 'pure experience' is, I think, to slip back into a subject object metaphysical format. But, as was stated in Lila, the four categories are exhaustive but not exclusive, so that a book can be more than one category at the same time.

Furthermore, it comes as no surprise, therefore, that Pirsig also relates the MOQ quite explicitly to James' pragmatism:

The Metaphysics of Quality is a continuation of the mainstream of twentieth century American philosophy. It is a form of pragmatism, of instrumentalism, which says the test of the true is the good. It adds that this good is not a social code or some intellectualized Hegelian Absolute. It is direct everyday experience. (Pirsig, 1991, p.373)

Pirsig's particular use of pragmatic method in the context of truth is explored further in Section 2.7. and his notion of 'immediate experience' in Section 2.3. In the meantime, we will examine Northrop's work, the third important influence on Pirsig's MOQ before examining its components.

2.1.3. NORTHROP'S INFLUENCE ON PIRSIG'S WORK

There is a book by Prof. F.S.C Northrop of Yale University called *The Meeting of East and West*. It is the book that really started me on this philosophic quest that has now lasted 47 years. (Pirsig, 1995a, p.17)

Noting the complete title of the Northrop text that is mentioned by Pirsig in ZMM (*The Meeting of East and West: An Inquiry concerning Understanding*) with the

full title of Pirsig's two books (*Zen & the Art of Motorcycle Maintenance: An Inquiry concerning Values* and *Lila: An Inquiry concerning Morals*) and the specific reference (given above) to Northrop in Pirsig's SODV paper, it's not unreasonable to assume that Pirsig perceives his work as a development of Northrop's. Northrop was essentially concerned in reconciling the cultural disparities of East and West. Writing in the aftermath of World War Two as he thought cultural reconciliation through mutual study was crucial in maintaining world peace.⁶⁷ Possibly, his (Socratic) assumption that people only behave immorally because of ignorance was too idealistic though it would be churlish to deny that improved international understanding would be a hindrance for global harmony and, to be fair to Northrop, it's apparent that he was only too aware of this limitation.⁶⁸ From one perspective, the MOQ can be seen as an example of the broad philosophical framework that Northrop claimed was necessary to underpin international understanding. On the other hand, it is doubtful that this was a conscious ambition of Pirsig's though an interest was obviously awakened sufficiently in him to study Eastern philosophy in India.⁶⁹ Certainly, Northrop's *The Meeting of East and West* coloured Pirsig's subsequent writing.

⁶⁷ 'The world is in a nasty mess. It is in this sorry state because each one of its cultures, [are] operating from theoretical assumptions which are as a whole provincial and which are in part erroneous... A philosophy which meets its present duties, therefore, must root these wrongs out by designating the faulty philosophical conception of man and the universe upon which they rest and must then move on to repair the damage which is done by replacing traditional provincial and faulty doctrines with new theoretical assumptions more in accord with the nature of things as revealed by the advance of scientific knowledge and a more catholic inclusion of the insights of all peoples everywhere.' (Northrop, 1947, pp.304-05)

⁶⁸ Northrop's concerns with the reconciliation with global cultures were espoused more recently by Samuel Huntington in *The Clash of Civilizations and the Remaking of World Order* (1996, p.29): 'The fault lines between civilizations will be the battle lines of the future.'

⁶⁹ Pirsig studied philosophy at Benares Hindu University during 1950 on the recommendation of George P. Conger. The curriculum at Benares included Hiriyana's

Northrop's name for Dynamic Quality is 'the undifferentiated aesthetic continuum.' By 'continuum' he means that it goes on and on forever. By 'undifferentiated' he means that it is without conceptual distinctions. And by 'aesthetic' he means that it has quality. (Pirsig, 1995a, p.17)

The identity of Quality with reality is the fundamental postulate in the MOQ and is analogous to the role of mass and length within physics. Due to its importance in Pirsig's system it will be discussed in the subsequent section.

2.2. PIRSIG'S UNDERSTANDING OF QUALITY

As noted above Pirsig's understanding of 'Quality' is synonymous with Buddhist 'nothingness' though he avoids their established terminology (such as 'nothingness')⁷⁰ partly due to a desire to place his philosophy in more everyday terms for the Westerner. It should be kept in mind that his first text was not produced for the Zen Master or professional philosopher but the modern Western parent, teacher or commuter for which mystical sounding terms (such as 'nothingness' or 'Absolute') could possibly be difficult to relate to.

Quality is a word, of course, that every schlock⁷¹ advertiser tries to attach to his products, but it has the advantage that its ubiquitousness, everywhere, makes it not an esoteric, mystic term. It's a common, everyday word and I think one of the messages of the [MOQ] is that the good life is not to be found somewhere else, it's to be found in daily life. (Pirsig 1975)

Furthermore, Pirsig (1996) thinks 'nothingness' is additionally problematic due to its ambiguous connotation with empty space:

Traditions of Indian Philosophy (noted in LILA, pp.389-90) and Radhakrishnan's *Indian Philosophy*. (Pirsig, 2000d)

⁷⁰ Though Pirsig translates *sunyata* as 'nothingness', some Western academics employ the term 'emptiness'.

⁷¹ "Schlock" being an old Yiddish word for second-rate or unwanted merchandise that is often sold at deep discounts to get it out of a merchant's inventory.' (Pirsig, 2004c)

The ‘nothingness’ of Buddhism has nothing to do with the ‘nothingness’ of physical space. That’s one of the advantages in calling it ‘Quality’ instead of ‘nothingness.’ It reduces the confusion.

As far as the term ‘Absolute’ is concerned, Pirsig (2000g) discerns, that it ‘conveys nothing except rigidity and permanence and authoritarianism and remoteness.’

‘The Absolute’ means the same as ‘Dynamic Quality’ and the ‘nothingness’ of Buddhism, but it’s a poor term because of its connotations. To me it connotes something cold, dead, empty of content and rigid. The term, ‘Dynamic Quality,’ has opposite connotations. It suggests warmth, life, fullness and flexibility. (Pirsig, 2002h, p.272)

However, I’m not too sure that philosophers from the Eastern tradition would agree with Pirsig’s dismissal of their terms. For instance, if the ‘world as flux’ point of view is accepted (which Pirsig does), ‘nothingness’ as a term for the ultimate reality has advantages (over ‘Quality’) because it implies the ineffable nature of reality i.e. *nothing* can be absolutely and completely conceptualised. Moreover, the term ‘Absolute’ has connotations of being primary and fundamental which the term ‘Quality’ lacks.

If the narrative in ZMM is taken as an accurate account of his tenure at Montana State College from 1959, it appears that Pirsig was initially concerned with merely understanding Quality (being under legal contract to teach ‘quality’ by the college authorities) rather than formulating a new metaphysics. It was because the college had no established definition of ‘quality’ that a senior colleague⁷² encouraged Pirsig (1995a, p.11) to initiate an inquiry into the term.

⁷² Sarah J. Vinke (B.A. 1914, M.A. 1921 and, Ph.D. 1923, Wisconsin University) who was formerly chair of the English Department at Montana State College. She retired around 1961 and is the basis of the character ‘Sarah’ in ZMM. ‘Her maiden name was Sarah Jennings and in her earlier years she was sometimes called “The Divine Sarah” for the inspiring effect she had on her students.’ (Pirsig 2001a)

Sometimes people come at me when I talk about quality as though I had made the whole problem up by myself. But I was under legal contract with the state government of Montana to teach quality even though I had no clear idea what it was, and nobody else did either. Anthropologists know that every culture has strange and bizarre practices that make no sense from a practical view, but it is much easier to spot those practices in other cultures than in our own. I will point out to you that for centuries rhetoric instructors in our culture have been paid to pass and fail students on the quality of their writing without ever having any viable definition of what that quality is or even if there is such a thing at all. This is a bizarre practice that I tried to end.

At the College, it was a common mischievous practice for students to submit the same rhetoric paper to a number of tutors who, individually, often graded the paper differently. However, one tutor 'turned the tables' on their students and handed them a group of papers to grade. As he expected, the students' relative rankings of quality for each paper correlated with each other and his own. With his own inquiry into Quality in mind, Pirsig (1995a, p.12) transposed this exercise by having his '...students' judge four papers day after day until they saw that they knew what quality is'. This process involved the withholding of essay grades and, as such, focused on the students assessing each other's work solely on the basis of their quality. Pirsig justified this because this teaching method orientated towards the students' own sense of Quality rather than an imposed definition of Quality set down by him (as their teacher) or a set text. Eventually, his students creatively realised the elements that produced better essays for themselves so despite never defining Quality formally, 'they understood that when you see it you know it.'

Quality was adopted dynamically. The term itself had high Quality. I just felt 'Quality' had quality the way the students just 'felt' some student papers were better than others. I used to give the students the advice, 'First you just "see" what has quality, then you figure out why. Don't reverse the process, or you will get all confused.' It is important to restate this now to avoid the perennial literary critics' trap of thinking that the pivotal term quality is the result of some rational, analyzable process. (Pirsig, 1995b)

The withholding of grades became an effective teaching method in radically improving the students' quality of work and was enthusiastically taken up by the majority. It indicated that they could recognise Quality for themselves giving them the confidence to evaluate their own work as well as providing a goal for the various methods of writing that they were learning. As Pirsig notes, it was only the unmotivated students who desired to 'scrape by' with as little effort as possible who supported retaining the grades system. Moreover, Pirsig realised that a reliance on grading often concealed mediocre quality standards and was often typical of teaching-only colleges where the tutors (not being involved in research) had lost much of their enthusiasm and interest in their respective subjects. Pirsig (1974a, p.147) notes, that this lack of enthusiasm and creativity would subsequently be transferred to their students:

At a teaching college you teach and you teach and you teach with no time for research, no time for contemplation, no time for participation in outside affairs... Your mind grows dull and your creativity vanishes and you become an automaton saying the same dull things over and over to endless waves of innocent students who cannot understand why you are so dull, lose respect and fan this disrespect out into the community.

Nevertheless, as the static assessment regimes employed by these colleges were relatively inexpensive and undemanding in operation (compared to research orientated establishments) they remained popular in the American education system.⁷³

⁷³ Unfortunately, a recent shift in the British university system towards discrete centres of teaching and research could possibly entail a similar lowering of standards concealed through the increased use of auditing (see Strathern 2000, Gombrich 2000, Blackman 2001 and Tagg 2002) and examinations (whose grading criteria can be adjusted):

'After a large group of students (myself included) performed badly in a recent exam in Physics at Cardiff University, grades were adjusted upwards because the university admitted there were a number of failings in its conduct of the module. I have been trying to determine how the grades have been adjusted in relation to exam performance. It seems that, at least in this instance, there is little correlation between performance and grade... The school's reaction to questioning over methodology of

Pirsig's postulation that equated Quality with reality only arrived in reply to the ensuing dilemma put to him by a professor at his College: 'Does this undefined "quality" of yours exist in the things we observe?' 'Or is it subjective, existing only in the observer?'⁷⁴ Pirsig puts this in context:

My use of this term arrived in answer to a question put by professors at Montana State College, 'Is quality in the subject or in the object?' with the presumption that it had to be one or the other. (Pirsig 2000f)

As Pirsig realised in assessing his students essays, it was doubtful that the Quality experienced through an essay was *purely* subjective (residing solely in the reader's mind) or *purely* objective (residing in the essay itself).⁷⁵ As Quality did not satisfactorily correspond to being *purely* subjective or objective, Pirsig's (2002h, p.364) initial response to the dilemma was to suggest that reality was a three-termed 'blessed trinity' of ontologically equal realms of subject, object and Quality (on lines similar to Peirce's *triadic* logic of Interpreter-Object-Primary). However, Pirsig considered that a three-termed metaphysics was rather unwieldy and, as such, attempted to collapse the three terms into one. He observed that the ontological difficulties with Quality (as being subjective or objective) remained if the terms were all collapsed into the object (producing a materialist metaphysics) or the subject (producing an idealist metaphysics). In consequence, he examined the possibility of

adjustment has been one of secrecy and cover-up. First the school denied that results of the module had been adjusted statistically (saying that the sample size was too small), then (perhaps realising that the implication was that results had been treated arbitrarily) refused to discuss the matter further.' (Wainhouse, 2004, p.17)

⁷⁴ Pirsig, 1974a, p. 228.

⁷⁵ Pirsig (2002a) expands the historical background of the question in the following:

'Howard Dean and Kenneth Bryson... had set up the dominant Freshman English course called "Communications" and written the text for it called "Effective Communications" which intended to teach English as an objective science. Howard Dean, incidentally, was the one who asked during a coffee break in the faculty room whether Quality was in the subject or object.'

collapsing the subject and object terms into Quality and realised that this metaphysical move was not only viable but avoided a number of 'philosophic problems that had dogged metaphysics for centuries. It produced harmony where there had been disharmony. It had high intellectual quality.' (Pirsig, 2002h, p.364)

Pirsig's experience with his Montana College class is an example of a practical technique with which the empirical reality of value can be demonstrated to anyone in a similar situation to Pirsig and his students. Its philosophical validity relies on inductive logic – reasoning from the particular experience of quality to a general statement of its existence. In addition to this inductive argument, Pirsig (1974, pp.215-16) also employs a 'reductio ad absurdum' argument to show that Quality exists irrespective of whether, or not, it is defined:

'A thing exists', he said, 'if a world without it can't function normally. If we can show that a world without Quality functions abnormally, then we have shown that Quality exists, whether it's defined or not.' He thereupon proceeded to subtract Quality from a description of the world as we know it.

The first casualties of such a subtraction are the Arts:

If you can't distinguish between good and bad in the arts they disappear. There's no point in hanging a painting on the wall when the bare wall looks just as good. There's no point to symphonies, when scratches from the record or hum from the record player sound just as good.

Poetry would disappear, since it seldom makes sense and has no practical value. And interestingly, comedy would vanish too.

I'm not too sure that poetry 'seldom makes sense' but I presume Pirsig means logical or scientific sense in this context. Other noticeable differences would be the elimination of sports and the blandness of food and drink:

Football, baseball, games of every sort would vanish. The scores would no longer be a measurement of anything meaningful, but simply empty statistics, like the number of stones in a pile of gravel. Who would attend them? Who would play?

Next he subtracted Quality from the marketplace and predicted the changes that would take place. Since quality of flavor would be meaningless, supermarkets would carry only basic grains such as rice, cornmeal, soybeans and flour; possibly also some ungraded meat, milk for weaning infants and vitamin and mineral supplements to make up deficiencies. Alcoholic beverages, tea, coffee and tobacco would vanish. (Pirsig, 1974, p.216)

Finally, 'movies, dances, plays and parties' would disappear, clothes and transport would be purely functional and, as such, all sorts of jobs would also disappear. However, Pirsig (1974, p.216) thinks that though science and technology would also change 'pure science, mathematics, philosophy and particularly logic would be unchanged'. The reason Pirsig claims that the latter would not suffer by the elimination of quality is because he considers them to be acts of pure reason.

However, this claim as it stands, in ZMM, seems to contradict Pirsig's other illustrations in the text (such as Poincaré's use of harmony in mathematical discovery) which indicates that these sciences do employ certain values. As Sneddon (1995, p.112) notes:

I think this is an example of being correct in theory and in error by application. Even if one allows Pirsig to define 'reason' as being purely manipulative, one could still hold that he is incorrect in seeing the human activities of mathematics, philosophy and logic as being purely activities of such a manipulative faculty... I would suggest that the pursuits of logic and philosophy are similar to mathematics in being (at least) analogous to art forms, and that Pirsig's slighting of these pursuits in ZMM is unwarranted.

At least, in LILA, Pirsig is more precise about values and the natural sciences and he states that certain intellectual and artistic values (such as the value of truth and the value of creativity) should indeed be incorporated into the sciences. It is only social values (as those often promoted in religion and politics)⁷⁶ that the sciences should (rightly) seek to dismiss. 'What the Metaphysics of Quality makes clear is that it is

⁷⁶ For example, see Chapter 22 of LILA, where there is a conflict between the values of science and religion discussed in the context of creationism and the 1925 Scopes Trial.

only social values and morals, particularly church values and morals, that science is unconcerned with.' (Pirsig, 1991, p.304)

Pirsig (1974, p.216) concludes the above argument by stating that 'since the world obviously doesn't function normally when Quality is subtracted, Quality exists, whether it's defined or not. It's important to note here that the 'Quality' Pirsig refers to in this argument in ZMM would be considered in LILA as only various human orientated biological, social and intellectual value patterns as he also asserts the seeming contradiction at this point 'that the world can function without [Quality] but life would be so dull as to be hardly worth living'. I state seeming contradiction because, of course, if Quality is everything that exists (as Pirsig postulates) then the world couldn't even function abnormally if Quality was subtracted because it wouldn't exist! As such, it is only with reading ZMM and LILA in context that this 'reductio ad absurdum' argument concerning the existence of Quality can be constructed coherently. Finally, it should be remembered that even when this reconstruction is completed, the argument simply supports the claim that Quality exists, not the stronger claim that Quality is the primary reality.

Further criticism of Pirsig in the context of his particular understanding of the term 'Quality' is that in referring to it as the primary reality is that this sounds intuitively false and absurd, at least initially. As such, this has given discomfort to a number of readers of ZMM and LILA. For instance, John Beasley (2001, p.1) states that 'I feel uneasy with Pirsig's use of a capital "Q" for "Quality"'. Moreover, Beasley (2000, p.2) adds that Pirsig 'loses the value of his core term, "quality", by

equating it with too many other terms... while at the same time asserting that quality cannot be defined, and ignoring the resulting paradox.'

When Pirsig states that Quality 'cannot be defined', he is following the Buddhist and Taoist concern that part of the unconditioned (such as a conditioned mind) can't include the whole of the larger unconditioned within itself. As the latter is impossible, then a full and complete understanding of the unconditioned is, therefore, impossible. A small box can only include a bigger box if the bigger box is distorted out of recognition through crushing it or folding it flat. However, though *sunyata* is beyond understanding in this absolute sense, Pirsig's two texts are designed (similar to a Zen koan) to push the intellect towards a better understanding of the unconditioned through largely intuitive means.

Moreover, if reality is deemed to operate on the lines of dynamic influences (rather than inert particles) then a metaphysics built around this understanding should be more effective when dealing with the world. From the smallest molecules to the largest galaxies, action, movement and change are always present so it appears that Pirsig is justified - certainly, to some extent - in employing a term (familiar to Westerners and especially North American consumers) that implies this dynamism.

As Quality is deemed fundamental in the MOQ, it's standard grammatical practice to capitalise a term employed in this way and, at least, through doing so, the reader becomes aware that a change from the usual use of the term is implied; this procedure being a pragmatic convention for reasons of clarity analogous to capitalising surnames such as 'beasley' or 'smith'. Nevertheless, the capitalisation

of Quality does appear strange at first reading and is no doubt, part of the rationale for Beasley's uneasiness.

Moreover, as with any term that's employed to denote reality, there are ambiguities with 'Quality'. In the interest of clarity when referring to an entity in the sense of its 'characteristic attributes', the term 'quality' is best avoided in the MOQ and the term 'property' employed instead. Even when taken by itself, Pirsig's employment of 'Quality' extends its traditional understanding from a synonym of 'excellence' to a denotation of all reality (whether good *or* bad) producing two different applications of the term: 'Quality' as everything that exists and 'Quality' as what is best. This is not ideal especially as a seemingly negative thing (such as a disease) is retained as a pattern of Quality. Pirsig (2001d) justifies this by suggesting that 'static patterned quality can be positive or negative the way temperature or pressure or wealth or a thousand other patterned things can be can be positive or negative' and that existence *as a whole* is fundamentally valuable.

Moreover, the use of the term 'Quality' facilitates a metaphysical system that can take account of the unconditioned (for instance, in its incorporation of the unknown) and – ideally - should address Hospers (1953, pp.249-50) concern that the term 'good' is often ambiguous due to the countless circumstances that it can be applied to.

To say that the world is nothing but value is just confusing, not clarifying. Now this vagueness is removed by sorting out values according to levels of evolution. The value that holds a glass of water together is an inorganic pattern of value. The value that holds a nation together is a social pattern of value. They are completely different from each other because they are at different evolutionary levels. And they are completely different from the biological pattern that can cause the most sceptical of intellectuals to leap from a hot stove. These patterns have nothing in common except the historic evolutionary process

that created all of them. But that process is a process of value evolution. (Pirsig, 1991, pp.156-57)

Moreover, (keeping Northrop's concerns in mind that) only a broad metaphysical system that incorporate values from both the West and the East can assist human beings to understand each other's cultures. To put it another way, the world requires a common ground (of debate) to start from. Moreover, Pirsig thinks that if he were to use a term such as 'patterns of God' or 'emptiness' it would be easier for scientifically orientated minds (read positivists and physicalists) to dismiss his metaphysics.

When a scientifically oriented mind hears the term 'substance' it says, 'that's reality.' When it hears about 'oneness' and 'nothingness' it says, 'That's just empty, meaningless, metaphysical claptrap for the "Mind of God" which we have already rejected for empirical reasons. Scientifically those words have no meaning.' The term 'quality' is superior to 'oneness' and 'nothingness' because it is impossible for scientists to reject as metaphysical religious claptrap. They try, but they cannot get away with saying there are no values in the world. (Pirsig, 1995d)

When Pirsig states that scientists cannot 'get away with saying there are no values in the world', it appears that he's referring to the requirement of scientific work to be as truthful as possible:

Truth is an intellectual pattern of values. Is science unconcerned? A scientist may argue rationally that the moral question, 'Is it all right to murder your neighbor?' is not a scientific question. But can he argue that the moral question, 'Is it all right to fake your scientific data?' is not a scientific question? Can he say, as a scientist, 'The faking of scientific data is no concern of science?' If he gets tricky and tries to say that that is a moral question about science which is not a part of science, then he has committed schizophrenia. He is admitting the existence of a real world that science cannot comprehend. (Pirsig, 1991, p.304)

Certainly, then, it seems that the term 'value' is a more difficult one for the scientifically orientated mind to discount as a meaningful one. This is supported by Putnam (1981, p.128) who also holds that 'factual statements themselves, and the

practices of scientific inquiry upon which we rely to decide what is and what is not a fact, presuppose values'. This not only includes the value of truth (though, importantly, Putnam does remind us that 'truth' is not a straightforward notion) but the cognitive values of coherence, simplicity and instrumental efficacy.

These cognitive values are arbitrary considered as anything but a part of a holistic conception of human flourishing. Bereft of the old realist idea of truth as 'correspondence' and the positivist idea of justification as fixed by public 'criteria', we are left with the necessity of seeing our search for better conceptions of rationality as an intentional human activity, which, like every activity that rises above habit and the mere following of inclination or obsession, is guided by our idea of the good. (Putnam, 1981, pp.136-37)

Pirsig not only largely agrees with the above sentiments of Putnam (as will be made apparent in Section 2.8.1. and Section 2.9.), but is even more radical by reducing *all* facts in terms of values.⁷⁷ The reasoning for this unusual deduction is explored further in the next section.

2.3. PIRSIG'S UNDERSTANDING OF 'VALUE'

It is primarily with the arguments from ZMM (examined above) that Pirsig proposes that Quality is empirical though undefinable. In LILA, this is re-stated with reference to the notion of value using the example of sitting on a hot stove.

Any person of any philosophic persuasion who sits on a hot stove will verify without any intellectual argument whatsoever that he is in an undeniably low-quality situation: that the value of his predicament is negative. This low quality is not just a vague, woolly-headed, crypto-religious, metaphysical abstraction. It is an experience. It is not a judgment about an experience. It is not a description of experience. (Pirsig, 1991, p.68)

Though Pirsig illustrates this (for clarity's sake) in reference to an extreme situation, his essential point is that experience is always value-laden.

⁷⁷ As will be noted in Section 2.8.1., it appears that Putnam's notion of truth differs from Pirsig's though both philosophers certainly reject the traditional correspondence theory of truth.

This value is more immediate, more directly sensed than any ‘self’ or any ‘object’ to which it might be later assigned... It is the primary empirical reality from which such things as stoves and heat and oaths and self are later intellectually constructed. (Pirsig, 1991, p.69)

i.e. unlike a negative experience, objects such as stoves need to be learnt. As such, Pirsig equates empirical *experience* with value and rejects the traditional Western understanding of the term which ‘enters the subject-object way of thinking that there is an object that is experienced and a subject that experiences it’.

In a subject-object metaphysics, this experience is between a pre-existing object and subject, but in the MOQ, there is no pre-existing subject or object. Experience and Dynamic Quality become synonymous... Experience comes first, everything else [such as subjects and objects] comes later. This is pure empiricism, as opposed to scientific empiricism, which, with its pre-existing subjects and objects, is not really so pure. (Pirsig, 2002h, p.515)

This denial of pre-existing subjects and objects, usually understood to be *the conditions for* experience, is essential to the comprehension of the MOQ. Nothing that can be intellectually distinguished from anything else can be said to exist *prior to* or *apart from* sensory experience. This includes the senses themselves, the existence of which, strictly speaking, are ‘derived from the study of anatomy and is not primary in the actual empirical process’. (Pirsig 2004e) i.e. the theory that our senses generate our experience is a high quality idea that had to be thought of, at some point, in human history. Though unlikely, this theory is open to revision, and possibly, to use an illustration from Putnam (1981, pp.1-21), we are simply brains in vats connected to electrodes that stimulate the necessary neurons to produce our experience.

This denial of pre-existing subjects and objects as ontologically primary, then, establishes the MOQ as ‘pure empiricism’ in which everything *arises from* a pre-intellectual (and, therefore indefinable) experience. As such, it shares similarities to

Merleau-Ponty's phenomenology where the 'phenomenal field' is not an inner world or state of consciousness but experience in which the pre-scientific life of consciousness is made explicit and from which scientific operations obtain their meaning. This notion of a 'pre-intellectual experience' appears to be supported in the recent experiments by the neurologist Benjamin Libet which strongly indicates that there is always a constant half second of unconscious processing to stimuli before consciousness arises. (Blackmore, 2004, p.26)⁷⁸ The intellectual patterns generated after the 'stimuli' of experience creates the subjective 'experiencer' and the object 'experienced' which - always being in the past - are, again strictly speaking, unreal.

At the cutting edge of time, before an object can be distinguished, there must be a kind of non-intellectual awareness... You can't be aware that you've seen a tree until after you've seen the tree, and between the instant of vision and instant of awareness there must be a time lag... The tree that you are aware of intellectually, because of that small time lag, is always in the past and therefore is always unreal. Any intellectually conceived object is always in the past and therefore unreal. Reality is always the moment of vision before the intellectualization takes place. (Pirsig, 1974, p.247)

It should be noted that Libet's research is still regarded as controversial though I think that is rather due to his explanations for *why* events are subjectively antedated to the time of their first effect on the brain (so we don't usually notice this half second delay) and his belief that consciousness is a type of a 'so-far-unrecognised field'. However, as regards Libet's experiments concerning the existence of this half-second delay, Blackmore (2004, p.26) clarifies that his results are 'unequivocal' and 'are generally accepted by other scientists'.⁷⁹

⁷⁸ Dr Susan Blackmore is a visiting lecturer in psychology at the University of the West of England, Bristol and a freelance writer and lecturer on consciousness studies.

⁷⁹ 'In his book *Mærk Verden (Notice the World)* the Danish science writer Tor Nørretranders touches the same subject in a chapter called "The Half Second Delay" which is worth studying to understand the impossibilities of SOM thinking, and the MOQ's solution. He refers to the American neurologist Benjamin Libet whose

This still leaves the issue of why this pre-intellectual reality should be regarded as primarily an evaluative one. Pirsig (1974, p.311) argues for this conclusion by claiming that for human survival, 'sense data' requires constant evaluation as there is an overwhelming avalanche of facts, sights and sounds that we are exposed to every second. If all this raw data wasn't processed:

...our consciousness would be so jammed with meaningless data we couldn't think or act. So we pre-select on the basis of Quality, or, to put it [another] way, the track of Quality pre-selects what data we're going to be conscious of, and it makes this selection in such a way as to best harmonize what we are, with what we are becoming.

In reference to a new-born baby's experience, Pirsig (1991, p.137) then argues that this data is then constructed into 'subjects' and 'objects' only after more primitive notions such as 'good' & 'bad', warmth' & 'cold', 'before' and 'after' are constructed:

One can imagine how an infant in the womb acquires awareness of simple distinctions such as pressure and sound, and then at birth acquires more complex ones of light and warmth and hunger... he will soon begin to notice differences and then correlations between the differences and then repetitive patterns of the correlations. But it is not until the baby is several months old that he will understand enough about that enormously complex correlation of sensations and boundaries and desires called an object to be able to reach for one. This object will not be a primary experience. It will be a complex pattern of static values *derived* from primary experience. (Pirsig, 1991, p.137)

I think this Putnam-reminiscent assertion⁸⁰ is reasonable to hold as an infant apparently doesn't think its parents or other external objects are distinct entities from

experiments on patients with exposed brains (!) revealed some disquieting facts about what takes place when we execute such acts as bending a finger, sitting down on a tack - or on a hot stove! There is obviously a third level at work that is neither subjective nor objective.' (Skutvik, 1997)

⁸⁰ Putnam (1981, pp.201-02) details numerous categories such as space, animate, inanimate and purpose that need to be valued just to utter 'the most banal statement imaginable' i.e. 'The cat sat on the mat':

'We have the category "cat" because we regard the division of the world into *animals* and *non-animals* as significant, and we are further interested in what *species* a given animal belongs to. It is *relevant* that there is a cat on that mat and not just a *thing*. We have the category "mat" because we regard the division of inanimate things into

itself when it is born. This distinction between oneself and the world must be eventually learnt as a *valuable* one to hold. A similar example indicating the primary status of valuations in comparison to subjects and objects is given by Pirsig in reference to single celled organisms which apparently don't ever develop a notion of a self opposing an objective reality but do almost certainly hold a distinction between good and bad:

An amoeba, placed on a plate of water with a drip of dilute sulfuric acid placed nearby, will pull away from the acid (I think). If it could speak the amoeba, without knowing anything about sulfuric acid, could say, 'This environment has poor quality.' If it had a nervous system it would act in a much more complex way to overcome the poor quality of the environment. It would seek analogues, that is, images and symbols from its previous experience, to define the unpleasant nature of its new environment and thus 'understand' it. (Pirsig, 1974a, p.251)

It seems, therefore, that notions of subjects and objects only arose much later on in evolutionary history than the more primitive notions of good and bad - probably when organisms (such as human beings) developed sentience and then thought the subject-object distinction would be one of *value* to hold.

To return to Pirsig's hot stove example then, only a moment's thought needs to be given to realise that a vague impression of a bad or good 'something' does often precede the recognition of a definite object or sensation of the self. Morton (1996, p.430) discerns that the sensation of heat generated by a stove is ontologically ambiguous (as regards being 'subjective' or 'objective') because when a heat becomes intense enough it becomes a pain yet 'you don't say that the stove hurts' - it is 'your hand [that] hurts'.

***artifacts* and *non-artifacts* as significant, and we are further interested in the *purpose* and *nature* a particular artefact has. It is relevant that it is a *mat* that the cat is on and not just a *something*. We have the category "on" because we are interested in *spatial relations*... To a mind with no disposition to regard these as relevant categories, "the cat is on the mat" would be as irrational a remark as "the number of hexagonal objects**

Sometimes we say the quality is ‘in’ the object that is its source, as with heat. Sometimes we say it is in the environment, as when we say that the air smells though the smell comes from a particular flower. And sometimes we say that it is in the body of the person perceiving it, as when pain is in a person’s hand. It is hard to explain why we put qualities in different things at different times. (Morton, 1996, p.431)

This is supported by William James (1912, p.34) who also noticed that certain experiences such as pain are not categorised simply as either subject or object: ‘There is a peculiar class of experience to which... I refer here to [as] *appreciations*, which form an ambiguous sphere of being, belonging with emotion on the one hand, and having objective ‘value’ on the other, yet seeming not quite inner nor quite outer... experiences of painful objects, for example, are usually also painful experiences.’ As with Pirsig, James regards these ontological vacillations of ‘appreciations’ as a strong indication that subjects and objects are not given but are just concepts derived from experience i.e. this ambiguity...

Illustrates beautifully my central thesis that subjectivity and objectivity are affairs not of what an experience is aboriginally made of, but of its classification... In the case of our affectional experiences we have no permanent and steadfast purpose that obliges us to be consistent, so we find it easy to let them float ambiguously, sometimes classing them with our feelings, sometimes with more physical realities. (James, 1912, pp.141-42)

Furthermore, there are further problems in considering values as either subjective or objective. If value is objective, then there needs to be an explanation of why individual value judgements for the same object (such as a painting) can be so variable (between viewers) while if value is purely subjective then this would imply an uncomfortable relativity in moral and aesthetic judgements. The view that value is purely subjective is held by logical positivism which holds that evaluative

is 76” would be, uttered in the middle of a *tete-à-tete* between young lovers.’

statements are not statements of fact but an expression of feelings. In consequence, evaluative statements are seen as only recommendations or attempts to persuade. However, the position of the logical positivism appears contradictory because it seemingly can't admit a *good* reason to justify its position and, as such, is ruled out according to its own criterion. Moreover, if a value such as truth has no relation to the 'real world' then it can only be a convention without moral force; there can be no obligation to prefer true premises over false:

Abandoning moral realism is a lot more difficult than some have thought (including Mackie): if there are no real obligations there is no obligation to accept the logical implications even of true premises, nor any obligation to prefer true premises to false. If we hold it necessary to believe that rationality is right, we must believe that there are real duties, and that we are the sort of creatures that can acknowledge and fulfil them. (Clark, 2002b, p.143)

On the other hand, if the reality of value is empirically verifiable it should be accounted for by a metaphysics. This is what existing SOM metaphysics fails to do properly and is both the core of, and motivation behind Pirsig's metaphysics.

In ZMM Phaedrus claims that value is NOT objective and is NOT 'out there.' Neither is it 'in here,' whatever that means. So where is it? Pirsig tries to answer this question in a 'valuable' way. Those formally trained in mathematics and logic seldom do so, saying, in effect, that 'value' is of no value - an interesting contradiction. (Pirsig, 2001e)

To recap then, the MOQ is a claim that descriptions of the world are learnt and are secondary to the experience of value (in the sense of being better or worse). That one can not explain the workings of the human world without reference to values; that, for instance, you can't even get out of bed in the morning before deciding (consciously or unconsciously) that it is *better* to do so. Subjects and objects (such as 'stoves', 'heat', 'oaths' and 'self') are, at least initially, useful (or valuable) details. For Pirsig, these conscious analogues are identified as static patterns of *value* because (through the connection between the past and present) these patterns have a

cognitive significance that enables us to make sense of a changing (if occasionally uncomfortable) Dynamic experience. It should be noted therefore that this claim moves the MOQ out of idealist premises because Pirsig does not hold that ideas exist prior to everything else and also out of materialist premises as Pirsig holds that descriptions are dependent primarily on value, not a physical reality.

We have a culturally inherited blind spot here. Our culture teaches us to think it is the hot stove that directly causes the oaths. It teaches that the low values are a property of the person uttering the oaths. Not so. The value is... more immediate, more directly sensed than any 'self' or any 'object' to which it might be later assigned. It is... the primary empirical reality from which such things as stoves and heat and oaths and self are later intellectually constructed. (Pirsig, 1991, p.69)

Pirsig is not the only philosopher to hold that values are primary ontologically. For instance, Merleau-Ponty argues (1948, p.53) that: 'Psychology did not begin to develop until the day it gave up the distinction between mind and body, when it abandoned the two correlative methods of interior observation and physiological psychology.' Moreover, and on similar lines to Pirsig, Merleau-Ponty considers that perceptions *with meaning* are more fundamental than subjects and objects. As Dreyfus & Dreyfus (1964, p.xiii) illustrate:

If concepts could in turn be shown to grow out of perception and therefore to reflect its irreducible contingency, reason and order would be neither prior to experience nor guaranteed. This would be the final step in developing what Merleau-Ponty calls an 'ontology of sense'. All experience would be construed on the model of perceptual experience, which is never totally without meaning and whose meaning is never definitive.

I find this paragraph significant in relating Pirsig's work with Merleau-Ponty's, as 'meaning' in this context could be replaced by 'significance' or 'value'. Pirsig appears to have chosen 'value' instead of 'meaning' for his system because though 'meaning' is a good synonym for Quality at the intellectual level (as one first senses that some new experience is meaningful and then, because of that sense, try to

'understand' it within existing intellectual patterns) at the lower static levels, the term, 'meaning' is more awkward to use than 'value'. For instance, at the biological level one does not scratch an itch because it is meaningful but rather because it is biologically valuable, that is, because it feels better. Having said that, regards clarifying the MOQ, I think it would no doubt be valuable (or 'meaningful') to instigate further research into these synonyms at the intellectual and social levels.

Certainly, it remains reasonable to assume that the MOQ could be construed as an 'ontology of sense'. However, as Dreyfus & Dreyfus (1964, p.xiii) observe, this subject-object ambiguity of particular perceptions is not a feature of experience that we usually notice. As observed with Pirsig's experience with Quality and his students' essays, it was more by accident that this ambiguity was discovered and indicates the importance of systematic approaches such as Merleau-Ponty's phenomenology in understanding the steps by which subjects and objects arise from perceptions.

The first philosophical act would appear to be to return to the world of actual experience which is prior to the objective world... to rediscover phenomena, the layer of living experience through which other people and things are first given to us, the system 'Self-others-things' as it comes into being; to reawaken perception and foil its trick of allowing us to forget it as a fact. (Merleau-Ponty, 1962, p.57)

2.4. IDEALISM AND REALISM IN REGARD TO THE MOQ

Despite claiming that values are primary in an ontological sense, Pirsig still holds that external, independent objects are high quality explanations for why sense experience is generated. However, unlike traditional realism he places the qualification that realism (as with any metaphysical theory) is primarily a set of provisional ideas concerning reality.

The MOQ does not deny the traditional scientific view of reality as composed of material substance and independent of us. It says it is an extremely high quality idea. We should follow it whenever it is practical to do so. But the MOQ, like philosophic idealism, says this scientific view of reality is still an idea. If it were not an idea, then that ‘independent scientific material reality’ would not be able to change as new scientific discoveries come in. (Pirsig, 2002h, pp.503-04)

This indicates that the MOQ is a form of *pragmatic* realism rather than *naïve* realism or *critical* realism. As explained by the Buddhist philosopher, Walpola Rahula⁸¹ (1959, p.55), it's correct to think of physical objects and minds as being real in the ‘conventional’ sense (*sammuti-sacca*) especially as some order and sense of the world is beyond one's personal wishes and desires. Otherwise, as David Burton (2001, p.181) postulates, the Madhyamaka-like claim of Pirsig's could lend itself to the charge of nihilism: ‘An entirely fabricated world – with no basis at all which is real, i.e. anything more than a conceptual construction – would seem to be hardly distinguishable from a non-existent world’.

To qualify this, Burton does note that the Madhyamaka texts can be understood as stating (specifically in Nagarjuna's *Refutations of Objections*) that it is objects of knowledge *as they are perceived* that lack inherent existence; that Nagarjuna was simply taking into consideration the (Kantian) epistemological limit that it's impossible to apprehend objects (of knowledge) as they exist independently from mind (i.e. outside of perception).

The Madhyamaka philosophy of emptiness treads the Middle Way between the nihilistic claim that everything is totally a fabrication and the naïve realists' contention that one has access to the unfabricated world as it actually is...

⁸¹ Dr. Walpola Rahula (1910-1997) was one of the most revered and eminent Buddhist monks of Sri Lanka. He received his doctorate from the Sorbonne and was the Chancellor of the University of Buddhist and Pali Studies in Colombo. (Peiris, 1997) In 1964, Rahula was instrumental in establishing the first North American Theravada temple in Washington D.C. and, at Northwestern University, became the first Buddhist monk to hold a professorship in America. Since the 1960s, Rahula's text *What the Buddha Taught* has become a set textbook for numerous American universities. (Piyananda, 1997)

things in themselves are known to us – they are present to us when we apprehend them – but this knowledge is nevertheless always a negotiation between the known entity and the knower. (Burton, 2001, p.187)

An illustration of Burton's comment is provided, for instance, in Plato's *Theaetetus* which indicates that perceptions can be erroneous (i.e. reality is more than mental contents of the individual) though, no doubt, an idealist would argue that any extra-mental reality for an individual is a manifestation of God's mind.

However, this idealist type of explanation would not be acceptable to Pirsig because (as noted in Section 2.1.1.) he rejects the reference to *any* supernatural belief in an explanation of reality. As such, though he perceives Dynamic Quality as permeating all existence in a similar vein as an omni-present God, he rejects the idea that Dynamic Quality consists of a theistic personality.

Quality can be equated with God, but I don't like to do so. 'God', to most people, is a set of static intellectual and social patterns. Only true religious mystics can correctly equate God with Dynamic Quality. In the West, particularly around universities, these people are quite rare. (Pirsig, 1994)

In support of his statement that "'God", to most people, is a set of static intellectual and social patterns', Pirsig (2000a) states the following:

The idea that God can hear one's prayers can be meaningful only if one assumes that God is a social and intellectual entity. The Buddhist 'nothingness' does not listen to prayers. It has no discernible social or intellectual existence. Dynamic Quality also does not listen to prayers. It also has no discernible social or intellectual existence.⁸²

⁸² **'If one considers the *Bible* to be the center of the Christian faith then it is evident that the Christian faith is dominantly social. Attention is sometimes drawn to various mystical statements in the *Bible*, but the fact that attention has to be drawn to them indicates how rare they are. Read any book of the *Bible* and count the number of lines classifiable as mystic, the number classifiable as intellectual, and the number classifiable as social. Then read the *Tao Te Ching* or the Buddhist sutras or the *Bhagavad Gita* and do the same. Compare the results and I think you will come to the conclusion that Christianity is dominantly social and intellectual whereas these Eastern religions are dominantly mystic.'** (Pirsig, 2000a)

In opposition to Pirsig's last assertion, it should be noted that Eastern religions also have large social and ceremonial traditions.

Moreover, though the MOQ agrees with idealism that ideas logically precede objects, it does not hold that mind precedes experience but that mind is itself constructed by a primitive sense of value.

The idea that ‘something existed before we became sentient’ is an idea that did not exist before we came sentient... Although ‘common sense’ dictates that inorganic nature came first, actually ‘common sense’ which is a set of ideas, has to come first. [Furthermore] this ‘common sense’ is arrived at through a huge web of socially approved evaluations of various alternatives. The key term here is ‘evaluation,’ i.e., quality decisions. The fundamental reality is not the common sense or the objects and laws approved of by common sense but the approval itself and the quality that leads to it. (Pirsig, 2002h, p.525)

2.5. DYNAMIC QUALITY

Further problems with holding subjects and objects as primary – in an ontological sense - is implied by Bradley (1914, p.176) who argues that metaphysical words divide reality up conceptually while reality (in itself) is not divided: ‘Everything which is got out into the form of an object implies still the felt background against which the object comes.’ The ‘felt background’ Bradley is referring to seems inescapable and is why words can produce very good or accurate descriptions (of the world) though never complete ones. As a consequence, a mystic viewpoint is maintained in the MOQ – as far as possible - through its recognition of Dynamic Quality:

When A. N. Whitehead wrote that ‘mankind is driven forward by dim apprehensions of things too obscure for its existing language,’ he was writing about Dynamic Quality. Dynamic Quality is the pre-intellectual cutting edge of reality, the source of all things, completely simple and always new... It contains no pattern of fixed rewards and punishments. Its only perceived good is freedom. (Pirsig, 1991, p.119)

The latter comment relating to freedom reflects Pirsig's concern with his initial plan to write a thesis demonstrating that contemporary American culture originally derived its essential ideas regarding freedom from Native American culture⁸³ and indicates a central objective of LILA to reconcile (Dynamic) freedom with (static) order.

It's still the central internal conflict in America today. It's a fault line, a discontinuity that runs through the center of the American cultural personality. It's dominated American history from the beginning and continues to be a source of both national strength and weakness today. And as Phædrus' studies got deeper and deeper he saw that it was to this conflict between European and Indian values, between freedom and order, that his study should be directed. (Pirsig, 1991, p.49)

Though Pirsig (2002h, p.524) suggests that 'the experience of freedom and the experience of Dynamic Quality are similar' he also cautions that 'it's important not to carry that analogy too far.'

Whenever one talks about Dynamic Quality someone else can take whatever is said and make a static pattern out of it and then dialectically oppose that pattern. The best answer to the question, 'What is Dynamic Quality?' is the ancient Vedic one – 'Not this, not that.' (Pirsig, 2002h, p.527)

As such, any definition of Dynamic Quality will always be less than what it is trying to define and, essentially, an understanding of it is not achieved intellectually but through intuitive means.

When Zen teachers introduce students to nirvana (which the MOQ translates as the world of pure undifferentiated value) they do not do so with books and theses. They sit the students in a room until their clutter of intellectual knowledge is abandoned (especially value judgments!) and the pure vision of the newborn infant is regained. (Pirsig 2004f)

⁸³ **'Freedom. That was the topic that would drive home this whole understanding of Indians. Of all the topics his slips on Indians covered freedom was the most important. Of all the contributions America has made to the history of the world, the idea of freedom from a social hierarchy has been the greatest. It was fought for in the American Revolution and confirmed in the Civil War. To this day it's still the most powerful, compelling ideal holding the whole nation together.'** (Pirsig, 1991, p.48)

This type of procedure is obviously relatively strange compared to most Western methods for understanding reality though, according to Pirsig (1993) it is fairly common in East Asia and far quicker and easier method of achieving enlightenment than through a nervous breakdown – as illustrated by Pirsig’s unfortunate experience in ZMM.

Dynamic Quality is this up welling... well it isn’t anything I can tell you. This is what you’ll hear every minute from the ‘Zennies’. But you can discover it if you work on it. But you won’t discover it by conceptualisation and this is a huge problem that Zen teaching has. You see it over and over again and this is why they sound so screwy, in their koans and everything. What they’re trying to do is get you to stop conceptualising and start experiencing. (Pirsig, 1993)

In LILA, Pirsig develops the notions of (unconceptualized) freedom and (conceptualised) order into the Dynamic and static. Not only is this distinction useful in examining modern American culture, he also employs it as the fundamental division of his metaphysics. In the next section, we examine the justifications for this.

2.6.0. THE DIVISION OF QUALITY INTO THE DYNAMIC & STATIC

As noted above, static everyday experience is never totally separate from the Dynamic perception of the mystic so even a relatively down-to-earth experience can transcend existing static patterns. An example of the latter is given in LILA through Pirsig’s encounter with a tiger at a zoo⁸⁴ and the general experience of listening to a high-quality new record:

The first good, that made you want to buy the record, was Dynamic Quality. Dynamic Quality comes as sort of a surprise. What the record did was weaken for a moment your existing static patterns in such a way that the Dynamic Quality all around you shone through. It was free, without static forms. The

⁸⁴ ‘The tiger had suddenly looked at him with what seemed like surprise and had come over to the bars for a closer look. Then the illumination began to appear around the tiger’s face. That... experience associated itself with William Blake’s *Tiger! tiger! burning bright*. The eyes had blazed with what seemed to be inner light.’ (Pirsig, 1991, p.347)

second good, the kind that made you want to recommend it to a friend, even when you had lost your own enthusiasm for it, is static quality. Static quality is what you normally expect. (Pirsig, 1991, p.135)

It follows, therefore, that once an experience is repeated (as far as an experience can be repeated) it tends to become less Dynamic and more static. As such a balance must be kept (ideally) between order (as too much static quality is boring) and freedom (as too much Dynamic Quality can be chaotic).

The names, the shapes and forms we give Quality depend only partly on the Quality. They also depend partly on the a priori images we have accumulated in our memory. We constantly seek to find... analogues to our previous experiences. If we didn't we'd be unable to act. We build up our language in terms of these analogues. We build up our whole culture in terms of these analogues. (Pirsig, 1974, pp.249-50)

As this example from ZMM seems a bit obscure by stating 'the names, the shapes and forms we give Quality depend only partly on the Quality', Pirsig divided Quality between Dynamic Quality and static quality when he wrote LILA. So, for instance, the above quote would have read: 'The names, the shapes and forms we give Quality depend only partly on [Dynamic Quality]. They also depend partly on the previous [static quality patterns] we have accumulated in our memory.'

Moreover, having put forward, in ZMM, a largely speculative metaphysical division of 'Quality' into the classic (underlying reality of the scientist e.g. motorcycle mechanics) and the romantic (surface reality of the artist), Pirsig revised his metaphysical framework in LILA. Firstly, this division could be read as creating two types of Quality: classic Quality dependent on a person's knowledge and romantic Quality dependent on a person's emotions. Secondly, his research into Native American Indians and specifically their vision quests – which like Zen meditation techniques – are designed to provide mystical knowledge indicated that

mystic experience is not a scientific, 'classic' experience or simply an aesthetic, 'romantic' one.

In consequence, Pirsig thought 'Quality' was better divided metaphysically into the Dynamic and static – primarily because the aesthetic, mystic and scientific aspects of reality can be taken account of by this dichotomy and, as the Dynamic is the essential nature of the static, there remains, essentially, only one reality of Quality, not two. This division of Quality into the Dynamic and static also assists his metaphysics to explain why an experience of a record or a painting can be variable depending on the viewer.

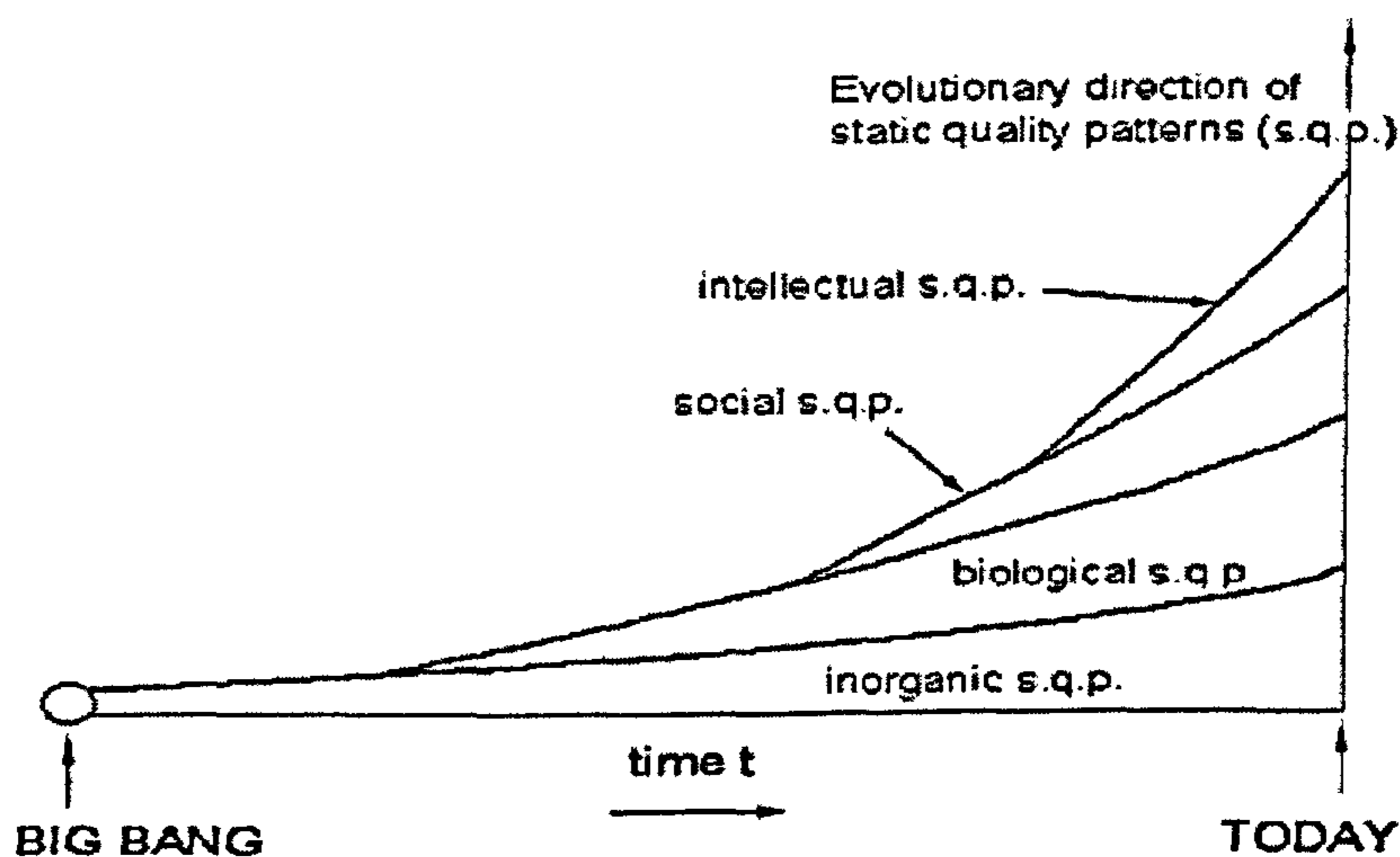
Dynamic Quality is the only part of Quality described in ZMM. It is the part of Quality about which everyone agrees. The experience of Dynamic Quality is the same for everyone, it is only the experiences and objects which are mentally associated with the experience which are different. There is no difference in the liking when the liking is independent of the things liked.

Dynamic Quality is universal. No-one says that his liking for beans is any different to someone else's liking for carrots independently of the beans and carrots involved. When the differences occur they are the result of the static patterns which vary from one person to another. (Pirsig, 1993)

Therefore, although Dynamic Quality is a constant for everyone (though I think this could never be proved), judgements concerning the same thing are often different because each person has a unique life history of different static patterns. As both Dynamic Quality and the static patterns influence final judgments this 'is why there is *some* uniformity among individual value judgments but not *complete* uniformity'. (Pirsig, 1995, p.13) This indicates that if everyone's ground of experience was equally broad, it would be expected that static discrepancies would disappear. Hence, the importance, for instance, of Northrop's project for global understanding of each culture's values as an aid to reconcile social conflict.

2.6.1. STATIC QUALITY PATTERNS

As noted in the preceding, Pirsig employs the term 'Dynamic Quality' to denote the continually changing flux of immediate reality and 'static quality' for any pattern abstracted from this flux. In view of the fact that the terms 'subjects' and 'objects' are not employed in the MOQ (to avoid the problems arising from their use), Pirsig divides conditioned reality between four distinct types of static quality patterns ordered by their cosmological evolutionary history. These refer to any repeated arrangement whether it is: inorganic (e.g. chemicals, quantum forces), biological (e.g. plants, animals), social (e.g. cities, government laws) or intellectual (e.g. thoughts, ideas).



The evolutionary order of static quality patterns

As illustrated in the above diagram, each static level is placed in a hierarchy from the inorganic (lower value or coherence) to the intellectual (higher value or coherence) i.e. the earliest levels (in cosmological history) are perceived in the MOQ as less 'valuable' than subsequent ones. As such, it should be noted that the recognition of value for each respective static quality level (and the Dynamic code of Art) is divergent, often radically. For instance, a philosophy text provides nutrition

for bookworms (i.e. biological quality), for a child, an aid to reach a toy on a high shelf (i.e. inorganic quality) and, for a philosopher, intellectual quality.

Intellectual quality measurements are logic, fittingness to empirical data, economy of statement, and what is sometimes called ‘elegance’ by mathematicians. Social quality measurements of quality, by contrast, are such things as conformity to social custom, popularity, ego satisfaction, and ‘reputation’. Biological standards are physical pain and pleasure. (Pirsig, 1998c)

Though Pirsig does not specifically refer to ‘complexity theory’, the recognition that there are Dynamic tendencies in nature that select ordered states (even when statistically these are vastly outnumbered by chaotic permutations) is a multidisciplinary research area that possibly throws light on the MOQ. In MOQ terms, the tendency towards ‘coherency’ that complexity theory indicates can be restated as a balanced drive created between static quality patterns towards Dynamic Quality.

Those involved in complexity theory include physicists, economists and biologists. On the inorganic level, this tendency towards coherency can be observed, for example, in ‘chemical clocks’ where at a particular non-equilibrium state a previously mixed-colour clock will resolve itself in a coherent state which pulses red then blue (due to chemical reactions that oscillate in a very regular and precise way over definite periods of time). The discoverer of this process, the chemist Ilya Prigogine⁸⁵ notes that it ‘wouldn’t be believed until it was observed’ (quoted from Sneddon, 1995, p.4) Other examples of non-equilibrium systems are the red spot of Jupiter, whirlpools and, as noted by biologist Stuart Kauffman (1995, p.21) *all* living systems.

⁸⁵ Prigogine was awarded the Nobel Prize in 1977 for his work in the thermodynamics of non-equilibrium systems. The usual subject matter for traditional science are inorganic

Kauffman (1995, p.8) has spent over thirty years researching complexity theory and proposes that this area indicates that the considerable order observed in biology is not accidental; that natural selection alone has not created the forms of life. 'Natural selection is important, but... the order of the biological world, I have come to believe, is not merely tinkered, but arises naturally and spontaneously because of these principles of self-organisation - laws of complexity that we are just beginning to uncover and understand.' (Kauffman, 1995, p.vii) Coherent behaviour is also widespread in groups of living organisms and, for instance, can be observed in flocks of birds and shoals of fish (in their synchronised movements when travelling) and in ant colonies.

This dynamic order appears to result from the very process of communal activity, as ants on their own, have no coherent rhythm of activity. There appear to be several indications that coherence in living organisms is an accessory to survival and hence health. It can be argued theoretically that coherence exploits energy to the maximum, it increases coordination of the components and that once reached it is a robust but flexible state. (Wilding, 2000)

Kauffman (1995, p.24) further suggests that if complexity laws are emergent (for instance, 'life is not located in the property of any single molecule') then possibly not just the general laws for biological patterns can be found but laws for social and intellectual systems. This view is supported by Highsmith (1998) who observes:

[Self-organization is a property of] ...complex adaptive systems similar to a collective 'aha,'⁸⁶ that moment of creative energy when the solution to some

systems in static equilibrium which exhibit known and predictable characteristics.

⁸⁶ In the context of playing chess, this moment of 'aha-ness' described by Highsmith is also recognised by Pirsig (1975, p.4):

'We went back over how we made chess moves and I said, "You know, I don't have any rational program for selecting the right moves. I just look at the board and all the various permutations and all of a sudden I go 'Oh!' and I grab the piece and move it.", and I'm saying that moment of Oh-ness is what I mean by Quality. There in the centre

nagging problem emerges. Self-organization arises when individual, independent agents (cells in a body, species in an ecosystem, developers in a feature team) cooperate to create emergent outcomes. An emergent outcome is a property beyond the capability of any individual agent. For example, individual neurons in the brain do not possess consciousness, but collectively the property of consciousness emerges. We tend to view this phenomena of collective emergence as accidental, or at least unruly and undependable. The study of self-organization is proving that view to be wrong.

The latter point regarding consciousness is similar to the conclusions drawn by Danah Zohar.⁸⁷ Zohar (1990, p.207) refers to testable evidence for Bose-Einstein⁸⁸ condensations⁸⁹ which she believed assisted in creating life. She explains that at the Big Bang only space-time and the vacuum⁹⁰ existed. Initially, the vacuum was just a field of potential though it eventually gave rise to particles due to energy fluctuations (or excitations) within it. According to Zohar (1991, p.208), elements of this vacuum have the same energy fluctuations as the ground state of human consciousness.⁹¹

The implication being that:

of the most rational activity is a Quality perception, and if you think about it you'll see that that moment of Oh-ness is what guides the entire development of the chess game. It's what makes it interesting; it's what you really play for, I think: not to win, but to get that Oh-ness out of discovering really good moves. High Quality moves.'

⁸⁷ Danah Zohar is a scientific author, consultant and visiting fellow at Oxford Brookes and Oxford University's Templeton College. Her texts include *The Quantum Self, Rewiring the Corporate Brain* and *SQ: Spiritual Intelligence*.

⁸⁸ S.N. Bose was a 'remarkable Indian physicist' who worked with Einstein in the 1920s. (Penrose, 1989, p.389)

⁸⁹ According to Zohar (1990, pp.63-64), a condensate is a condensed phase. For example, water has three phases - gaseous (steam), liquid (water) and solid (ice). Each state displays a greater order amongst its molecules than the last. The degree of coherence refers to the degree that a group of things (such as atoms or a football crowd or brain cells) behave as one. When a particular behaviour becomes strong enough to outweigh the effects of others, the group is said to have gone into a 'condensed phase'. She suggests that it's this condensation that gives the human mind its unitary character by organizing millions of neurone firings into a coherent whole.

⁹⁰ The American physicist David Finkelstein believes that 'A general theory of the vacuum is thus a theory of everything.' Quoted from Zohar (1991, p.207).

⁹¹ What is also termed a 'coherent Bose-Einstein condensate'. A condensate is a condensed phase. For example, water has three phases - gaseous (steam), liquid (water) and solid (ice).

The physics which gives us human consciousness is one of the basic potentialities within the quantum vacuum, the fundament of all reality. It might even give us some grounds to speculate that the vacuum itself (and hence the universe) is 'conscious' - that is, that it is poised towards a basic sense of direction, towards a further and greater ordered coherence. If we were looking for something that we could conceive of as God within the universe of the new physics, this ground state, coherent quantum vacuum might be a good place to start. (Zohar, 1990, p.208)

In reference to Whitehead's and David Bohm's suggestion that 'even elementary subatomic particles might possess rudimentary conscious properties' Zohar (1990, p.35) claims that the unity of consciousness is evidence that the collapse of a wave function is not random but tends toward (or 'value') Bose-Einstein condensates. The critical issue for the MOQ is that the existence of these Bose-Einstein condensates implies a primordial tendency (or value) of the universe towards coherency. Possibly, cosmological evolution is a result of the activity of 'rudimentary conscious properties' (Dynamic Quality?) to escape from the bondage of matter and gain freedom in an increasingly coherent cosmos.

In the MOQ, then, Dynamic Quality can be perceived as continually attracting the static patterns... 'towards a further and greater ordered coherence' (Zohar, 1990, p.208) and greater freedom though this 'greater ordered coherence' is not pre-ordained and this freedom remains undefined. This suggests a 'basic sense of direction in the unfolding universe - even, perhaps, with an evolving consciousness within the universe'. (Zohar, 1990, p.208) This contention is supported by the cosmologist, Rocky Kolb (1998, pp.37/42) who notes:

In perhaps nature's most miraculous transformation, the universe evolved the capacity to ponder and understand itself. Structure would never have

Each state displays a greater order amongst its molecules than the last. The degree of coherence refers to the degree that a group of things (such as atoms or a football crowd) behave as one. When a particular behaviour becomes strong enough to outweigh the effects of others, the group is said to have gone into a "condensed phase". (Zohar, 1991, pp.63-64)

formed if the entire universe was completely uniform. Without [quantum fluctuations to act as] primordial seeds in the universe... gravity would not have been able to shape the universe into the form we now see. A seedless universe would be a pretty boring place to live, because matter would remain perfectly uniform rather than assembling into galaxies, stars, planets, and people.

This suggests that the theory of cosmological evolution, far from undermining the idea of a spiritual universe, actually supports the idea of at least a universal tendency towards sophisticated value states without having to hold the more extreme notions of a pre-ordained design or pure chance (as suggested by Jacques Monod). Moreover, if a universal tendency towards coherency and freedom reflects the 'Good' then possibly 'Evil' (to refer to the quote at the beginning of this chapter) is the universal tendency towards chaos i.e. the breakdown of static levels to lower ones (as manifested, for instance, in the end of a civilisation or the biological death of an individual). Though Pirsig (1991, pp.151-52) asserts that the universe has a general *tendency* towards higher quality, he also notes that cosmological evolution (from the inorganic to the intellectual) has been analogous to a ratchet movement:

Sometimes a Dynamic increment goes forward but can find no latching mechanism and so fails and slips back to a previous latched position. Whole species and cultures get lost this way. Sometimes a static pattern becomes so powerful it prohibits any Dynamic moves forward. In both cases the evolutionary process is halted for a while.

This is supported by the biologist Lynn Margulis (1981) who observes that evolution is often a reticulum⁹² rather than an ever-diverging arborisation. In this context, she is referring to a relatively narrow band of reality i.e. eukaryotic cells (the cells which compose bodies of animals, fungi and plants). On the other hand, this doesn't alter the observation that, on the whole, cosmological evolution (from stars

⁹² A reticulum is a circular process i.e. like a loop. This is illustrated in evolution by dolphins which evolved from land-based creatures, which themselves, had originally evolved from sea creatures.

to people) has been in one *general* direction towards higher static levels despite the disappearance of dinosaurs, the fall of the Greek Empire, the appearance of Thatcherism etc.

Before we bring our attention to the individual static levels and their interaction, a difficulty with Pirsig's terminology that should be noted is the ambiguity of the term 'static' due to its connotations with the movement of physical objects even though this isn't the sense in which Pirsig (1994) understands the term.

According to the Metaphysics of Quality all objects, whether they move or not, are physical patterns of value and are therefore static patterns of quality. Static and Dynamic Quality are not properties of objects. Objects are a property of static quality.

A proposed modification therefore is the term 'stable' which avoids this ambiguity but retains the essential meaning of 'static' that the MOQ requires. Another difficulty is that a sharp distinction between the static levels is not portrayed explicitly in Pirsig's published work and it was only through later discussions (concerning the relationship of the MOQ to Kosko's fuzzy logic)⁹³ that the requisite clarification was provided.

I have noticed that in the [MOQ.org Discuss]⁹⁴ Archives some writers think the static levels of the MOQ are 'fuzzy' but in my opinion the fuzziness is not in the categories. Separate categories can exist simultaneously and still be sharp. For example: A cat meows. A cat is four-legged. I don't think that means that meowing and four-leggedness are fuzzy indistinct categories because you can't tell where one stops and the other begins in a single cat. (Pirsig, 2000e)

⁹³ Bart Kosko received a Ph.D. in mathematics for his theories of fuzzy logic. He provides an introduction to fuzzy (or multivalent) logic in his 1994 text *Fuzzy Thinking*. The theory of fuzzy logic was examined in relation to the MOQ because Pirsig asserts that reality is fundamentally indeterminate while Kosko asserts that the fuzziness of reality is the usual state of affairs. Kosko's (2001) ideas were developed from Russell's work on logic: 'You might point out to Mr. Pirsig that Bertrand Russell's 1923 article *Vagueness* is arguably the founding article of fuzzy logic.'

⁹⁴ The Pirsig Internet discussion group established in 1997.

This is a reasonable comment when categorising the majority of static levels (such as those composing a cat) though the issue of 'fuzziness' remains a concern with certain entities which are situated on the boundaries between two static levels. An instance of this is the self-replicating proteins (such as the prions which cause Creutzfeldt-Jakob disease) which lie on the boundary between the inorganic and the biological. Furthermore, though Pirsig recognises four distinct realms in the 'conditioned' universe, there are other metaphysical possibilities in the division of the latter (as illustrated with SOM's two realms of 'mind' and 'matter'). A higher static level that possibly could be distinguished (from the intellectual level of the MOQ) is Steiner's notion of 'spiritual perception' (which incorporates imagination, inspiration and intuition).⁹⁵ The latter are incorporated by the MOQ within its code of Art though a distinct static level of 'spiritual perception' would be advantageous in emphasising these elements. Certainly, in education, it is apparent (as no doubt seen in the philosophy of Steiner schools) that an emphasis on imagination etc. is important.

Moreover, at the other extreme of the evolutionary spectrum, there is scope for recognising a level below the inorganic. The grounds for this modification arises because quantum phenomena exhibit unusual behavioural characteristics in comparison to the macro-world; as illustrated by Barrow (1988, pp.133-37) who observes that quantum 'particles' (such as neutrons) fired at a target wall (through a diffusion screen containing two slits) create wave patterns (of alternate bands of maximum and minimum intensity) while particles at the macro level (such as golf

⁹⁵ Rudolf Steiner (1861-1925) invented the term of 'anthroposophy' (literally 'wisdom about man') to denote his teaching methods. These were developed from research into spirituality and led to practical applications in education, farming, medicine and the arts. The 200 or so worldwide Steiner schools being the most well known development of his work. (Wilson, 1964)

balls) fired in a similar manner create only two narrow bands of marks on the target wall indicating an absence of wave-like properties.⁹⁶ As in the context of Steiner's emphasis concerning 'spiritual perception', I think the argument for a distinct quantum static level in the MOQ turns on its pragmatic results. In other words, does this additional level clarify our perception of the universe or obscure it?

In the subsequent four sections, the static levels that Pirsig does recognise within his system are examined in their order of value starting with the most Dynamic (or most valuable). This is the intellectual level.

2.6.2. INTELLECTUAL QUALITY PATTERNS

The block at the top [of the above MOQ diagram] contains such static intellectual patterns as theology, science, philosophy, mathematics. The placement of the intellect in this position makes it superior to society, biology and inorganic patterns but still inferior to Dynamic Quality. (Pirsig, 1995a, p.14)

Intellectual values include truth, justice, freedom, democracy and trial by jury.

Both the subject-object metaphysics and the MOQ are patterns lying entirely within the intellectual level of evolution. Other patterns in the same level are Euclidian and Riemann geometry, the branches of scientific knowledge, and the

⁹⁶ Strictly speaking, there *are* quantum effects on the macro scale but these effects are too negligible to notice by the human eye. (See Barrow, 1988, pp.132-137) As the behaviour of 'particles' at the quantum level actually appear to be waves (when viewed under an electron microscope) it's confusing to label them as either particles or waves. I would suggest this is why certain physicists such as Heisenberg (quoted below in Pirsig, 1995a, p.5) attempted to dispense with visualised descriptions on the quantum level altogether.

'The terms don't get hold of the phenomena, but still, to some extent they do. I realized, in the process of these discussions with Bohr [in the 1920s], how desperate the situation is. On the one hand we knew that our concepts don't work, and on the other hand we have nothing except the concepts with which we could talk about what we see... I think this tension you just have to take; you can't avoid it. That was perhaps the strongest experience of these months.'

written laws. (Pirsig, 1998b)

Despite Pirsig's illustrations of the MOQ's intellectual level in the above, the term 'intellectual' is ambiguous. Firstly, there exists a confusion between the social title of being an 'intellectual,' and the intellectual level itself. So when Pirsig (1991, p.165) states that the character of Lila is 'intellectually nowhere' he isn't literally stating that this character was unconscious but rather making the observation that: 'As an intellectual, she is nowhere'. This expanded sentence would clarify that it was the social title being referred to rather than Lila's intellectual abilities per se. Another ambiguity that exists with the term is that 'intellectual' can refer to thought or be employed as referring to the notion that abstract thought itself is of primary importance. Thus, though it may be assumed that the Egyptians who preceded the Greeks were 'intellectual' in the first sense, it can be doubted that theirs was an intellectual culture in the second.

To clarify what the intellectual level refers to within the MOQ, it may assist the reader to understand that just as every biological pattern is also inorganic (in the MOQ), not all inorganic patterns are biological and just as every social level is also biological, not all biological patterns are social. So though every intellectual pattern is social, not all social patterns are intellectual. For instance, language is a *form* of social pattern (i.e. a shared meaning of sounds and characters taught by imitation) which can contain both social and/or intellectual *content* so while the 'Acknowledgements' section of this thesis is social (it being *customary* to thank people who assist with a thesis), the three chapters it contains are largely intellectual.

Handshaking, ballroom dancing, raising one's right hand to take an oath, tipping one's hat to the ladies, saying 'Gesundheit!' after a sneeze - there are trillions of social customs that have no intellectual component. Intellectuality occurs when these customs as well as biological and inorganic patterns are

designated with a sign that stands for them and these signs are manipulated independently of the patterns they stand for. 'Intellect' can then be defined very loosely as the level of independently manipulable signs. Grammar, logic and mathematics can be described as the rules of this sign manipulation. (Pirsig, 2003c)

It appears that mathematics and geometry evolved their own abstract language as they became inexpressible in the traditional written forms of spoken language. Referring to Pirsig's 'Bergsonian' understanding of intellect as symbol manipulation,⁹⁷ Turner (2003) discerns the primary application of intellect as the conceptual organisation of experience through description, explanation and prediction. In description, symbols are manipulated either verbally, by gestures or via writing or pictures.

The shared meaning involved in understanding a description seems to require social learning of a common set of symbols, or a language. Poems and stories recalling events are a form of describing experience. These descriptions seem to begin to express primary assumptions about experience and the way the world is. (Turner, 2003, p.3)

In an explanation of experience, the intellect seeks to elucidate the underlying relationships between patterns of experience deduced from these descriptions and from these explanations, the intellect can then produce predictions concerning future behaviour.

Pirsig (2003c) justifies his definition of intellectual (as 'sign manipulation') by arguing that it is the most useful definition to employ:

If one extends the term intellectual to include primitive cultures just because they are thinking about things, why stop there? How about chimpanzees? Don't they think? How about earthworms? Don't they make conscious decisions? How about bacteria responding to light and darkness? How about chemicals responding to light and darkness? Our intellectual level is broadening to a point where it is losing all its meaning. You have to cut it off somewhere, and it seems to me the greatest meaning can be given to the intellectual level if it is confined to the skilled manipulation of abstract symbols

⁹⁷ Bergson (1907, p.xii) defines consciousness as 'our conceptual and logical thought.'

that have no corresponding particular experience and which behave according to rules of their own.

This definition may appear reasonable enough though it appears a rather restrictive understanding of consciousness and one that certainly 'pushes' many previously considered elements of consciousness such as awareness or intuition into the other static levels or the Dynamic. As with the division of the static levels into four distinct realms rather than five or six, Pirsig would no doubt argue that this understanding should be considered by its pragmatic consequences. Even still, relatively little space is devoted to the issue of mind in Pirsig's formulation of the MOQ and no mention is made of the modern debate. Smart, Putnam, Davidson, Nagel, Fodor, the Churchlands, Armstrong and Dennett are all conspicuous by their absence.

Nevertheless, Pirsig's definition of consciousness is shared by Jaynes (1976, Book I) who argues that the 'voices of the Gods' described in Homer's *Odyssey* were literally heard in peoples' heads (i.e. the 'bicameral' mind) and were the precursors to modern consciousness. Jaynes' theory of how consciousness developed is certainly feasible if speculative especially as it would entail the strong likelihood of our recent ancestors (having bicameral 'multi-track' minds) being classified by modern psychiatrists as schizophrenic!⁹⁸

Jaynes', *The Origin of Consciousness in the Breakdown of the Bicameral Mind*, has impressed me, but other speculation seems valid. Solon, the Athenian lawgiver, could be the pivotal point. Maybe Solomon. Maybe the early Greek philosophers. Who knows? But if one studies the early books of the Bible or if one studies the sayings of primitive tribes today, the intellectual level is conspicuously absent. The world is ruled by Gods who follow social and biological patterns and nothing else. (Pirsig, 2003c)

⁹⁸ In fact, Jaynes' puts forward the notion that schizophrenia, religious frenzy and hypnotism are actually contemporary throwbacks to bicamerality.

Owen Barfield (1957) discerns that the Gods were also experienced in nature; for instance, thunder & lightning were understood as being a manifestation of Thor's anger. Thus, it appears that the inorganic level (as understood as a natural phenomenon) only appeared when a 'God-free' intellectual level also appeared.

Pirsig advances the argument that intellectual abilities (such as rational analysis) evolved initially as a function of society; certainly not directly from biology.

[Ideas] have their genesis in society the same way that society has its genesis in biology. Without biology there is no society. Without society there is no intellect since there would be no one to talk to anyone else and thus no language to speak and thus nothing to contain the ideas. (Pirsig, 2003b)

In the same vein as Jaynes work, this is largely speculative though supported by a number of contemporary writers such as Susan Blackmore and Robin Dunbar (who conjectures that the intellectual level developed as an adjunct to gossip!).⁹⁹

In Pirsigian terms, the social and intellectual levels were distinct before the Renaissance but the intellectual level was not yet independent. Descartes represents the break with the church, the break from theology, the break from the social level. Cartesian doubt, then, represents the independence of the intellect and the beginning of modernity. However, Pirsig laments the way SOM philosophy then 'threw the baby out with the bathwater' with the mistaken perception that intellect was 'born without parents'. He therefore corrects Descartes and instead insists that the latter can only think he exists as an individual because French culture exists. Pirsig illustrates the intellectual level's development from society in the following:

⁹⁹ 'Our much-vaunted capacity for language seems to be mainly used for exchanging information on social matters; we seem to be obsessed with gossiping about one another.' (Dunbar, 1996, pp.6-7)

Descartes' 'I think therefore I am' was a historically shattering declaration of independence of the intellectual level of evolution from the social level of evolution, but would he have said it if he had been a seventeenth century Chinese philosopher? If he had been, would anyone in seventeenth century China have listened to him and called him a brilliant thinker and recorded his name in history? If Descartes had said, 'The seventeenth century French culture exists, therefore I think, therefore I am,' he would have been correct. (Pirsig,1991, p.305)

The point of this illustration is to argue that it was Descartes western cultural conditioning that produced his lack of doubt in the ego. Whereas if he had been a Chinese philosopher (where the primacy of the ego has been doubted continuously for, at least, two thousand years) it would have been unlikely that such an idea would have seemed reasonable. Pirsig is not saying that *all* ideas have their genesis in society but only that it has a large influence on the ideas that an individual will hold.

2.6.3. SOCIAL QUALITY PATTERNS

The social patterns in the next box down include such institutions as family, church and government. They are the patterns of culture that the anthropologist and sociologist study. (Pirsig, 1995a, p.14)

For the sake of clarity, it should be noted that the social patterns, denoted by the MOQ, tend to refer only to behaviour that is learnt through imitation (such as rituals and social customs) rather than 'hard-wired' genetic behaviour (as, for instance, observed in ant colonies). As with his definition of 'intellectual', Pirsig justifies this 'cutting-off' point on the grounds that if the term 'social' is expanded too far, it becomes meaningless.

There has been a tendency to extend the meaning of 'social' down into the biological with the assertion that, for example, ants are social, but I have argued that this extends the meaning to a point where it is useless for classification. I said that even atoms can be called societies of electrons and protons. And since everything is thus social, why even have the word? (Pirsig, 2003c)

In restricting his understanding of the social only to human behaviour, Pirsig shares a similar notion of social with Bergson (1907, pp.157-58) who observes that

ant colonies are based on 'pre-ordained' instinct (while human societies are learnt) and with Dawkins'¹⁰⁰ theory of memes.

Everything that is passed from person to person [by imitation] is a meme. This includes all the words in your vocabulary, the stories you know, the skills and habits you have picked up from other others and the games you like to play. It includes the songs you sing and the rules you obey. So, for example, whenever you drive on the left (or the right!), eat curry with [real ale] or pizza [with tea], whistle the theme tune from *Neighbours* or even shake hands, you are dealing in memes. Each of these memes has evolved in its own unique way with its own history, but each of them is using your behaviour to get itself copied. (Blackmore, 1999, p.7)

As elucidated by Blackmore (1999, p.50), this is behaviour transmitted *directly* by imitation rather than genetically:

After nearly a century of research there is very little evidence of true imitation in non-human animals. Birdsong is obviously an exception and we may simply be ignorant of the underwater world of dolphin imitation. Chimpanzees and gorillas that have been brought up in human families occasionally imitate in ways that their wild counterparts do not... However, when apes and human children are given the same problems, only the children readily use imitation to solve them... Unlike any other animals, we readily imitate almost everything and anything, and seem to take pleasure in doing so. If we define memes as transmitted by imitation then we must conclude that only humans are capable of extensive memetic transmission.

If sentient beings from other worlds, dolphins or parrots were discovered to be true imitators, in the extensive human sense provided by Blackmore, then the application of social value patterns would be correspondingly expanded in the MOQ. Though Pirsig's system was designed primarily (for pragmatic reasons) to explain human behaviour, it is technically concerned with value patterns irrespective of which entities (known and unknown) that they manifest themselves through.

In one sense, copying behaviour may be understood as a form of learning. In MOQ terminology, learning is a process of static latching and if a new behaviour is

¹⁰⁰ The zoologist Richard Dawkins is an advocate for neo-Darwinism and has written numerous texts and articles on the subject. He presently holds the Charles Simonyi chair for

better than another, it is considered a Dynamic advance. Furthermore, Pirsig argues that the imitation of behaviour found so predominantly in modern humans is a development of primitive rituals and social customs that originally weren't self-consciously considered:

Cave men are usually depicted as hairy, stupid creatures who don't do much, but anthropological studies of contemporary primitive tribes suggest that stone age people were probably bound by ritual all day long. There's a ritual for washing, for putting up a house, for hunting, for eating and so on – so much so that the division between 'ritual' and 'knowledge' becomes indistinct. In cultures without books ritual seems to be a public library for teaching the young and preserving common values and information. (Pirsig, 1991, p.395)

It appears that the evolutionary purposes of social patterns of value (such as ritual and custom) were developed to preserve and improve biological patterns. To the extent that social customs and institutions reproduce, preserve, and protect the relationships within a given society for the good of that society, they may be regarded as 'social quality'.

Due to his interest in anthropology, it's apparent that the MOQ gives social value patterns the same ontological status as the intellectual, biological and inorganic realms of existence. Though the recent work in memes by Dawkins, Dennett, Blackmore etc. assists in affirming this notion, Babbie (1994, p.20) notes that there remains a general difficulty in this context: 'Ask Sociology professors around the country what their most difficult task is, and many will tell you that it involves getting students to grasp the existence, the reality, of social structure'. I think this is because social (and intellectual) patterns are ontologically subjective i.e. no physical sense, camera or recording equipment can detect a social or intellectual pattern of value. However, it does not follow that entities not composed of mass-energy (such

as social relations) are unscientific. For example, scientific work is calculated on digital computers which use ones and zeros and, though zeros lack mass or energy, it does not entail the computers' calculations are therefore unscientific. According to Pirsig (1991, p.163), this sentiment of sociology students has come from a culture still dominated by Enlightenment science which dealt with only the physical aspects of the universe and, as such, perceived subjective reality (whether social or intellectual) has relatively unimportant.

Babbie (1994, p.23) argues that social structure *is* ontologically significant by observing that individuals are *really* expected to behave in particular ways with others depending on the circumstance: 'The wrong behaviour can get you yelled at, shut out, or dead. That's how real social structure is.' An instance of the latter is causing an accident by disobeying traffic rules (such as driving on the 'wrong' side of the road). Moreover, Babbie (1994, p.69) discerns that individual identity is interwoven with social structure; that the majority of references employed in self-description (such as gender, place of residency, occupation and surname) will be shared with others. Babbie (1994, p.31) further argues that the recognition of social structures as being real is crucial because social problems often require *social* (rather than individualist-based) solutions.

Many of the problems we face as a society are embedded in the structure of social relations rather in the hearts and minds of individuals. The solutions to those problems also lie in the domain of how we structure our social relations, and the necessary remedies are not the same ones that might be effective with individuals.

An illustration of a structural social problem is institutionalised racism. Though in Europe and the United States there is legislation designed to counteract this, the

fact remains that as black people earn less than whites their children will, in general, have less opportunities. Consequently, even if racist ideas disappeared overnight, the imbalance of opportunities (for black children) would still remain. A similar example is the relatively low recruitment of blacks in the British police creating a vicious circle in which antagonism by the black community towards a misrepresentative police force results, in turn, to a low take-up from that sector of society.¹⁰¹ This does not entail that the tackling of racist ideology is futile, just that the accumulated social residue from past behaviour can, at best, lead to an underestimation of its contemporary and future impact. Though new laws of government can be introduced in a matter of a few months, the corresponding transformation in society can occur a great deal later.

When Poland returned to competitive pricing after many years, it was reported that people were at a loss to take advantage of the free market. They knew that certain stores were charging less, but they had no skills for shopping around. Their experience of stores was not about comparison shopping; it was about standing in line. (Babbie, 1994, p.34)

2.6.4. BIOLOGICAL QUALITY PATTERNS

In the third box are the biological patterns. (Pirsig, 1995a, p.14)

These include the functions, structures and processes of biology (such as reproduction and DNA) studied by geneticists, microbiologists, botanists and zoologists. Instances of biological quality include health and physical pleasure.

Though the MOQ accepts socio-biology's contention that genes are a partial explanation on human behaviour (the Harvard socio-biologist Edward O. Wilson

¹⁰¹ As one wit noted: 'The British police focus on young and old, black and white alike, especially the young and black'. As a measure to prevent this type of discrimination, British police will soon be required to make a record of the ethnic background of any person they stop and search. (BBC One News, 2002)

thinks approximately ten percent of human behaviour is genetically orientated), it possibly puts greater emphasis on the effects that the other three levels of static patterns (the inorganic, social, intellectual) and the Dynamic code of Art produce in behaviour and, as noted above, asserts that what constitutes Quality for these manifestations of reality can be enormously different.

Though the process of variation caused by genes is biologically good (by ensuring the survival of life on earth over immense time and changes), the genes in themselves are blind to intellectual and social quality. They are, as Sexton (2002, p.147) points out, neither altruistic nor selfish. Altruism and selfishness are both social patterns of value so it's a categorical error to assign these properties to genes which are biological patterns. Dawkins (1976, p.164) may have titled his book *The Selfish Gene* but even he recognises that genes have 'no conscious forethought whatsoever' and that the life of a human being is 'largely determined by culture rather than by genes.' As Sexton (2002, p.148) cynically notes, the title *The Selfish Gene* is a better selling title than *The Blind Gene*. Polkinghorne (1996, p.110) argues that a biological explanation (such as genes) is a good explanation for the appearance of blue eyes but an unlikely one for musical appreciation or the appreciation of beauty in a dangerous animal. Not only is it difficult to perceive how such behaviour aids biological survival, but the transfer of social and intellectual knowledge is not genetic (but by language and ritual). As seen in rituals such as hari-kari (social quality) or the sense of discovery (intellectual quality) of the astronauts involved in the manned missions to the moon,¹⁰² biological survival is not always the primary concern for human behaviour.

¹⁰² This is discounting the element of cold war propaganda that the moon missions provided.

Finally, though there is agreement between the MOQ and socio-biology concerning the influence of genes on behaviour, there is no explanation offered by the latter (being a materialist based theory) for why genes eventually developed from physical matter. However, Pirsig's inference that this occurred because physical matter has a propensity towards coherency (as understood by Zohar) offers socio-biology an explanation for this development without having to resort to a supernatural theory (such as creationism).

2.6.5. INORGANIC QUALITY PATTERNS

The bottom section of the MOQ diagram shows 'static inorganic patterns of value' which replace the SOM notion of 'material substance'. However, if material substance doesn't exist...

It must be asked, then why isn't everything chaotic? Why do our experiences act as if they inhere in something? If you pick up a glass of water why don't the properties of that glass go flying off in different directions? (Pirsig, 1991, p.108)

The response to this provided by Pirsig is that the atoms of the glass can be said, metaphysically, to *value* sticking together. Pirsig argues that the advantage of the term 'value', in this context, is that it avoids the implication of absolute certainty of determined consequences while, simultaneously, avoiding chaos as the only alternative. Though classical Newtonian mechanics only offer these two alternatives (as Newtonian particles operate in terms of absolute certainty), Pirsig (1991, p.108) argues that the nature of quantum particles correspond to his value construct of physical reality as they lack *absolutely* determined behaviour.

Particles ‘prefer’ to do what they do. An individual particle is not absolutely committed to one predictable behavior. What appears to be an absolute cause is just a very consistent pattern of preferences.¹⁰³

The central tenet of Pirsig’s argument turns on the issue of indeterminacy in the behaviour of quantum particles. As noted above by Heisenberg’s uncertainty principle, it’s impossible to simultaneously determine the exact position and momentum of a subatomic ‘particle’ or predict where a single particle will hit a photographic plate when being fired through a two slit screen. As Barrow (1988, p.139) emphasises, this is due to the *nature* of quantum ‘particles’ rather than any limitations of measurement.

It is important to appreciate that Heisenberg’s uncertainty is somewhat deeper. The inevitable gap in our knowledge it guarantees is not in any way a reflection of the *imperfection* of our measuring devices.

This issue is discussed further in Section 3.4.0. However, even if Pirsig’s argument is valid, there remains some doubt that his particular employment of value terminology would be acceptable to physicists as their primary focus of research could then be construed as ‘static inorganic patterns of value.’¹⁰⁴ Having said this, the physicists new Theory of Everything ‘Membrane Theory’¹⁰⁵ is strange even in

¹⁰³ The use of ‘preference’ terminology in the context of sub-atomic particles is discussed in Section 3.4.0. and Section 3.4.1.

¹⁰⁴ It’s pertinent to note that the only academic paper *Subjects, Objects, Data, Values* (1995) that an increasingly reclusive Pirsig presented in the 1990s was a paper relating the MOQ to quantum mechanics. Despite this interest, he is cautious about relating quantum mechanics and mysticism too closely:

‘I have seen popular books on this subject: *The Tao of Physics, The Dancing Wu Li Masters*, that seem rather eager to jump from an observation of similarity to a statement of identity. But be careful to follow the scientific rule of saying no more than you really know... The [physicists] may have arrived at a rejection of objectivity but that isn’t where they start from. No high school physics class begins with the statement “All the world is an illusion”... Talking mysticism in a scientific community is like talking Judaism in Damascus. They may listen to you but it goes completely against the grain of their education.’ (Pirsig, 1997b)

¹⁰⁵ ‘Membrane’ or ‘M-theory’ contends that the universe is composed of one dimension of time and ten dimensions of space (three large and seven relatively small) in which

comparison with Pirsig's ideas so possibly their open-mindedness or pragmatic bent in relation to value-based terminology is being under-estimated here.

The difference is linguistic. It doesn't make a whit of difference in the laboratory which term is used. No dials change their readings. The observed laboratory data are exactly the same. (Pirsig, 1991, p.108)

Now we have examined the four static levels that Pirsig employs in his system, in the remaining sections of this chapter, we will see how they work for him in conjunction with the notion of cosmological evolution - after first examining the difficulties and justifications which surround the latter theory.

2.7.0. COSMOLOGICAL EVOLUTION

The theory of cosmological evolution in Pirsig's system is important as it is the basis for its hierarchy of values (and, therefore, morals). Though evolutionary theory was established by the nineteenth century, Pirsig's particular perception of the universe's evolution as being primarily *an evolution of values* is possibly unique:

I didn't get the idea that the MOQ is an evolutionary theory of value patterns from anybody. It just arrived Dynamically one day the way a good chess move arrives Dynamically. There was probably some stream of consciousness, a series of intellectual jigsaw puzzle pieces that didn't fit anything and were immediately forgotten, when among them appeared this puzzle piece which fit everything. It seemed of higher quality than anything I had thought before on the subject and so became incorporated into the static pattern of the MOQ. (Pirsig, 1997d)

If the 'Big Bang' is taken as the historical beginning of the universe, it is reasonable to assume that only inorganic quality patterns (i.e. quantum forces) existed at this time. Since then, at successive stages, chemicals developed from quantum forces, plants and animals evolved from chemicals, societies evolved from

everything is a manifestation of a single membrane that is 10^{-20} mm wide and infinitely long. (BBC Two, 2002)

biological patterns, and intellect evolved from societies. 'The universe is evolving from a condition of low quality (quantum forces only, no atoms, pre-big bang) toward a higher one (birds, trees, societies and thoughts) and in a static sense (world of everyday affairs)¹⁰⁶ these two are not the same.' (Pirsig, 1997a) By *higher quality patterns*, I think Pirsig denotes the following:

1. Of having a higher harmony, whether biological (e.g. health), social (e.g. political agreement), intellectual (e.g. mathematical solutions).
2. Anything that opposes the force of entropy; that tends toward order rather than disorder.
3. The development of increasingly complex and sophisticated levels.
4. Something that increases the potentiality (or freedom) for new value patterns.
5. As noted above in the context of complexity theory 'a further and greater ordered coherence.'

Having noted the above, Pirsig tends to avoid defining high quality too precisely, as occasionally it's recognised only intuitively (as signified by the Dynamic code of Art as discussed later in this section).

However, evolutionary theory is not without its own difficulties. Firstly, it is rejected by fundamental creationists who insist on a literal reading of the bible. This suggests that the world is only around 6000 years old and, in consequence, dinosaur bones are thought of as misleading artefacts of human or Satanic provenance designed to 'test the faithful'. Nevertheless, for someone of even minor scientific orientation such an argument appears unlikely especially when seen in the light of

¹⁰⁶ The realm of static quality patterns i.e. anything that can be conceptualised.

other advice given by the Old Testament. For instance, the *Leviticus* contains the following: 'You will not wear a garment made from two kinds of fabric' (Lv 19:19); 'You will not mate your cattle with those of another kind; you will not sow two kinds of grain in your field' (i.e. hybridization of animals and crops is condemned) (Lv. 19:19); 'You will not round off your hair at the edges or trim the edges of your beard' (Lv. 19:27); and 'The man who commits adultery with his neighbour's wife will be put to death, he and the woman.' (Lv. 20:10)¹⁰⁷ This is not to suggest that all normative advice in theistic religious texts isn't without value but should be read in the context of the era in which it was written rather than as absolute and ultimate truth for all people for all time.

A more credible criticism of evolutionary theory is put forward by the 'Intelligent Design' theorists who accept the scientific evidence concerning the age of the world and of evolutionary theory. Nevertheless, they observe that there remain gaps in the fossil record and an uncertainty regarding exactly how and when life appeared. A more pertinent difficulty of theirs concerns the absence of a so-called 'missing link', as noted by Bernard Wood (an evolutionist anthropologist from George Washington University); quoted in an article by Whitfield (2002):

Anybody who thinks this isn't going to get more complex isn't learning from history... When I went to medical school in 1963, human evolution looked like a ladder. The ladder stepped from monkey to man through a progression of intermediates, each slightly less ape-like than the last.

Now human evolution looks like a bush. We have a menagerie of fossil hominids - the group containing everything thought more closely related to humans than chimps. How they are related to each other and which, if any of them, are human forebears is still debated.

¹⁰⁷ These lines of the *Leviticus* are cited from *The New Jerusalem Bible* (1985) pp.158-60.

A present absence of a known 'missing link' between *Homo erectus* (an early human race) and the ape species that preceded it (such as *Homo Habilis*) does not entail (as put forward by a number of 'Intelligent Design' theorists) the non sequitur that *Homo sapiens* exist due to a God (or an extra-terrestrial race). On the contrary, judging by Wood's comments, the more feasible conclusion is that, rather than just one prehistoric species, a number of 'missing links' will eventually be thought of as probable ancestors to *Homo sapiens*.

Despite these difficulties with evolutionary theory, there still remains convincing scientific evidence that *cosmological* evolution (from stars to people) occurred. Furthermore, Dawkins (1976, p.1) suggests that evolutionary theory has important ramifications for philosophy.

Today the theory of evolution is about as much open to doubt as the theory that the earth goes round the sun, but the full implications of Darwin's revolution have yet to be widely realized. Zoology is still a minority subject in universities, and even those who choose to study it often make their decision without appreciating its profound philosophical significance. Philosophy and the subjects known as 'humanities' are still taught almost as if Darwin had never lived. No doubt this will change in time.

In addition in taking account of Darwin's theory, a difficulty of evolutionary theory that the MOQ possibly resolves is the postulated finalism of evolutionary progress. In specific reference to Ernst Mayr¹⁰⁸ (the Professor Emeritus of zoology at Harvard), Pirsig elucidates this problem thus:

1. The proponents of teleological theories, for all their efforts, have been unable to find any mechanism (except supernatural ones) that can account for their postulated finalism. The possibility that any such mechanism can exist has

¹⁰⁸ 'Ernst Mayr is one of the greatest living authorities on evolutionary theory, and although they sometimes make hard reading, his essays on *Evolution* and the *Diversity of Life* provide an unrivalled account of many aspects of this difficult subject.' (Miller & Van Loon, 1982, p.176)

now been virtually ruled out by the findings of molecular biology. (Mayr, 1978, p.6)¹⁰⁹

2. That, in fact, mechanism is the enemy of life. The more static and unyielding the mechanisms are (such as the law of gravity), the more life works to evade them or overcome them.

One could almost define life as the organized disobedience of the law of gravity. One could show that the degree to which an organism disobeys this law is a measure of its degree of evolution. Thus, while the simple protozoa just barely get around on their cilia, earthworms manage to control their distance and direction, birds fly into the sky, and man goes all the way to the moon. (Pirsig, 1991, p.147)

3. In addition, the term 'fittest' in the phrase 'survival-of-the-fittest'¹¹⁰ can be equated with Dynamic Quality (or an 'undefined betterness').

'Survival-of-the-fittest' is one of those catch-phrases like 'mutants' or 'misfits' that sounds best when you don't ask precisely what it means. Fittest for what? Fittest for survival? That reduces to 'survival of the survivors,' which doesn't say anything. 'Survival of the fittest' is meaningful only when 'fittest' is equated with 'best,' which is to say, 'Quality.' (Pirsig, 1991, p.148)

In consideration of the latter point, Darwin (1859, p.459) asserts that 'Natural selection works solely by and for the good of each being, *all corporeal and mental endowments will tend to progress towards perfection.*'¹¹¹ As the term 'perfection' is a synonym for Dynamic Quality and as an improvement of a species cannot be pre-determined, it appears plausible that Pirsig is correct in asserting that the terms 'fittest' and 'Quality' can be interchanged.

¹⁰⁹ This quote is also employed by Pirsig, 1991, p.146.

¹¹⁰ The phrase 'survival of the fittest' was coined by Herbert Spencer in 1852, seven years before the publication of Darwin's *The Origin of Species*.

¹¹¹ My italics.

If you take it step by step through molecules and viruses and cells and the Darwinian process and then anthropological evolution and historical evolution and academic evolution, I think you can see how it happens with pure preference and nothing more. It's only when you drop out all the stuff in the middle that it looks difficult. The MOQ, as I understand it, does not contradict Darwinian evolution in any way, it only expands it. (Pirsig, 2000e)

Cooper (1996, pp.368-69) observes that the ideas of Darwinism also influenced Indian philosophy. For instance, Radhakrishnan argues that evolutionary theory refutes a materialistic view of the cosmos and he notes the latter shares socio-biology's difficulty in explaining the appearance of life from inorganic matter. Materialism... 'at best shows why some events occur given that others have occurred: it cannot, as a philosophy should, show why the whole process has to be as it is.' (Cooper, 1996, p.368) This limitation of explanation provided by materialism is also recognised by Pirsig (1991, p.144):

Right from the beginning, substance-caused evolution has always had a puzzling aspect that it has never been able to eliminate. It goes into many volumes about how the fittest survive but never once answers the question of why... Why does any life survive? It's illogical. It's self-contradictory that life should survive. If life is strictly a result of the physical and chemical forces of nature then why is life opposed to these same forces in its struggle to survive?

As mechanistic stories fail to address the issue concerning the appearance of life, Radhakrishnan argues that evolutionary theory requires supplementing with a teleological account of 'the reason or purpose behind it.' Pirsig agrees with Radhakrishnan's criticism regarding materialism but disagrees that evolutionary theory must be supplemented by a teleological account (supernatural or otherwise).

The MOQ does not say that intellectual patterns guide the supremacy of life over inanimate nature. On the contrary the MOQ says that at the time life triumphed over inanimate nature there were no intellectual patterns. (Pirsig 2004b)

As noted above, Pirsig suggests instead that evolution occurred due to 'spur of the moment decisions' based on Dynamic Quality i.e. undefined betterness.

Dynamic Quality is not structured and yet it is not chaotic. It is value that cannot be contained by static patterns. What the substance-centered evolutionists were showing with their absence of final 'mechanisms' or 'programs' was not an air-tight case for the biological goallessness of life. What they were unintentionally showing was [that]... the patterns of life are constantly evolving in response to something 'better' than that which these [physical] laws have to offer. (Pirsig, 1991, p.146)

In other words, there is a tendency (what Popper would term a propensity) in the universe for life to improve its situation where possible but this improvement is not pre-determined by physical laws nor consciously directed by a God towards a pre-set defined purpose or end.

Is there progress in evolution? Gould (1996a)¹¹² famously argues there is not, but I think he has a concept of progress that I do not share. He is right to rule out progress *towards* anything. This is the whole point of Darwin's inspiration – and what makes his theory so beautiful - there is no master plan, no end point, and no designer. But of course there is progress in the sense that we now live in a complex world full of creatures of all kinds and a few billion years ago there was only a primeval soup. Although there is no generally accepted measure of this complexity, there is no doubt that the variety of organisms, and their structural and behavioral complexity have all increased. (Blackmore, 1999, p.13)

Finally, an issue not touched upon by Pirsig, is that the synthesis of Darwinism and genetic theory¹¹³ is actually a good example of the relationship between harmony and the static/Dynamic division employed in the MOQ. For instance, Miller & Van

¹¹² Blackmore cites this reference as S.J. Gould's *Life's Grandeur* published by Cape, London.

¹¹³ It's worth being aware that Darwin (1859, pp.178-82) thought that the variation in species was caused by a combination of environmental factors (e.g. bats losing their sight from living in caves) and innate differences (i.e. genetic mutation) *rather* than innate differences alone. 'Darwin, for example, assumed that the use or disuse of a structure by one generation would be reflected in the next generation, and so did many evolutionists until late in the [nineteenth] century, when the German biologist August Weismann demonstrated the impossibility, or at least the improbability, of the inheritance of acquired characteristics.' (Mayr, 1978, p.1)

Unfortunately, Darwin wasn't aware of the 1860s work of Mendel who suggested that variation was caused *solely* by the genetic characteristics underlying the external appearance (or phenotype) of an organism. In consequence, Darwinism and genetic theory weren't integrated until the 1930s with the work of geneticists such as Fisher and Haldane.

Loon (1982, p.163) observe an (unexpected) absence of a direct correlation between genes and specific characteristics (such as blue eyes) in the phenotype. The efficacy of a gene, therefore, depends on the extent to which it relates 'and improves the expression' of other genes: 'The substitution of a brand new gene depends to a large extent on how the newcomer harmonizes with the pre-existing [biological value] pattern.' (Miller & Van Loon, 1982, p.163) Moreover, Miller & Van Loon (1982, p.169) observe that a species is in a Dynamic balance between chaos (i.e. being too susceptible to the possibility of further change through mutation e.g. cancer) and the static (i.e. the tendency to preserve and perpetuate an existing standard pattern or form e.g. short necked giraffes):

Both tendencies are indispensable for the survival of life on earth. Organisms which promiscuously dispersed the hard-won bequests of their predecessors, would soon lose their adaptive grip. On the other hand, organisms which slavishly reproduced the structure of their ancestors would soon lose their competitive place in a changing world. It is natural selection which strikes the balance between obstinate conservatism and careless mutability.

2.7.1. THE MORAL FRAMEWORK DERIVED FROM EVOLUTION

Though each static level has emerged from a preceding level, Pirsig advances the argument that each level manifests distinctive behaviour i.e. there are physical laws such as gravity (inorganic), the laws of the jungle (biology), co-operation between human beings (society) and the ideas of freedom and rights (intellect).

In the Metaphysics of Quality there's the morality called the 'laws of nature,' by which inorganic patterns triumph over chaos; there is a morality called the 'law of the jungle' where biology triumphs over the inorganic forces of starvation and death; there's a morality where social patterns triumph over biology, 'the law;' and there is an intellectual morality, which is still struggling in its attempts to control society. Each of these sets of moral codes is no more related to the other than novels are to flip-flops. (Pirsig, 1991, p.162)

In consequence, the different levels often clash¹¹⁴ e.g. adultery (a biological good for transmitting one's genes over a wider area) v. family stability (a social good for a stable environment to raise children).

With static patterns of value divided into four systems, conventional moral patterns¹¹⁵ have almost nothing to do with inorganic or biological nature. These moral patterns are superimposed upon inorganic nature the way novels are superimposed upon computers. They are more commonly opposed to biological patterns than they are supportive of them. And that is the key to the whole thing. (Pirsig, 1991, p.162)

When Pirsig states 'that is the key to the whole thing' he is referring to the opposing nature (more often than not) of the static levels as the fundamental grounding of moral organization in the MOQ. Consequently, a *moral* action is one where a higher level takes precedence over the lower one (e.g. where the social takes precedence over the inorganic) while an *immoral* action is one where a lower evolutionary level of reality takes precedence over a higher one (e.g. where the biological level takes precedence over the intellectual). Static patterns such as sex and drugs have biological quality but if they're not controlled they can undermine social relationships such as the family and wider community. For instance, if every adult member of a country became alcoholic, it seems highly likely that every social network (from transport, power to food) would eventually fail (and society would slip back to a previous latched position on the evolutionary scale). It is therefore seen that by placing the four distinct evolutionary stages in a hierarchy of

¹¹⁴ With each other and the Dynamic 'Code of Art'.

¹¹⁵ Conventional moral patterns are termed the social-biological code by Pirsig (1991, p.163):

'What is today conventionally called "morality" covers only one of these sets of moral codes, the social-biological code. In a subject-object metaphysics this single social-biological code is considered to be a minor, "subjective," physically non-existent part of the universe. But in the Metaphysics of Quality all these sets of morals, plus another Dynamic morality are not only real, they are the whole thing.'

cosmological evolution, a code of ethics is generated, arguably a rational one. In consequence, Pirsig advances the argument that the MOQ can avoid the cultural relativity that is inherent in many ethical beliefs by dealing with value conflicts on a rational basis (comparable to Kant's 'categorical imperative').¹¹⁶

This opposition of levels of static patterns offers a good explanation of why science in the past has rejected what it has called 'values.' The 'values' it has rejected are static social prejudices and static biological emotions. When social patterns such as religion are mixed in with the scientific method, and when biological emotions are mixed in with the scientific method these 'values' are properly considered a source of corruption of the scientific method. Science, it is said should be 'value free', and if these were the only kind of values the statement would be true.

However, the Metaphysics of Quality observe that these two kinds of values [i.e. the biological and the social] are lower on the evolutionary ladder than the intellectual pattern of science. Science rejects them to set free its own higher intellectual pattern [of truth]. The Metaphysics of Quality calls this a correct moral judgment by science. (Pirsig, 1995a, p.15)

In addition to the four static moral codes, Pirsig incorporates a 'Dynamic Code' (or 'Code of Art') to complete his metaphysical 'map' of reality. The 'Dynamic Code' refers to indefinable high quality experiences that illuminate the world and our place in it – experiences which give a Dynamic sense of wonder as illustrated by Kant's notion of the sublime (in the *Critique of Judgement*) e.g. the harmony of forms and geometric elegance that a mathematician employs or an artist 'reflects' when producing art. However, in the ethical realm, Pirsig (1997a) warns that a resort to the Dynamic as grounds for behaviour requires serious consideration:

For a person who is not yet enlightened the way to avoid... confusion may be to ask of each desire, 'Is this a common ego desire? Is this a common sensual desire?' If not, then maybe the quality which stimulates the desire is Dynamic.

¹¹⁶ In *The Critique of Pure Reason* (1781), Kant maintained that rationality can find an objective basis for moral ideas. He perceived that any 'praiseworthy person' would act in accordance with a universal moral command termed as the 'categorical imperative'. The MOQ has a wider remit than the 'categorical imperative' in that it also applies to aesthetics.

If it is a common sensual or egotistic desire, however, then one should wait a few days and see if the desire weakens or goes away. Sensuality and egotism have a way of waxing and waning in the manner of the emotions, whereas Dynamic Quality tends to be steady and patient, in the manner of Gandhi's favorite Christian hymn, *Lead Kindly Light*.¹¹⁷

Unfortunately, it is implausible that the MOQ would restrain a twenty-first century Charles Manson engaging in various atrocities ('I just felt kidnapping Professor Robinson¹¹⁸ had Dynamic Quality') though, reflecting the Buddhist emphasis on meditation, the MOQ at least provides a rational person an imperative to pause for thought. Another limitation of Pirsig's value hierarchy is that it only distinguishes between values on five distinct levels (i.e. the four static levels and the Dynamic code of Art) and, as such, is not particularly useful with the less obvious dilemmas on the same static level e.g. determining the best Shakespeare play. A further difficulty is the evaluation of ideas with long-term consequences (for instance, nuclear fusion or democracy) in terms of whether they work or not though, to be fair, any system will be limited in this context.

Finally, it should be clarified that as evolution is an ongoing process that what is identified as valuable at point x in time may become less valuable (or even evil) at a later date, point y . This includes the MOQ itself. Moreover, though the MOQ uses a scientific evolutionary framework to assist in the solution of moral dilemmas, it notes

¹¹⁷ Pirsig (1997a) further notes that the static-Dynamic dichotomy was developed in LILA to take into account behaviour that 'follows' the code of Art (such Native American vision quests) but isn't easily categorised into either the Classic (rational) or Romantic (aesthetic) divisions employed in ZMM.

'From your own reading of *Zen in the Art of Archery* you know that the "It" of the Zen master in no way resembles... egotistic self-satisfaction. The main reason for dropping the Classic-Romantic dichotomy of ZMM and setting up the static-Dynamic dichotomy of LILA, was to help avoid this confusion.'

¹¹⁸ Howard Robinson was the Head of Department of Philosophy at Liverpool in the 1990s and was, indeed, kidnapped during his tenure.

that scientific ideas are susceptible to change; that what's deemed of intellectual value presently is provisional. In other words, as a pragmatist system, the MOQ implies its own eventual replacement by a superior system of thought:

The pencil is mightier than the pen.

That's the whole thing: to obtain static and Dynamic Quality simultaneously. If you don't have the static patterns of scientific knowledge to build upon you're back with the cave man. But if you don't have the freedom to change those patterns you're blocked from any further growth. (Pirsig, 1991, p.226)

2.8.0. THE MOQ & PRAGMATIC TRUTH

As noted in the preceding section and Section 2.1.2., Pirsig relates the MOQ quite explicitly to American pragmatism. It comes as no surprise, therefore, that he shares a similar notion of truth to William James i.e.

[Truth is] a property of certain of our ideas. It means their agreement, as falsity means their disagreement, with reality. Pragmatism asks its usual question. 'Grant an idea or belief to be true,' it says, 'what concrete difference will its being true make in any one's actual life? What experiences [may] be different from those which would obtain if the belief were false? How will the truth be realized? What, in short, is the truth's cash-value in experiential terms?' The moment pragmatism asks this question, it sees the answer: *True ideas are those that we can assimilate, validate, corroborate, and verify. False ideas are those that we cannot.* (James, 1907, pp.v/vi)

In other words, a belief is considered true when it works well in practice (that it has 'workability' to use James' words). Therefore, in pragmatism, the idea that 'the world is round' is true and the idea that 'the world is flat' is false because the difference the two ideas entail in practical terms. Conversely, despite its present improbability, if the idea that the world is flat (or a section of an infinitely long strip, as perceived by M-theory) became more useful, the idea that 'the world is round' will then become false.

Truth and falsehood as commonly understood belong to those sharply defined ideas which claim a completely fixed nature of their own, one standing in solid isolation on this side, the other on that, without any community between

them. Against that view it must be pointed out, that truth is not like stamped coin that is issued ready from the mint and so can be taken up and used. (Hegel, 1807, p.98)

Pragmatic truth, therefore, is understood not as an absolute (as illustrated by Hegel's stamped coin) but a *process* that 'happens to an idea':

The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity is in fact an event, a process, the process namely of its verifying itself, its *verification*. Its validity is the process of its *validation*. (James, 1907, p.vi)

Nevertheless, the pragmatic theory of truth is criticised by Hospers (1953, pp.46-47) who advances the argument that in a court of law, it is *correspondence* to the facts that a judge 'no doubt' requires rather than their 'usefulness'. On the other hand, it can be argued that a court case (and subsequent appeal/s) is exactly the form of pragmatic process in which one verdict (rather than another) is *realised* as true. This is illustrated by Dewey's campaigning (with like-minded reforming lawyers) in revising the American legal system's reliance on 'absolutes' and 'ultimates' in order to establish a practical and less biased system. Lancaster (1959, p.358) observes, that in the early part of the twentieth century, American law had become perceived as:

Something always there to be found by judges, not to be *made* by ordinary men. In practice this meant that the efforts of legislators to provide by statutes answers to concrete problems were more likely than not to encounter in the courts, where they were regularly tested, prejudiced arbiters. The bias of the legal tradition was against the wisdom of ordinary men and strongly in favour of the validity of the 'higher law' as declared by the judicial priesthood.

Typical illustrations of this prejudice were discerned in the Supreme Court's reversal of Congress legislation to restrict child labour, enforce maximum working hours for bakers and the provision of a minimum wage for women. As these controversial decisions mounted up, Lancaster (1959, pp.360-61) relates that 'it was hard to maintain the fiction that the judges were only 'finding' and not making law'.

Eventually, a movement for pragmatism as an established 'philosophy of law' in which real human conditions and issues (based on evidence from scholars and experts) was given priority over precedents (which were still used, nonetheless) did eventually gain influence and, as such, Dewey lived to see his own works being quoted favourably in the Supreme Court.

Theoretically, the correspondence theory of truth has difficulties with contrary-to-fact hypothetical statements (for example, 'if the United States had joined the Second World War in 1939, the war would have ended earlier') in that there are no extra-mental 'facts' for such a statement to relate to. It has similar difficulties with statements in logic and mathematics as these can also be seemingly true or false yet lack any correspondence with a non-mental reality. The advantage of the pragmatic (and coherence) versions of truth, in this respect, is that non-mental facts aren't required for correspondence. In addition, there is an epistemological objection to the correspondence theory in that it seemingly leads into uncertainty in achieving conclusive truth because the required correspondence between our thoughts and external reality (in itself) is not ascertainable. As noted above, by Nagarjuna (and later by Berkeley, in his argument against the representational theory of the mind) it is apparent that we cannot step outside our own minds to compare our thoughts with a mind-independent reality. Yet, for the correspondence theory of truth, this would seem necessary in order to obtain conclusive knowledge. We would have to access reality as it is in itself, independently of our cognition of it, and determine whether our thoughts corresponded to it. As this is impossible, since our access to the world is mediated by our mind, knowledge (in this sense) is also impossible. (David, 2002)

A coherence theory of truth states that the truth of any (true) proposition consists in its coherence with a number of specified set of propositions. The first difficulty with the theory is the lack of agreement concerning the specified set of propositions that should be recognised as *the* definitive benchmark for coherence. For instance, some coherence theorists hold that this specified set of propositions is the largest consistent set of propositions currently believed by actual people, some (such as Putnam) contend it is the propositions which will be believed when human beings (with finite cognitive capacities) have reached a certain limit of inquiry while others contend it is the propositions which would be accepted by an omniscient being. Other than this disagreement concerning a definitive benchmark, coherence theory also fails as beliefs usually have a basis in non-mental facts during a certain point in their historical construction and would appear to imply that the truth of a given proposition is more than just coherence with a set of other propositions.

In addition to the correspondence and coherence theories of truth, is Identity Theory established to incorporate Frege's 1918 criticism¹¹⁹ of correspondence theory. However, as Identity Theory conflates a truth-bearer (e.g. a proposition) with an identical truth-maker (e.g. a fact) it is an absurd theory to hold for any philosopher who maintains that truth-bearers are sentences and truth-makers are non-linguistic

¹¹⁹ 'A correspondence, moreover, can only be perfect if the corresponding things coincide and so are just not different things... It would only be possible to compare an idea with a thing if the thing were an idea too. And then, if the first did correspond perfectly with the second, they would coincide. But this is not at all what people intend when they define truth as the correspondence of an idea with something real. For in this case it is essential precisely that the reality shall be distinct from the idea. But then there can be no complete correspondence, no complete truth. So nothing at all would be true; for what is only half true is untrue. Truth does not admit of more and less.' (Frege, 1918, p.3)

The latter two propositions would be denied by a fuzzy logician such as Bart Kosko (1994).

states of affairs. As such, it has received scant academic interest though, at one stage, Bertrand Russell adopted a view of truth judgments which regarded their constituents as the very things the judgments are concerned with rather than as an intermediary between the mind and the world. Unfortunately, this involved a kind of realism in relation to judgments, and since both true and false judgments are equally composed of 'real' constituents, truth can not be distinguished from falsehood by simply being identical with reality. (Candlish, 2003) Essentially, it appears that the problem with Identity Theory, as with the Correspondence and Coherence theories, is a failure to satisfactorily bridge the epistemic gap between mind and non-mental reality.

As noted above, Pirsig employs the notion of pragmatic truth which appears to avoid this epistemological difficulty.

One doesn't seek the absolute 'Truth.' One seeks instead the highest quality intellectual explanation of things with the knowledge that if the past is any guide to the future this explanation must be taken provisionally; as useful until something better comes along. (Pirsig, 1991, p.103)

It appears, therefore, that truths for the pragmatist are statements built upon an edifice of cultural history over millennia: science evolved from philosophy which itself evolved from religion and mythology. When context changes as in Kuhn's¹²⁰ paradigm shifts, truth correspondingly alters. Truths change - they evolve. On what basis can they evolve? As a reply of more 'truth-ness' lacks any sense, it is

¹²⁰ Thomas Kuhn received his Ph.D. in physics from Harvard in 1949 and remained there as an assistant professor of general education and history of science until 1956 when accepting a post at the University of California (Berkeley). In 1961, Kuhn became a full professor of history of science and, in 1964, was named the M. Taylor Pyne Professor of Philosophy and History of Science at Princeton University. In 1979, he was appointed the professor of philosophy and history of science at the Massachusetts Institute of Technology (MIT), being named the Laurence S. Rockefeller Professor of Philosophy at MIT in 1983. Of the five books and countless articles he published, Kuhn's most renowned work is *The Structure of Scientific Revolutions* (1962). (Van Gelder, 1996)

reasonable to hold that the basis for their change is that the new truths are of more *value* than the previous ones (as illustrated by Dewey's influence on the American legal system). Not only does this indicate a relationship between truth and value, it also suggests that truth (though being one of the highest intellectual ideals) is secondary (and, therefore, *relative*) to the Good.

From James' perspective, you will see a will (other than the will to truth) at work within human knowing, a will to good. The will to truth is subordinate to the will of good. Truth is a species of good, the good in the area of belief, that which it is good to believe. Hence, you should not think of the pursuit of truth as a detached, value-free exercise but as an intellectual effort directed and permeated by value concerns. (Di Santo & Steele, 1990, p.170)

Furthermore, because values are graded by an absolute framework in the MOQ, the notion of truth in Pirsig's system, avoids the relativity of truth (especially between intellectual and cultural 'truths') suffered by post-modernism and, therefore, its nihilist consequences. Though there is no single objective reality that truth corresponds to in the MOQ, at the same time, there is a moral grading of the competing truths that do exist. 'There are many sets of intellectual reality in existence and we can perceive some to have more quality than others.' (Pirsig, 1991, p.103)

2.8.1. UTILISING COSMOLOGICAL EVOLUTION IN PRAGMATISM

Instrumentalism corresponds to James' 'pragmatic method' which asks:

What difference would it practically make to anyone if this notion rather than that notion were true? If no practical difference whatever can be traced, then the alternatives mean practically the same thing, and all dispute is idle. Whenever a dispute is serious, we ought to be able to show some practical difference that must follow from one side or the other's being right. (James, 1907, pp.45-46)

As noted in Section 2.1.2. James (1907, p.xii) asserts that the 'pragmatist theory of truth is a step of first-rate importance in making radical empiricism prevail.' He perceives his two systems of 'pragmatism' and 'radical empiricism' as being connected, essentially through a recognition that subjects and objects are concepts derived from experience and that it is this experience which is the adjudicator of the truthfulness of an idea, and, therefore, its usefulness (or 'workability'). Pirsig (1991, p.372) advances the claim that the MOQ strengthens this combination:

What the Metaphysics of Quality adds to James's pragmatism and his radical empiricism is the idea that the primal reality from which subjects and objects spring is value. By doing so it seems to unite pragmatism and radical empiricism into a single fabric. Value, the pragmatic test of truth, is also the primary empirical experience.

Though it is doubtful that the MOQ is required to unite 'pragmatism' and 'radical empiricism' into a single fabric (as these two philosophies were clearly constructed by James to complement each other), there is possibly a certain weight to Pirsig's claim. As noted in the previous sections, cosmological evolution provides a *rational* (if broad) moral grading of values from inorganic patterns through to biology, society and finally to intellect. Without this metaphysical 'reference' at hand, a radical empiricist (such as James) will tend to opt for a traditional ontology; namely 'subjects' and 'objects' which lack an absence of an implicit evolutionary relationship. However, the underlying assumption of SOM that reality is composed of static, independent things is contradictory to James' assertion that reality is a dynamic connected flux and, as such, possibly leads to a difficulty with his form of pragmatism. This is noted by Pirsig (1991, pp.371/72), in reference to the Holocaust:

The idea that satisfaction alone is the test of anything is very dangerous... The Holocaust produced a satisfaction among Nazis. That was quality for them. They considered it to be practical. But it was a quality dictated by low level static social and biological patterns whose overall purpose was to retard the evolution of truth and Dynamic Quality. James would probably have been

horrified to find that Nazis could use his pragmatism just as freely as anyone else, but Phædrus didn't see anything that would prevent it.

This criticism is supported by Popkin & Stroll (1956, p.271) who criticise the pragmatism of William James as it lacks an explicit moral framework to judge behaviour by:

It is not possible to make an evaluation, to say something works or not, unless one has some criteria to appeal to. Such criteria the pragmatist denies us. What is meant by 'what works'? Are we to be concerned for what works for us as individuals, for our society, for our humanity, or what? We need some moral framework, some idea of what is good and bad, desirable and undesirable, some notion of aims and objectives, in order to know what it might mean to say that something works or does not.

Because it avoids the notions of subjects and objects, Pirsig advances the argument that the MOQ can provide, to a certain extent, the rational framework that Popkin & Stroll consider pragmatism requires by instead, employing four static value codes (the inorganic-chaotic, biological-inorganic, social-biological and intellectual-social) that are graduated morally (from the inorganic to intellectual) via cosmological evolution. Therefore, to return to the example of the Holocaust with the MOQ, it's apparent that the National Socialist party of Hitler's was a social institution at a higher level of evolution than the biological patterns it was seeking to destroy. However, Pirsig's system further indicates that these actions of Hitler's party were immoral because the destruction of biological patterns (i.e. of six million plus people) also entailed the destruction of their intellectual patterns which take absolute moral precedence over any social pattern (such as a political party). Moreover, the destruction of six million Jews reduced the overall intellectual and Dynamic value in the world.

The MOQ distinguishes 'what works' inorganically from 'what works' biologically and 'what works' socially and 'what works' intellectually. It shows

that these levels are often opposed and that this opposition can be the basis of a scientific description of morality. (Pirsig, 2000c)¹²¹

In other words, the MOQ is a rational framework that avoids making moral choices on personal whim or satisfaction. The system shows that there are different types of satisfaction and these types are not all of equal (Dynamic) value.

Consequently, Pirsig contends that he avoids the relativism left open by James¹²² though Barzun (1983, p.156) does contend that ‘since James’s moral philosophy follows the pragmatic pattern of considering outcome as well as antecedents, it is clear that his relativism, far from being footloose, is held fast by as many demands and duties as the moral agent can think of.’ This may well be the case though the evolutionary framework employed by the MOQ remains useful in clarifying the ‘demands and duties’ that are referred to by Barzun. Moreover, as noted by Lancaster (1959, pp.356-57), without a scientifically based standard to judge the truth of one’s ideas by, it becomes increasingly difficult to determine whose ideas of ‘what works’ for a particular situation should take priority and which ‘consequences’

¹²¹ Another difference between Pirsig and James is that the latter conceives reality as a neutral flux, consisting neither of value, mind or matter: ‘There appears no universal element of which all things are made.’ (James, 1912, p.27)

¹²² Certainly, evolutionary theories were well established by the early twentieth century when James was still writing and, in fact, Dewey and Bergson both noted the implications of Darwinism on philosophy. However, such evolutionary ideas were largely biologically orientated and theories of cosmological evolution undeveloped. It’s, therefore, understandable that this connection would have escaped James’ notice though he comes close to describing a system like the MOQ in *Essays in Radical Empiricism*:

‘If one were to make an evolutionary construction of how a lot of originally chaotic pure experience became gradually differentiated into an orderly inner and outer world, the whole theory would turn upon one’s success in explaining how or why the quality of an experience, once active, could become less so, and, from being an energetic attribute in some cases, elsewhere lapse into the status of an inert or merely internal “nature.” This would be the ‘evolution’ of the psychical from the bosom of the physical, in which the esthetic, moral and otherwise emotional experiences would represent a halfway stage.’ (James, 1912, pp.35-36)

should be considered as being desirable. Otherwise, a pernicious relativism in pragmatic truth remains and, as shown in the example provided by Hospers (1953, p.46), it doesn't prevent a tyrant-monarch putting to death all doubters in the Gods Isis and Osiris and then stating that it 'worked' in preventing religious argument. As Pirsig and Lancaster (1959, p.357) both independently observe, it's not always enlightened people such as Dewey or James who decide 'what works' means.

2.9. THE MOQ & SPINOZA

Not only is the MOQ a type of 'source' monism (in which Quality is postulated as the source of all that exists), in addition, it is monistic in the stronger sense of postulating that reality is *composed* of Quality. In ZMM, Pirsig discerns that the MOQ shares this stronger sense of 'absolute monism' with Hegel.¹²³ However, an 'absolute monist' system with pragmatic overtones that Pirsig overlooks is that of Spinoza's. The latter's assertion (Spinoza, 1677, pp.11-14/ Part I, PXV)¹²⁴ that God is the one and only substance, infinite and inherent in all things (plus his denial of God being like a person with a mind and body) has similarities to Pirsig's conception of Dynamic Quality. Moreover, Spinoza's notion of striving (*conatus*) bears comparison to Pirsig's emphasis on the Dynamic nature of reality (and pre-dates Csikszentmihalyi's ideas on flow and happiness by three hundred years). For instance, Spinoza states that joy (*laetitia*) is a passion by which the mind strives to a greater perfection (1677, p.93/ Part III, PXT) while sadness (*tristitia*) is less Dynamic

¹²³ 'Phædrus remembered Hegel had been regarded as a bridge between Western and Oriental philosophy. The Vedanta of the Hindus, the Way of the Taoists, even the Buddha had been described as an absolute monism similar to Hegel's philosophy.' (Pirsig, 1974a, p.252)

¹²⁴ For ease of referencing, I have quoted the page numbers of the particular edition of Spinoza's *Ethics* used for this thesis in addition to the traditional notation (P = Proposition & D = Definition).

i.e. depression represses the power to persevere (in being). Moreover, as with Pirsig's Dynamic Quality, Spinoza's notion of *conatus* applies to all things in general not just sentient beings. In this sense both philosophers can be perceived as panpsychists though this understanding should be qualified in that neither would hold that rocks or tables have a form of mentality in the same sense as a sentient being.¹²⁵

Nevertheless, a difference between Pirsig and Spinoza's philosophies is that the latter is determinist largely due to the Newtonian understanding of physical matter predominant in Spinoza's time. Briefly, Spinoza's reasoning here is that if everything has the same essential nature and the latest discoveries in physics imply that physical matter has a 'clockwork' nature then (to prevent a contradiction in his system) mind must follow the same universal 'rules' as physical matter. In comparison, though Pirsig follows similar reasoning to Spinoza (in that the *essential* nature of everything must be consistent in a monism), the latest discoveries in physics have altered since the seventeenth century and now imply there is a degree of indeterminacy in the behaviour of physical reality. As such Pirsig isn't a determinist though he still holds that quanta (inorganic patterns) are more static (or 'determined') in their behaviour than biological, social and intellectual patterns. This issue (in regard to free-will) is discussed in more detail in Section 3.4.1.

Another important difference between Pirsig and Spinoza is an absence of evolutionary development in the latter's monism: 'Nature does not act with an end in view... as God exists with no end in view, he cannot act with any end in view.'

¹²⁵ Further discussion of the notion of *conatus* in relation to Spinoza's (and Descartes) work can be found in Della Rocca (1996, pp.194-202).

(Spinoza, 1677, p.142/ Part IV, Preface) As explained above, this is a critical difference as the notion of dynamic evolutionary development is an important element for the MOQ's hierarchy of moral values. Without such a notion of development (which to be fair, did not exist in seventeenth century science), Spinoza's system seems to vacillate between ethical intuitionism (of which the MOQ is a type) and ethical naturalism (which, as noted in Section 2.1., holds that there are real moral properties though reducible to entirely non-ethical properties). For instance, Spinoza (1677, p.142/ Part IV, Preface) insists that the human mind must be explicable in terms of the laws which govern nature so he advances the argument that ethical properties, which he usually characterizes as human 'modes of thinking', be explicable in terms of natural ones. In this context, then, this would indicate that Spinoza's work has ethical naturalist tendencies as the *Ethics* states (Spinoza, 1677, p.143/ Part IV, Preface) that perfection (*perfectio*), good (*bonum*) and evil (*malum*) are labels or 'modes of thinking' that human beings apply to 'things' but which indicate *nothing positive or negative of the things in themselves*. Spinoza (1677, p.143/ Part IV, Preface) illustrates this through the example of music 'which is good to the melancholy, bad to those who mourn, and neither good nor bad to the deaf'. However, in an apparent contradiction to this statement, Spinoza (1677, p.38/ Part Two, DVI) states that 'reality and perfection I understand to be the same thing'. In this latter context, then, this would imply that Spinoza's work is a type of ethical intuitionism and, as such, is inconsistent with the earlier statements concerned with values.

Despite this difficulty with the *Ethics*, Spinoza complements Pirsig's work in shedding further light on a number of issues given only a cursory glance in ZMM or

LILA. For instance, this is illustrated by Spinoza's denial of an anthropomorphic conception of God, notions of government (e.g. the type of government most likely to respect and preserve our freedom is based on sound reason and democracy), superstition (e.g. the bitter enemy of all true knowledge and true morality) and religion (e.g. scripture is not a source of 'natural truth' but the bearer of only a simple moral message: 'Love your neighbour'). As such, further comparison between the two philosophers would certainly merit consideration.

Another parallel between Pirsig and Spinoza is that the latter is often portrayed as a precursor to pragmatism. For instance, Spinoza defines the 'Good' as 'that which we certainly know to be useful to us' (1677, p.144/ Part IV, D1). However, Spinoza utilizes rationalism to a further depth than either William James or Pirsig by the use of a regressive method of analysis in the style of Euclid's Geometric proofs. However, Poincaré's realisation in 1905 that geometries are human conventions indicated that mathematical truths are also conventions. Spinoza (1677, p.16/ Part One, PXVII) attempts to prove the existence of God's infinite power and nature using a form of analysis based on Euclid's Geometric proofs and, as such, argues that God's power and nature has the same (mathematical) necessity as a triangle's three angles will 'from eternity to eternity' be 'equal to two right angles'. However, as illustrated by Poincaré, a triangle containing a total sum of angles less than 180 degrees (i.e. two right angles) is possible in non-Euclidean geometry. It was this difficulty in deciding between the 'true' triangle of respective geometries which led to Poincaré's realisation that mathematical truths are conventions rather than a prior or empirical truths: 'It is evident that experiment can not settle such a question'. (Poincaré, 1907, p.37) Consequently, if geometric proofs are mere conventions then

it appears that any proof of God (or his attributes) using the same method will, likewise, be a convention. As such, an uncharitable critic could feasibly state that Spinoza was just proving the *conventions* he desired to prove; that a reliance on a logical geometric type method of proof doesn't necessarily lead to legitimate empirical conclusions especially if, as Whitehead (1929, p10) notes, one or more of your initial assumptions are mistaken.

In consequence, Whitehead (1929, p10) concludes that 'philosophy has been misled by the example of mathematics' and is, no doubt, one of the considerations for why Poincaré (and Pirsig) argue for a radically extended type of rational analysis in which intuition and imagination are also utilised.

Poincaré... saw that when reason pursues knowledge, it requires an element of will other than simply a will to truth: It requires an orientation toward a harmony comparable to Phædrus' Quality so it can select information on the basis of that orientation... [Otherwise] the attempt is misguided and inhuman. The search for knowledge should be carried out within the context of human values, and knowledge itself should be seen as appropriately, as well as necessary, value-laden. This insistence is a central and recurrent theme of ZMM. (Di Santo & Steele, 1990, p.169)

2.10. RATIONALITY & ALIENATION

As noted above, the MOQ emphasises the Dynamic in the actual methodology of the sciences and arts and seeks to re-centre the Good that has tended to be trivialised as subjective (and, therefore unreal) in Enlightenment-based rationality.

Our current modes of rationality are not moving society forward into a better world. They are taking it further and further from that better world. Since the Renaissance these modes have worked. As long as the need for food, clothing and shelter is dominant they will continue to work. But now that for huge masses of people¹²⁶ these needs no longer overwhelm everything else, the

¹²⁶ However, in an Oxfam Position Paper, Neefjes (1999, p.1) notes that for 'huge masses of people' there still isn't adequate 'food, clothing and shelter':

whole structure of reason... is no longer adequate. It begins to be seen for what it really is... emotionally hollow, esthetically meaningless and spiritually empty. (Pirsig, 1974a, p.120)

The above quote possibly portrays modern Western society as too nihilistic though Barrett (1986, pp.8-9) supports Pirsig's basic contention that SOM encourages the view that human beings are fundamentally just conscious beings facing out onto an alien material universe:

It is well to remember that the profoundest and most poignant sense of alienation is our human consciousness itself. We are strangers in this universe, and we discover this troubling situation as soon as we begin to be conscious of the world and the universe we inhabit.

Barrett further supports the contention that Renaissance science eroded religious faith together with a realisation that people were no longer the centre of the cosmos (as in pre-Copernican cosmology). As the Enlightenment developed, the importance of spiritual values became submerged. Pirsig believes that the unfortunate consequence of this is that the Good has become sidelined from a western view of what is important. Moreover, as western science has employed a scientific method tending to encourage value freedom, values at best, are viewed as being secondary to 'objective' facts. As such, Pirsig (1991, pp.281-82) believes that in the West, this has created a relatively technically advanced society that has given an undue weighting to materialism at the cost of the aesthetic and spiritual realms:

Science, the intellectual pattern that has been appointed to take over society, has a defect in it. The defect is that subject-object science has no provision for morals. Subject-object science is only concerned with facts. Morals have no objective reality. You can look through a microscope or telescope or oscilloscope for the rest of your life and you will never find a single moral. There aren't any there. They are all in your head. They exist only in your imagination.

'There is a world food crisis. Currently 790 million people are undernourished and around one third of the world's children go to bed hungry. But their lack of food security is primarily caused by low incomes and unequal access to land, water, credit, and markets. There is no crisis of world food production on the horizon, despite environmental problems and a growing world population.'

In consequence, Pirsig (1991, p.282) believes that this metaphysical positioning of values as purely subjective implies an amoral outlook i.e.

[Apparently] the world is a completely purposeless, valueless place. There is no point in anything. Nothing is right and nothing is wrong. Everything just functions, like machinery. There is nothing morally wrong with being lazy, nothing morally wrong with lying, with theft, with suicide, with murder, with genocide. There is nothing morally wrong because there are no morals, just functions.

Undoubtedly, this critique is an exaggeration as the latter behaviour (such as genocide) is recognised as morally wrong by Western societies though the observation that modern science (as illustrated in the methodology of Boas) tends to view values (because they are 'subjective') as being secondary to 'objective' facts is plausible.

A person's religion, for example, or his metaphysics, or his sense of humour... must not have the slightest connection with his scientific activity. His imagination is restrained, and even his language ceases to be his own. This is again reflected in the nature of scientific 'facts' which are experienced as being independent of opinion, belief, and cultural background. (Feyerabend, 1975, p.19)

This is supported by Searle (1984, p.10) who relates that 'People think science must be about objectively observable phenomena'. For instance, 'on occasions when I have lectured to audiences of biologists and neuro-physiologists, I have found many of them very reluctant to treat the mind... as a proper domain of scientific investigation'. Moreover, Clark (2000 pp.699-700) observes: 'unfortunately, later thinkers, forgetful of the priority of value (both in human life and in the universe at large), supposed that merely material causes could and (weirdly) should explain away the very recognition of value which drives us and the world.' Clark (2000 p.690) suggests that the significance of spiritual values became submerged between the time of Leibniz (i.e. the early eighteenth century) and Darwin's theory of

evolution (i.e. the mid-nineteenth). This is supported by Kauffman (1995, pp.5-6) who perceives the Enlightenment as removing the West from the sacred in that Copernicus first removed us from the centre of God's universe, Newton's clockwork universe then dispensed the requirement of a God and then Darwin undermined human beings' top position in God's creation with his theory of natural selection.

Darwin's theory offered a plausible explanation of the appearance of human beings without the involvement of a creator and, reflecting the scientific belief that physical matter was absolutely determined through mechanical laws, required no place or need for spiritual values. Northrop (1947, pp.370-71) locates this division (between physical matter and values) precisely with Kant's philosophy of science which evidently had no meaning for morality and religion because the *knowing* of the scientific object became subject to the same absolute necessity as the completely determined and necessary object of scientific knowledge. This followed as the a priori 'forms of sensibility' and 'categories of the understanding' which the Kantian scientist brought to the study of nature were characterized by universality and necessity. As such, not only nature itself but also our knowing of nature was characterized by absolute necessity and hence provided no place for the freedom necessary for the moral and religious life.

Consequently, Kant seemed to have no alternative but to set up morality and religion as independent autonomous subjects having no connection with science. This occurred in Kant's *Critique of Practical Reason*. This point is tremendously important because it explains why the modern man came to the notion of an autonomous ethics and religion having no basis in science. (Northrop, 1947, p.371)

And, as Polkinghorne (1996, p.104) argues, it is erroneous to divide reality in this Kantian fashion when moving outside methodology:

Methodology does not determine ontology. A projectile executes the same parabola under gravity, whether it is a shell, or a distress flare, or the signal to attack, but that does not mean that Newtonian physics by itself is an adequate account of what is going on. The fact that meaning and value have been bracketed out by science does not imply that meaning and value do not exist.

The mathematized world or 'the world without values' is a useful abstraction but for only certain calculable properties of the lived world of experience. However, by the time the logical positivists appeared they had even dispensed with ethics and aesthetics as genuine philosophical subjects (on the grounds that values are not empirical facts). Clark (2002b, p.147) shares Polkinghorne's and Northrop's concern that this type of positivistic outlook remains too reductionist.

We sometimes need to concentrate on simple properties of the people, or the animals, we seek to understand (and use). But none of this, except for political purposes, suggests that a projectile's speed or weight is all that really matters, nor that a human or non-human creature has really no existence outside the formulaic description of its weight or speed. The actual reality from which we all begin our calculations and extrapolations is the shared, lived world... There are great advantages to mathematizing our experience, but also great advantages in not doing so at the expense of other significant explanations or descriptions of what is going on.

In other words, a scientific materialistic outlook is adequate with physics or biology, for instance, in calculating the movement of the planets but becomes problematic when dealing with human activity which is always (intellectually and socially) value laden.

By the late eighteenth century, an autonomous Enlightenment science had also facilitated large scale social and economic experiments that often alienated workers from each other and the products they manufactured. To use a phrase from situationism,¹²⁷ the workers had become spectators of their own working lives.

¹²⁷ The situationists (such as Hakim Bey) were protagonists behind the 1968 Paris demonstrations. They perceive individuals in modern capitalist countries as being alienated because they are spectators of life rather than participants. For example, these individuals tend to buy a commodity such as a CD to listen to (i.e. be a spectator), rather than create (i.e. participate in) their own music. (Csikszentmihalyi. 1992, p.111)

Twenty-first century capitalist companies still tend to follow this model and the Victorian sweat shop is still to be found especially – though not exclusively - in the Second and Third Worlds. Power is located in a few managers (or owners) while everyone else is instructed what work to do, what their salary will be, what the company policy is and what operating structures the company will have. Admittedly, some organizations (such as the John Lewis Partnership) tamper with the edges of capitalist relations but very few large scale companies operate, for instance, as holistic democratic co-operatives. I believe that the general alienation (and the resultant social consequences) that it causes is immense and, in the following, run through some evidence for the USA (the largest capitalist country) to support this contention:

Between 1960 and today, the USA's rate of divorce has doubled, teenage suicide has tripled, recorded violent crime (murder, rape, robbery and assault) has quadrupled and clinical depression has increased more than threefold (from a baseline of 1,700,000 instances of clinical intervention in 1955). 'More than a quarter of Americans now say they feel permanently lonely, about half of American executives say their lives are empty and meaningless, and one half of all affluent American children believe – almost unbelievably – that their lives are tougher than the lives of their parents when they themselves were young.' (Fletcher, 2004, p.27)¹²⁸ This is not to claim capitalism is the only cause of global problems but if such a social structure is thought to be unreal then it becomes disassociated from any

¹²⁸ Winston Fletcher is visiting professor in marketing, Westminster University and the chairman of the Royal Institution. The evidence quoted is derived in conjunction with a review of Barry Schwartz's 2004 text about modern alienation in the USA, *The Paradox of Choice: Why More is Less*.

problems (such as pollution, mass poverty and unemployment) that it may cause. This, in turn, will make it more difficult to find solutions for these problems.

It seems plausible, then, that without Enlightenment science and philosophy, the Industrial Revolution and large scale industrial capitalism (where Marx essentially locates alienation) would have failed to develop. Reflecting Heidegger's (1955, p.79) proposal that nihilism can only be overcome 'when the essence of nothingness can be accepted', Pirsig applies his ideas concerning Quality towards more spiritual affairs in an effort towards re-incorporating the 'sacred' to resolve modern Western alienation. Possibly, he is naïve in believing that a new Buddhist type of philosophy for Americans (and other Westerners) would be more effective than a fundamental economic revolution on the lines of Marxism. However, American culture is generally hostile to the latter theory while, as argued by Lorentz (2001, p.197), Buddhism can certainly 'survive and integrate meaningfully' in American society despite its obsession with materialism and consumerism. Pirsig does place more emphasis on individual self-development (through Buddhist thought) rather than mass social movements so the plausibility of choosing an economic or politically orientated solution over Pirsig's in dealing with modern alienation could possibly be loosely framed as choosing between the respective effectiveness of Buddhist philosophy or radical politics in achieving positive global social change. On the other hand, this is not to state that the two strands are mutually exclusive and that a balance between individual (private) and social (public) development could possibly be met. This latter issue is explored in the work of Richard Rorty which is examined next.

2.11. THE MOQ & POST-MODERNISM

Rorty and Pirsig both proclaim themselves as modern advocates of American pragmatism. Certainly, both philosophers use the historicist's starting point in which freedom has replaced truth 'as the goal of thinking and of social progress' in the contemporary world. (Rorty, 1989, p.xiii) However, Rorty then identifies two types of 'historicists': those who emphasize self-creation and private autonomy (such as Nietzsche, Heidegger & Foucault) and those who emphasize social justice (such as Marx, Dewey & Habermas). Rorty (1989, p.xiii) asserts that it's *impossible* that a philosophy 'would let us hold self-creation and justice, private perfection and human solidarity, in a single vision.' Though this reconciliation of the public and the private realms is, undoubtedly, not without difficulties, Orwell (1944) argues that positions similar to Rorty's are unsafe to hold:

A very dangerous fallacy... is to believe that under a dictatorial government you can be free *inside*. Quite a number of people console themselves with this thought, now that totalitarianism in one form or another is visibly on the upgrade in every part of the world. The greatest mistake is to imagine that the human being is an autonomous individual. The secret freedom which you can supposedly enjoy under a despotic government is nonsense, because your thoughts are never entirely your own. Philosophers, writers, artists, even scientists, not only need encouragement and an audience, they need constant stimulation from other people... Take away freedom of speech, and the creative faculties dry up.

It seems, therefore, that the public/private distinction must be reconciled, at least partially, to prevent Orwell's 'very dangerous' fallacy coming into being.

To some extent, the credibility of Rorty's argument is an issue of foundationalism; concerning the extent we should rely on static frameworks such as metaphysical systems to order our experience. As the MOQ is a 'contradiction in terms' (Pirsig's words) in being a metaphysics wherein a Western scientific theory is combined with the mystic notion of 'nothingness', it seems that Pirsig is attempting a pragmatic balance (the 'middle way'?) between modernist absolutes and post-

modernist relativism. Though Falzon (1998) discerns that philosophers from the nineteenth century onwards have been more successful in dealing with SOM, he argues that it was only with the arrival of post-modernist thought that Western philosophy began to break the epistemological hold of Cartesianism. However, as Cooper (2002a) contends, the post-modernist movement of Rorty et al (termed 'humanism' by Cooper), may possibly be as unpalatable as the type of epistemological objectivity (or 'absolutism') it attempted to replace. Cooper (2002a, p.19) concludes that human beings 'cannot dispense with the conviction that their lives are "answerable to", and find "measure" in something "beyond the human".' This is on the grounds that while humanists correctly believe that our understanding of the world is 'coloured' by human concerns, they are mistaken to set these concerns adrift from the universal harmony entailed by Being (or 'Dynamic Quality' to Pirsig's terminology). By doing so, the value and meaning of human concerns and projects have no standard to set themselves against and the despair (or 'existential angst') that concerned Gabriel Marcel becomes a possibility – certainly for 'available' human beings who realise that the value of their activities are rendered meaningless in purely human terms.

According to Cooper, it is only those human activities and projects grounded 'beyond the human' that can escape the circular justification of significance suffered by the humanist. Though the latter may argue that many people 'rest content' with travelling only a small distance (for their own projects and beliefs) along the 'chain of significance' that confers meaning to human belief and activity (and therefore never personally suffering existential angst), this parochialism (in a finite and inter-connected world) may be a luxury we can no longer afford to entertain.

‘In this age of terrorism... the postmodern prejudice against norms, unities and consensuses is a politically catastrophic one’ he writes. Cultural theorists can no longer ‘afford simply to keep recounting the same narratives of class, race and gender, indispensable as these topics are.’ What Mr. Eagleton, one of the few remaining Marxist critics, wants now is a search for absolutes, for norms, for answers to what he calls ‘fundamental questions of truth and love in order to meet the urgencies of our global situation.’ (Terry Eagleton quoted by Dinitia Smith, 2004)

Though, to correct Eagleton’s sentiments in consideration of another work of Orwell’s (namely *Nineteen Eighty-Four*); the concerns with terrorism largely appear to be a fictional distraction from the real global difficulties concerning poverty, illiteracy and injustice. Terrorism may be a symptom of the latter but, if anything, it is the fascination with projects of a materialistic nature (certainly in the West) that is the root cause – as far as one exists - of a ‘global crisis’.

This brief overview of post-modernism brings us finally round to value relativism which perceives progressive aesthetics as ultimately misguided, oppressive or insufficiently pluralistic. Value relativists (epitomised by the sociologist Pierre Bourdieu) deny that value is a property of objects, subjects or even ‘processes’ between subjects and objects; arguing that it is instead a product of the dynamics of cultural systems. No doubt there is merit in the value relativists’ critique of modern capitalist society (in that taste has come to be institutionalized in a manner that can often exclude and oppress on a class basis) though their view of values do seem reductionist from the MOQ perspective. At least, Bourdieu’s interest, as with Pirsig’s, is that value concerns should be used for the improvement of the majority rather than for any elite. (Ghazzal, 2002)

2.12. CONCLUSION

In the above then, we have seen that the MOQ was constructed by Pirsig to improve the usefulness of American anthropology by embedding its research findings on a metaphysical system that gives proper recognition to social values. That is to say, open to scientific generalisation. The primary metaphysical revision that Pirsig operates to facilitate this is the atypical reduction of facts to types of values. The question arises then, is such a radical move beneficial?

As we have seen, the first implication of this metaphysical move is that values become the primary empirical reality. In Section 2.2., the history of Pirsig's initial classroom experience in defining Quality and his 'reductio ad absurdum' argument indicate that Quality exists though these arguments don't prove that reality is essentially composed of Quality. Moreover, there are problem in employing the term 'Quality' in this context. However, the existence of an 'aboriginal' element from which both subjects and objects are derived is noted in Buddhist philosophy, phenomenology and neurological experiments (such as those carried out by Libet). That this 'aboriginal element' is essentially an 'evaluative' one is an assertion supported – at least, to some extent - by evolutionary history (i.e. primitive notions of 'good' and 'bad' almost certainly appeared in creatures before notions of 'subject' and 'object') and assessing the experience of new born babies. Therefore, despite its relative strangeness, Pirsig postulates that reality is composed from Quality.

As noted in Section 2.1.1., the MOQ's incorporation of cosmological evolution is arguably an improvement on Zen Buddhism by facilitating the removal of the supernatural concept of reincarnation (and in consequence, the *atman*). As Cooper (1996, p.20) observes, the theory that karmic effects continue through reincarnation

is not philosophically defended in Buddhism. In consequence, this belief of reincarnation is replaced in the MOQ with a more rational justification to be good (i.e. the well-being of future generations). As we saw in Section 2.8.1., cosmological evolution also provides a rational framework for James' pragmatic notion of truth and even early forms of pragmatism (such as Spinoza's monism) to prevent their slide into relativism while the Dynamic propensities (of inorganic patterns) provide Darwinists with an explanation for the appearance of life without the need to resort to supernatural causes. As such, a biologist such as Dawkins may find a value created universe (as understood by Pirsig) slightly less unpalatable than one created by a theistic God. Moreover, while there remains a difficulty in SOM in assigning values to either the subjective or objective ontological realms, the MOQ has a coherent place for values together with a proper recognition of 'Being' (which is possibly a fundamental element required for dealing with Western angst). This is certainly an improvement on post-modernism which – without a notion of 'Being' - remains adrift on a 'sea of relativity'.

Finally, ZMM can be read as an anti-dualist book and the narrator of the book is seen contending with various dualisms that seem to make for 'unharmonious' living. These not only include the difficulties in his relationship with his son (who is travelling with him) but the relationship with his other travelling companions, (the Sutherlands), his past self, the dichotomy between technology and art (as primarily illustrated in the motorcycle) and the mind-matter division of Descartes. In LILA, Pirsig contends that by employing Quality as fundamental, it allows his system to solve the previously intractable problems caused by the mind-matter division of

Descartes (while remaining within the realm of metaphysics). It is to these problems, therefore, that we bring our attention to, in the next chapter.

Chapter 3: The metaphysical problems of SOM

Materialism inadvertently accepts the categories and the vocabulary of dualism. [Unlike the MOQ] it accepts the terms in which Descartes set the debate. It accepts, in short, the idea that the vocabulary of the mental and the physical, of material and immaterial, of mind and body, is perfectly adequate as it stands. It accepts the idea that if we think consciousness exists we are accepting dualism. What I believe - as is obvious from this entire discussion - is that the vocabulary, and the accompanying categories, are the source of our deepest philosophical difficulties. (Searle, 1992, p.54)

3.0. INTRODUCTION

In the previous chapter, we were introduced to the background of Pirsig's system, its main components and his arguments for why it works better than SOM metaphysics and its reactionary opposite, post-modernism. In this chapter, then, we will return to purely metaphysical concerns and I will argue here that the MOQ dissolves the main metaphysical problems that concern SOM, largely by shifting the terms of the debate. After examining the scientific ideas of Galileo and Newton which led to Descartes' and Locke's particular notions of mind and matter and the subsequent solutions provided by traditional metaphysics (with reference to Northrop's concepts by intuition and postulation) in attempting to reconcile these two notions, I argue that the MOQ provides the break with Cartesianism that John Searle thinks necessary to make any real headway with this problem. Next, we will consider related metaphysical difficulties such as Hume's Dilemma, causation, the problem of free-will and determinism and Chalmers' 'hard question' of consciousness and the MOQ solution to these (in reference to the work of Nagel, Northrop, Whitehead, Hume, Popper and Russell).

3.1. THE DEVELOPMENT OF THE MIND-MATTER PROBLEM

Though having ancestry with the Ancient Greeks (for instance, the later Platonic dialogues contain a dualism between Platonic 'souls' and Platonic 'physical nature'), an extended discussion of the metaphysical division between mind and body by Descartes first appeared in the *Meditationes* of 1641 as an important stage of an argument concerned with a proof of souls and of God. In his Second Meditation, Descartes (1641, p.20) proposes his famous wax experiment to discover what can be known about a 'body' of wax and, therefore, implicitly what can be known about bodies in general. He places a wax honeycomb by a fireplace and watches it melt noting how its properties (such as taste, smell, colour and shape) alter from their previous form. Descartes observes that the only empirical properties of the honeycomb remaining constant are its extension in space and its property of having quantity. As such, he concludes that physical bodies always have extension as there is no physical body 'I can think of which in my thought I cannot easily divide into parts' while for mind he states that 'I am unable to distinguish any parts... although the whole mind seems to be united to the whole body, I recognize that if a foot or arm or any part of the body is cut off, nothing has thereby been taken away from the mind'. (Descartes, 1641, p.59) As a sentient being (such as a human being) is divided into a material body (which is spatially extended and, therefore divisible) and a rational soul (which is not),¹²⁹ Descartes (1641, p.59) advances the argument that 'the mind is completely different from the body' and, as such, can only affect the latter through the pineal gland.

¹²⁹ As with Plato, Descartes (1641, p.10) makes 'no distinction between' mind and soul.

However, not only is it highly unlikely that the pineal gland is responsible for mind-body interaction, from the MOQ's point of view, the assumption of *complete* difference between mind and matter is erroneous. The grounds for this objection is primarily based on the observation that if cosmological evolution is true, it indicates that over the course of about twelve billion years, intellectual value patterns (minds) evolved from inorganic value patterns and, as such, can't be *absolutely* different ontologically. This objection is supported by Searle (1992, p.28) who regards the idea of the world being constructed entirely of physical particles as being inconsistent with the idea that we are conscious and Nagel (1979, pp.183-84) who argues that only physical properties can ever be inferred from purely physical phenomena and, likewise, only mental properties can ever be inferred from mental phenomena. Nagel (1979, p.184) then puts forward (on similar lines as Pirsig) the argument that a possible solution to the appearance of mental and physical properties is that both are derived from a common (non-physical or non-mental) source:¹³⁰

In the event that any properties of matter are discoverable by explanatory inference from observable mental phenomena, they will have mental implications of a kind that physically inferred properties will never have... perhaps there are not two chains of inference, but one chain leading from the mental and the physical to a common source. It is conceivable in the abstract that if mental phenomena derive from the properties of matter at all, those may be identical at some level with non-physical properties from which physical phenomena also derive.

This not only supports Nagel's panpsychism to the extent that the mental is irreducible to the physical but, also paves the way for a solution to the mind-matter problem:

Other metaphysicians were not willing to give up as easily as Descartes, and suspected that the difficulties in the problem arose from the initial separation of mind and body in the Cartesian metaphysical system. If one refused to grant that mind and body were really different kinds of entity, then one would not

¹³⁰ Nagel (1979, p.185) suggests that, broadly speaking, a theory such (as the MOQ) where mind and matter are derived from a third substance 'could still be called panpsychism'.

have any trouble accounting for their interrelations. (Popkin & Stroll, 1956, p.99)

This is, indeed, the approach that Pirsig takes when dealing with the problem.

The genesis of Descartes' conclusion that 'the mind is completely different from the body' was apparently derived from the metaphysical assumptions employed by Galileo and Newton for mechanics. In light of the following comment made by Whitehead to Northrop (1985, p.48) in 1922, it's the assumptions of Enlightenment science about subjects, objects and perceptions (or sense qualities)¹³¹ which are of particular concern:

A mistake was made in the interpretation of the entities of modern physics at the beginning of the modern world, and it is only by returning to the origins and correcting this error that any solution for the problems of traditional modern philosophy in science or the humanities is to be found.

In the subsequent two sections, then, we'll be taking on board Whitehead's advice and returning to the original scientific assumptions made by Galileo and Newton in an effort to discover exactly how these affected the philosophy of Descartes and Locke.

3.2.0. GALILEO & NEWTON

According to Northrop (1947, p.351), Galileo and Newton assert that the *perceptions* in private sensed space and time are how the public *material objects* (in public mathematical space and time) appear to the *observer*. Put more precisely, these *perceptions* are related to *material objects* by a three-termed relation in which:

a. The *perceptions* in sensed space and time are one term,

¹³¹ As 'quality' in this context means 'property' and, not in the evaluative sense that Pirsig employs, I have tended to avoid this phrase to prevent any ambiguity.

b. The physical objects, or *material substances*, in public mathematical space and time are a second term, and;

c. The *observer* is the intermediary, third term.¹³²

Galileo and Newton presume that b. (the *material substances* in public mathematical space and time) are the cause of (and, therefore, logically precede) the *perceptions* in private sensed space and time. All *perceptions* are thought to be mere projections generated in the *observer* (leading to Newton labelling them 'appearances').

Moreover, Newton adds a further qualification with respect to the role of c. (the *observer*) in the relationship between a. and b., in that the *observer* does not generate *perceptions* in sensed space and time spontaneously, but only when acted upon by the *material substances*. (However, dreams appear to contradict this particular qualification as perceptions can be generated without the action of a *material* substance.)

For Galileo and Newton, the *observer* cannot be conceived as merely an aggregate of the *material substances* of his body, since the latter type of *observer* would be quite unable to be conscious of *perceptions* in sensed space and time. This is because both scientists considered that *material substances* possessed only the properties of moving in a straight line with a constant velocity when no external forces are acting upon them (and of moving in an accelerated manner when acted upon by external forces). Galileo and Newton presume that *material substances*

¹³² This particular terminology is from Northrop (1947, Chapter Twelve).

have no awareness at all and, therefore, no capacity, whatsoever, to have sense *perceptions*.

3.2.1. LOCKEAN SPIRIT

However, when John Locke¹³³ read that the Galilean and Newtonian *observer* entailed a different type of substance from the *material substances* he then erroneously presumed that this type of *observer* was composed of a '*mental substance*'.

For putting together the ideas of thinking and willing, or the power of moving or quieting corporeal motion, joined to substance, of which we have no distinct idea, we have the idea of an immaterial spirit; and by putting together the ideas of coherent solid parts, and a power of being moved, joined with substance, of which likewise we have no positive idea, we have the idea of matter.

I do more certainly know that there is some spiritual being within me that sees and hears. This, I must be convinced, cannot be the action of bare insensible matter; nor ever could be, without an immaterial thinking being. (Locke, 1690, p.193)

The Lockean *mental substance*, therefore, is the kind of entity identified with c. (the *observer* or spirit) which has the property that when it's exposed to b. (the *material substances*) of generating consciousness and the capacity to produce a. sense *perceptions*. It is only with the event of quantum mechanics and the theory of relativity that viable alternatives to Newtonian physics became available. As we will observe, in the remainder, the presumed properties of *material substances* were radically revised in light of these new theories opening the door to the possibility that

¹³³ The influence of Galileo and Newton on Locke is confirmed by Northrop (1947, p.353):

'The Lockean philosophy which defined the economic and political ideology of classical Anglo-American culture was not merely a philosophy of economic science and politics but also the philosophy to which Galilean and Newtonian physics first forced modern philosophical thought.'

material substances do have the capacity, when placed in the right configuration, to generate sense *perceptions*.

Unfortunately, as Locke was convinced that it was impossible for 'spirit' to be generated by *material substances*, it left him with the question¹³⁴ of how the two completely different substances of Lockean *spirit* (i.e. *mental substance*) and 'bare insensible *matter*' could affect each other and, as such, the mind-matter problem was introduced. This is because there is no direct connection between the two realms:

If you start with the subjective/objective metaphysics (or the mind/matter idea if that sounds less 'metaphysical')... subjectiveness is subjectiveness from here to eternity as is objectiveness; nowhere do the two overlap. (Skutvik, 1997)

As such, the two substances of mind and matter are regarded as mutually exclusive and, being *absolutely* distinct (like a phantom walking through a door), unable to affect each other. However, in direct contradiction to this assertion, experience strongly indicates otherwise. For instance, a mind can decide to move a body (a physical object) and physical substances (such as LSD) can alter a mind. If mind-body interaction is denied then this implies that planning or thinking form no causal link with actions and, conversely, that physical stimulus has no affect on mental states. As Campbell (1970, p.35) notes, such an implausible position can only be accepted with difficulty:

If we deny mind-body interaction we must furnish a convincing account of how the illusion arises. We will need a powerful reinterpretation of all the evidence apparently supporting interaction. In the meantime, the initial plausibility of the view that body acts on mind and mind acts on body is immense.

¹³⁴ See Locke, 1690, p.387.

3.3.0. SOM SOLUTIONS TO THE MIND-MATTER PROBLEM

Before examining how the MOQ deals with the mind-matter problem, we will first consider the SOM solutions provided by physicalism, behaviourism, idealism and dualism. The first system to be assessed will be physicalism in the context of Northrop's concepts by intuition and postulation. W.A. Davis (1995, p.679) notes that physicalism is:

The doctrine that everything is physical. Also called materialism, the view is associated with Democritus, Epicurus, Lucretius, Hobbes, Holbach, T.H. Huxley, J.B. Watson, Carnap, Quine, and Smart. Physicalists hold that that the real world contains nothing but matter and energy.

As mentioned above, Pirsig terms any philosophy that asserts that reality is composed from mind *or* matter *or* a combination of both is an SOM philosophy. As physicalism asserts that reality is fundamentally material, it fulfils this criterion. It should be noted, that the term 'physicalism' in its broadest sense, now designates any form of contemporary materialism as modern physics indicates that matter is composed of forces (i.e. 'dynamic influences') and energy (i.e. the capacity of a system to produce these 'dynamic influences').¹³⁵

3.3.1. THE NEGATION OF PHYSICALISM

In this section, physicalism is dealt with and - in light of Northrop's (1947, pp.82/83) specific terminology of 'concepts by intuition' and 'concepts by postulation' - is held as an incoherent position.

¹³⁵ As 'dynamic influences' is an official dictionary definition of 'physical forces', it can appear that as physicalists are stating that the universe is composed of 'physical forces', their position is similar to the MOQ view that the universe is essentially composed of 'Dynamic Values'. However, it should be noted that dynamic influences, in the physical sense, are (inorganic) *static* patterns of value (rather than Dynamic Quality).

A 'concept by intuition' is one, which denotes, and whose complete meaning is given in immediately apprehended experience. 'Intuition' in this context means 'immediately perceived' not instinctively known or felt. A headache or 'blue' (in the context of the sensed colour) are concepts by intuition.¹³⁶

On the other hand, 'a "concept by postulation" is one the meaning of which (in whole or part) is designated by the postulates of the deductive theory in which it occurs.' (Northrop, 1947, p.83) It is a concept not given by immediate experience but through deduction. Sub-atomic particles or 'blue' (in the context of a particular wavelength in electromagnetic radiation) are concepts by postulation.

It's therefore apparent that concepts by intuition refer to phenomenal properties (including imagined objects) that are immediately apprehended (such as colour and pain) while concepts by postulation refer to theoretically postulated entities (such as 'mind', 'subjects', 'objects', 'atoms' and 'brains') which are *never* immediately apprehended. Concepts by intuition refer to conceptualised elements of immediate experience and are beyond doubt while concepts by postulation refer to anything that transcends immediately given phenomena and, in consequence, are subject to the

¹³⁶ Northrop (1947, p.195) expands on the definition of 'concepts by intuition' elsewhere:

'In other words, they are concepts the complete meaning of which is given by something which can be immediately apprehended. Such concepts we shall call concepts by intuition, where intuition means, not a speculative hunch, but the immediate apprehension of pure empiricism, which occurs in direct inspection or pure observation. Descriptive, natural history biology with its classification of genera and species constructed in terms of directly observable characteristics is an example of a science [using concepts by intuition].'

vagaries of Descartes' Demon.¹³⁷ In the following, Northrop (1947, pp.43-44) elucidates the difference between these two types of constructions:

Empirically, we immediately apprehend what we immediately apprehend, the image of the snake on the bedpost with the same vividness and purely factual immediacy as the image of the snake in the zoo. Nor does the former image come with a tag on it saying 'I am illusory,' or the latter image come with a tag reading 'I am the image of a real public, external animal.' Both images are equally factual, the one as real, so far as pure empiricism can tell, as the other.

In addition, Northrop (1947, p.43) illustrates the relationship between concepts by intuition and concepts by postulation:

When one concludes that the two-dimensional colored patch before one is the sign of the presence of a three dimensional desk, one has epistemically correlated the two-dimensional colored patch [i.e. a concept by intuition] which one directly inspects with one side of a theoretically postulated, three-dimensional, right-angled cornered, external material object which one terms a desk [i.e. a concept by postulation].

Physicalism remains the dominant viewpoint in the philosophy of mind debate; Chalmers (1996, p.xiii) calculating that the ratio between the physicalists and other philosophers now being two or three to one. In a less extreme form, physicalism perceives mental events as causally dependent on bodily events but does not deny their existence (such as epiphenomenalism). Though physicalism has early origins with the Ancient Greeks (e.g. Democritus), the division between the mechanical (or physical) realm and the moral (or subjective) realm arose, to a large part, due to the recognition by Enlightenment philosophers (and scientists) that Final Causes¹³⁸ (or 'God's purpose') were beyond the remit of science. As Clark (2000, p.685) notes 'Descartes and Spinoza both agreed in practice that we should not reckon on knowing final causes.'

¹³⁷ Descartes, 1641, p.15.

I would suggest that this recognition was necessary to allow science to develop without the need of 'Final Causes' as they can lead to 'explanations' which superficially appear plausible but upon closer analysis add nothing to our understanding of the world. As explained by Professor John Barrow¹³⁹ (1988, pp.56/57):

If the sun shines because its purpose is to supply heat and warmth to Mankind, then no further enquiry into its nature seems necessary... One searches for evidence of design, rather than documenting what is observed in a dispassionate and all-encompassing manner.

Moreover, the developments of the Enlightenment may have been hindered if philosophers and scientists didn't distance their independent discoveries from the authority of the Church. Even today, creationist 'science' or the medical beliefs of Jehovah Witnesses indicate (to quote Kant) the dangers of 'the inability to use one's reason without the guidance of another'.¹⁴⁰

On the other hand, if the moral order was not clearly distinguished from the material world, then mechanical explanations would possibly replace the notion of God altogether. However, by the eighteenth century the latter had occurred with Julien Offray de la Mettrie (1709-1751) who applied Descartes' automata¹⁴¹ concept

¹³⁸ The predominant Final Cause, until the Enlightenment, was God's (Final) Design.

¹³⁹ Since 1999, John D. Barrow has been the Professor of Mathematical Sciences at the University of Cambridge in addition to being the Director of the University's Millennium Mathematics Project. His research interests include cosmology, particle physics and aspects of the history and philosophy of science touching upon developments in astronomy, cosmology, fundamental physics and mathematics. Barrow has published numerous texts since 1976 including *The Left Hand of Creation* (1983), *The World Within the World* (1988), *The Universe that Discovered Itself* (2000) and *The Constants of Nature: From Alpha to Omega* (2002). (Barrow 2004a/2004b)

¹⁴⁰ Quoted from 'Enlightenment' in *The Oxford Companion to Philosophy* (1995), p.236.

¹⁴¹ Descartes thought animals were *purely* physical automata.

to human beings in *L'homme machine*. Towards the end of nineteenth century, both determinism and Darwinism became dominant and, in combination, these modes of thought encouraged a nihilistic ethos; as noted by the work of Nietzsche. As such, even more reductive theories were eventually put forward so, in consequence, what commenced as just a useful methodological abstraction for mechanics in the seventeenth century resulted in late twentieth century philosophers *seeming* to doubt 'that they are even conscious, or that there is anyone who is.' (Clark, 2000 p.690) The development of this strange conclusion is supported by Barrett (1986, p.xiii) who argues:

Surely there is something a little strange, even foolish, about this flight from consciousness. Is the consciousness of another person something that we should reasonably expect to see?

Furthermore, Barrett (1986, pp.xii-xiii) confirms that these strange ideas about the non-existence of consciousness were not found among ancient or medieval thinkers:

Whatever their other aberrations, these older thinkers did not doubt that we lived in a world that was shared by our own and other minds. But in this modern, scientific age of ours we feel compelled to raise such doubts out of a spirit of what we imagine to be theoretical exactness.

This concern of Clark's and Barrett's in regard to the ontological certainty of consciousness is shared by Chalmers (1996, p.xii):

It seems to me that we are surer of the existence of conscious experience than we are of anything else in the world. I have tried hard at times to convince myself that there is really nothing there, that conscious experience is empty, an illusion. There is something seductive about this notion, which philosophers throughout the ages have exploited, but in the end it is utterly unsatisfying. I find myself absorbed in an orange sensation, and *something is going on*. There is something that needs explaining, even after we have explained the processes of discrimination and action: there is the *experience*.¹⁴²

¹⁴² Chalmers (1996, p.xiv) originally held a physicalist position but eventually rejected it:

'It seems to me to ignore the problems of consciousness would be antiscientific; it is the scientific spirit to face up to them directly. To those who suspect that science requires materialism, I ask that you wait and see.'

Even if we are generous with physicalists and assume that they are not committed to regarding consciousness as an ‘illusion’ but regard it as, for instance, a certain state of the central nervous system, the fact remains that such a system *is a theoretical deduction* (i.e. a concept by postulation) whereas much conscious experience (such as thirst, fear, the perception of colour) consists of immediately apprehended concepts by intuition. Northrop (1947, p.63) notes the implications when philosophers (such as Dennett) confuse the two:

Failure by... Western philosophy to distinguish the concepts by intuition... from the concepts by postulation of the stage of deductively formulated theory in Western science... has resulted in incalculable error.¹⁴³

Even within the SOM tradition, this conflation has not escaped notice. For instance, in Dennett’s (1991, p.372) statement: ‘I agree wholeheartedly that there seem to be qualia’, Chalmers (1996, pp.190-91) has discerned Dennett’s ambiguous use of the word ‘seem’:

There is a phenomenal sense of ‘seem’, in which for things to seem a certain way is just for them to be experienced in a certain way. And there is a psychological sense of ‘seem’ in which for things to seem a certain way is for us to be disposed to judge they are that way. It is in the first sense that a theory of experience must explain the way things seem. But it is in the second sense that Dennett’s theory explains it. Once this subtle equivocation [between concepts by intuition and postulation] is noted, the argument loses most of its force.

Chalmers’ observation is of particular interest from the viewpoint of Northrop’s philosophy (and, in consequence, the MOQ) because the phenomenal sense of ‘seem’ is a ‘concept by intuition’ while the psychological sense of ‘seem’ is a ‘concept by postulation’. Not only does Chalmers confirm that it’s the phenomenal sense of ‘seem’ that’s important for a theory of experience, it’s also apparent that Dennett can

¹⁴³ This is an ‘incalculable error’ as concepts by intuition are partially immediately sensed while concepts by postulation (such as physical properties) are only theoretically inferred.

only deny Chalmers' criticism (of having a weak argument) if he (erroneously) conflates the two understandings of 'seem'. However, such conflation is not only misleading but results in nonsense. As Northrop (1947, p.63) notes:

Failure by historians of Western philosophy to distinguish the concepts by intuition of Oriental philosophy and of the natural history stage of Western scientific knowledge, from the concepts by postulation of the stage of deductively formulated theory in Western science and its attendant deductively formulated Western philosophy has resulted in incalculable error. Since a concept by intuition, such as 'red' in the sense of the empirically sensed color, gets its meaning directly from immediately apprehended fact, a concept by intuition does not depend for its meaning upon the scientific or philosophical theory, into which it enters as a term.

In other words, a concept by intuition (such as the phenomenal sense of 'seem') keeps its meaning constant whether it is employed by one scientist (or philosopher) or by another. However, this is not the case with a concept by postulation (such as the psychological sense of 'seem'):

Such a concept has no meaning apart from a specific deductively formulated theory. This follows from its definition, as previously stated: A concept by postulation is one the meaning of which in whole or part is proposed for it by the postulates of some specific deductively formulated theory. It follows, therefore, that when such a word is used in two different sets of postulates of two different deductively formulated theories, it has two quite radically different meanings... If one treats the concepts of Western philosophy, which almost invariably are concepts by postulation, as if they were empirically given concepts by intuition, vague rubbish is precisely and inevitably what one will get. (Northrop, 1947, pp.63/67)

To be fair, Dennett (1991, p.37) does recognise that SOM (what he terms 'the myth of the Cartesian theatre') 'needs to be avoided'. As such, physicalists and functionalists have rejected Cartesian dualism with its division into mind-things and substance-things. In consequence, they attempt to explain how mind arises either from matter or from some sort of information processing. Eliminativists go further and advance the argument that consciousness is simply a construction based on our 'old habits' of folk psychology. Unfortunately, these approaches involve the

rejection of all concepts by intuition and, in so doing attempt the logically impossible by building a theory solely from concepts by postulation.¹⁴⁴ It must be stressed that the latter is *impossible* because though concepts by postulation designate the universal character of a potential particular, they provide by themselves nothing concrete or existent; as such, they *necessarily* require the immediately apprehended concepts by intuition for verification. This is illustrated by Northrop (1947, pp.69/70) with the example of the sun:

The scientific object, the star called the sun, which is a three dimensional spherical mass composed of molecules with a mean free path between them defining an exceedingly high interior temperature, is a theoretically inferred object. In short, the astronomer's sun is not an empirically immediate pure fact, but a highly complicated theoretical inference from pure fact. Furthermore, *the existence of this astronomical ball of matter is - only indirectly verified, through its deductive consequences checked against immediately inspected data such as those in... the sunset.*

i.e. concepts by postulation¹⁴⁵ (which physicalism solely relies on) are never immediately apprehended and are meaningless if they do not have concepts by intuition (which are a combination of concepts *and* qualia) to refer to for verification.

This distinction is confirmed by G.E. Moore (1903, p.10):

A moment's reflection is sufficient to show that these light vibrations are not themselves what we mean by yellow. They are not what we perceive. Indeed, we should never have been able to discover their existence, unless we had been struck by the patent difference of quality between the different colours. The most we can be entitled to say of those vibrations is that they are what corresponds in space to the yellow which we actually perceive.

Arguably, Northrop is correct because it's difficult to envisage how a person without any of the five senses (and, therefore, lacking the 'qualia component' of

¹⁴⁴ Physicalism is forced to make this 'illegal' metaphysical move (of reducing the subjective realm to the objective) because otherwise it becomes a type of dualism.

¹⁴⁵ Amongst others, Dennett employs the following concepts by postulation in *Consciousness Explained*: 'out there', 'in here', 'light-reflecting properties', 'objects', 'creatures', 'discriminative states', 'brains', 'innate dispositions', 'learned habits', 'mechanistic properties' and 'human creatures'.

concepts by intuition) could, in consequence, postulate any scientific theory (i.e. imagine a 'concept by postulation' such as D.M. Armstrong's 'physico-chemical mechanism'). Moreover, Searle (1992, pp.116-18) notes that if you, for example, equate pain (which is a concept by intuition) to 'neuron firings' (which is a concept by postulation) the essential first person experience features of the pain would be omitted.

Hypothesising a 'real world' apart from mind, and seeking to explain the mind's existence and character by reference to that hypothesis, is wasted labour... Either there is no 'material world' at all, or it is a simple aspect of this world, the world of changing experience. Cartesians have always suspected (as Platonists before them) that 'matter' had no real, substantive, independent being... 'Matter' so called is only that set of properties abstracted from the world of our experience for certain (largely political) purposes. It is convenient, for example, to insist that animals are only matter in motion [as Descartes asserted], since, as really perceived animals, they would offer far more obstacle to our casual, callous use of them. (Clark, 2002b, pp.154-55)

John McDowell (1994, pp.3-23) denies the existence of pure intuitions (what he terms 'the Myth of the Given') and this can appear, at first glance, as an argument against Northrop's claim that concepts by postulation require concepts by intuition for verification. However, it must be emphasised that concepts by intuition are not *pure* intuitions.

It cannot be too strongly emphasized that if one wants pure fact, apart from all theory, then one must keep completely silent, never reporting, either verbally or in writing, one's observations to one's colleagues. For the moment one reports or describes what one has observed, one has described fact rather than merely observed, or immediately apprehended, fact. In short, one has observed fact brought under concepts and propositionized. (Northrop, 1947, p.36)

In consequence, a concept by intuition is a combination of the logical organization (of the mind) *and* sense data rather than a 'piece of pure experience', as noted by Pirsig (2000e):

The MOQ would say there is no 'piece' of pure experience. By the time it has become a piece it is already a static pattern.

And, by Kant (1781/87, A50/B74):

Our nature is so constituted that our *intuition* can never be other than sensible; that is, it contains only the mode in which we are affected by objects. The faculty, on the other hand, which enables us to *think* the object of sensible intuition is the understanding. To neither of these powers may a preference be given over the other. Without sensibility no object [of sensible intuition] would be given to us, and without understanding no object would be thought.

An *analogy* to a concept by intuition is the sound of musical instruments and the melody in a piece of music. Without the sound there is no music and without the melody there is no music; for music to exist both elements in combination are required.

3.3.2. BEHAVIOURISM & THE MIND-MATTER PROBLEM

Ryle (1949, p.13) labels SOM as ‘the official doctrine’ or ‘the dogma of the Ghost in the Machine’ and confirms that in the Western tradition:

Most philosophers, psychologists and religious teachers subscribe, with minor reservations, to its main articles and, although they admit certain theoretical difficulties in it, they tend to assume that these can be overcome without serious modifications being made to the architecture of the theory.

Recognising SOM as problematic, Ryle suggests a logical approach (based on behaviourism) that dispenses with phenomena and images as meaningful in an explanation of the mind. In consequence, the visualising of an object (such as Ryle’s example of the mountain Helvellyn) is considered by him as not ‘really doing anything’ (1949, p.252). However, as Smart (1994, p.19) observes, on occasions it does appear plausible that visualisation (such as an architect imagining a proposed building on a new site) is actually ‘doing something’. Another example is a deaf composer (such as the later Beethoven) who can only imagine the music that he writes. Furthermore, Chalmers (1996, p.xii) notes that the simple ignoring of mental phenomena doesn’t really solve the mind-matter problem and would indicate that

Ryle had failed to extricate himself from the SOM context despite being aware of its difficulties.

3.3.3. IDEALIST & DUALIST SOLUTIONS

The suggested solution of idealism in dealing with the mind-matter problem is that the mind of God provides ideas so the ‘objective world’ (of trees, tables and chairs, etc.) does not disappear when human beings are not observing it. The principal difficulty with this theory is that a belief in the supernatural Final Causes of God does not sit very easily with modern science. As Pirsig (1995b) illustrates:

When a scientifically oriented mind hears the term ‘[material] substance’ it says, ‘that’s reality.’ When it hears about ‘oneness’ and ‘nothingness’ it says, ‘That’s just empty, meaningless, metaphysical claptrap for the “Mind of God” which we have already rejected for empirical reasons. Scientifically those words have no meaning.’

Moreover, in light of Occam’s razor, the further requirement of a God to provide ideas of matter is superfluous if values (as employed by the MOQ) are regarded as holding matter together. Clark (2004b) does observe that ‘traditionally, “God” guarantees unity’ and that ‘merely having values/forces in charge leads to the possibility that the world is radically at odds with itself’. However, the latter observation has been already noted in Chapter 2 as the four static levels of the MOQ are, indeed, often in conflict and unity, in the sense of universal harmony, does appear absent. In consequence, possibly a solution (of sorts) is provided to the ‘problem of evil’ in the MOQ, as it elucidates an understanding of evil in the sense that a lower level of evolution can take priority over a higher level (as illustrated in the example of the Holocaust in Section 2.8.1. Moreover, by not incorporating a theistic God, Pirsig’s system avoids the problem that Divine foreknowledge is inconsistent with human freedom. As there is no omniscient God with foresight, the

conundrum of a God who knows the chosen behaviour of an agent before they choose it, is avoided. Human freedom is, therefore, not necessarily illusory though, as explained below in Section 3.4.1., the MOQ also avoids regarding it as absolute.

SOM dualistic theories include double aspect theory, occasionalism (originally attributed to Malebranche) and psychophysical parallelism. The latter view retains both the dualism of mind and body and the notion of a regular correlation between mental and physical events but avoids any assumption of direct causal mind-body connection. Psychophysical parallelism eschews interactionism on the grounds that events as dissimilar as those occasioned by mind and body could not possibly affect one another. Moreover, it rejects occasionalism and dual-aspect theory on the grounds that no third entity could be responsible for such vastly different effects. Parallelists simply accept the fact that every mental event is correlated with a physical event in such a way that when one occurs, so too does the other. Parallelism in this form is usually traced to Leibniz (1646-1716) who introduced the system in the *Système nouveau de la nature* (1695) and the *Eclaircissement du nouveau système* (1696). Leibniz adapted an occasionalist metaphor to support the view that soul and body exist in a pre-established harmony. Comparing soul and body to two clocks that agree perfectly, he argued that there are only three possible sources for this agreement. It may occur through mutual influence (interactionism), through the efforts of a skilled workman who regulates the clocks and keeps them in accord (occasionalism) or by virtue of the fact that they have been so constructed from the outset that their future harmony is assured (parallelism).

Leibniz rejects interactionism because he thought it impossible to conceive of material particles passing from material substance to mind substance and rejects occasionalism as it invokes the intervention of God in a natural series of events. All that remains is parallelism - the notion that mind and body exist in a harmony that has been pre-established by God from the moment of creation. For instance, Brutus did not murder Caesar due to the emperor's behaviour, but because God created each monad so at the moment that Brutus's monad had particular thoughts of treachery and performed certain actions (e.g. stabbing Caesar), Caesar's monad correspondingly dropped dead. Leibniz's theory circumvents the difficulties in Cartesian metaphysics by avoiding any direct relationship between mind and matter but shares the same difficulty with idealism in that a supernatural explanation is required to explain why a person's mental and physical histories are in close correspondence with each other. 'Like Malebranche's, Leibniz's view, though it may not contain any inconsistencies, is incredible from the point of view of our ordinary, common experience.' (Popkin & Stoll, 1956, p.103) In other words, as Northrop (1947, pp.196/199) notes, SOM fails to provide a credible *scientific* explanation concerning the relationship between mind and matter:

As the development of modern psychology and philosophy following Descartes and Locke [has] made clear, no one has been able to formulate clearly, within a single deductive theory, how the postulated mental substance is related to the postulated material substances of physiology and physics... The trouble with the postulation of 'material substances' to account for certain immediately apprehended factors and 'mental substances' to account for other directly inspected factors is that, being so completely different from each other and having nothing in common, there is no way of getting them into working relationship with each other in a single deductive scientific theory.

3.4.0. THE MOQ & THE MIND-MATTER PROBLEM

As Searle (1992, p.49) observes with the mind-matter problem, after half a century of achieving no headway with the problem ‘one might suppose that the materialists and the dualists would think there is something wrong with the terms of the debate.’ This is essentially the position held by Pirsig so in dealing with this ‘debate’, the MOQ first rejects Galileo’s and Newton’s deterministic assertions about perceptions, material substances and mental substances (that underlie Descartes’ ontological assumptions) and, instead, employs the ontological assumptions implied by quantum physics. In the 1920s, physicists (such as Niels Bohr) realised that quanta do not behave mechanistically akin to the macro objects that Galileo and Newton were observing. Instead, it was noticed that on the quantum scale, the observer (or the observer’s means of measurement) significantly affected what was being observed. This was not related to the technical ‘clumsiness’ of the observer (or their equipment) but (as noted in Chapter 2) was due to the physical *impossibility* of simultaneously determining the exact position and momentum of a subatomic ‘particle’. This limitation is indicated by ‘Heisenberg’s uncertainty principle’¹⁴⁶ which can be examined in the form of an inequality equation where x is the position and p is the momentum of a ‘particle’, h denotes Planck’s constant,¹⁴⁷ Δx the uncertainty of position x and Δp the uncertainty of momentum p .

$$\Delta x \Delta p \geq h/4\pi$$

The first observation to make is that Planck’s constant h is diminutive which entails that the quantum uncertainty of any phenomena is far beyond the capability of

¹⁴⁶ The limitation relating to the precision of observing quantum particles was first summarized mathematically in 1927 by the physicist Werner Heisenberg.

¹⁴⁷ Planck’s constant is the universal constant of 6.63×10^{-34} Joule seconds.

the naked eye. The critical observation, however, is that the physical limit of accuracy in measuring the position and momentum of a single particle is $h/4\pi$. This limitation corresponds to the *nature* of quanta so even assuming a physicist's measuring equipment is *perfectly* accurate, simultaneous measurements of position and momentum is limited by this intrinsic uncertainty. 'The Uncertainty Principle gives the minimum extent to which the world can be divided into the dualists' conception of the observer and the observed.' (Barrow, 1988, p.139) Moreover, though Schrödinger's equation¹⁴⁸ that predicts the behaviour of the 'wave function' (the probability of the positions and velocities of quantum 'particles' influenced by any set of forces) produces extremely accurate results, the detailed outcome is not strictly determined. For instance, it's not possible to predict where a single 'particle' will hit a photographic plate (after being fired through a two slit diffusion screen) with any certainty.

We cannot observe the wave function directly. When we carry out a measurement on a physical system all that we can predict about its result using quantum mechanics is the probability of obtaining a particular result. From the human standpoint there is a breakdown of determinism in principle. (Barrow, 1988, p.142)

Professor Ronald Pine¹⁴⁹ (2004) argues that the immediate influence of quantum mechanics on philosophy was initially repressed due to the influence of logical positivism which eschewed any desire for metaphysics. Quantum mechanics was

¹⁴⁸ The Schrödinger equation was the mathematical formula published by Erwin Schrödinger in 1926 to predict the future behaviour of a dynamic (physical) system in terms of a wave function. It replaces the role of Newton's laws and conservation of energy found in classical mechanics.

¹⁴⁹ Professor Ronald C. Pine teaches logic at the University of Hawaii. His publications include *Science and the Human Prospect* (1989), *Intelligent Inference and the Web of Belief* (1996) and *Essential Logic: Basic Reasoning Skills for the 21st Century* (1996; revised 2001).

proclaimed as simply the correct methodology for physics to capture 'the phenomena' rather than as any basis for making any metaphysical claims.

[However] as the influence of logical positivism has waned, we see that Bohr was claiming that modern physics was involved in making revolutionary epistemological and ontological discoveries. When the empirical evidence is overwhelming that Newtonian-Kantian conceptualization does not match and cannot capture reality, we have thus discovered that reality is not Newtonian. This realization opens the door to alternative characterizations. (Pine, 2004)

Certainly, the MOQ is an example of one of these 'alternative characterizations'.

Another such 'characterization' that relates to the MOQ is Karl Popper's 'Theory of Propensities'; as noted by Richard Hazlewood (1997, p.3):

Both writers think that preference is a key term in understanding why the universe is as it is. Popper, when writing about the evolution of species, talks of 'preferences of organisms for certain possibilities' thus making them propensities and Pirsig writes 'what appears to be absolute cause is just a consistent pattern of preferences,' and he means by this preference for certain valued relationships which we can just as easily recognize as propensities.

By propensity, Popper (1990, p.18) is referring to the tendency for events to occur or behave that is greater than chance, what he terms 'weighted possibilities'. As noted above, Pirsig locates the development of quantum physics as an important factor in undermining determinist explanations. This realisation is also shared by Popper (1990, p.19) who observes that classical mass effects are affected by quantum effects:

The world of physics is, we have known for some time, indeterministic. It was long regarded as deterministic. And then, after quantum indeterminism was accepted, indeterminism was usually regarded as affecting only the tiniest bodies, such as radioactive atoms and only very little. But this, it turned out, was a mistake. We now know that not only tiny particles are affected but also the probability of chemical reactions, and thus, of classical mass effects.

An additional similarity to Pirsig's values is Popper's perception of propensities as being distinct from subjects and objects:

I have stressed that propensities should not be regarded as properties inherent in an object, such as a die or penny, but should be regarded as in a situation (of which, of course, the object is a part). I asserted that the

situational aspect of the propensity theory was important, and decisively important for a realist interpretation of quantum theory. (Popper, 1990, p.14)

However, Popper still regards subjects and objects as being distinct from propensities while Pirsig reduces subjects and objects down to propensities (as types of values).

As such, the MOQ recognises that material 'substances' and mental 'substances' inhere in a larger context of value patterns that, in addition, incorporates social and biological aspects in an evolutionary relationship. This ontological framework is viable in the MOQ because it rejects Galileo's and Newton's original SOM assertions about perceptions, material substances and mental substances. Instead of presuming (as Locke proposed), that b. (the *material substances* in public mathematical space and time) are the cause of a. (the *perceptions* in private sensed space and time) by acting on c. (the *mental substance* of the observer), the MOQ presumes that b. and c. are abstractions (static quality patterns) derived from a. the *perceptions* (or Dynamic Quality). According to Northrop (1947, pp.44-45), the recognition of Dynamic Quality (i.e. 'nothingness') arises from the Buddhist 'dialectic of negation' which can be considered as the East Asian equivalent of Descartes' 'cogito ergo sum' though a more severe (i.e. even the 'I' isn't accepted as certain) conceptual development from the immediately apprehended continuum of experience.

The Orientals of the Far East, who brand all knowledge as illusory except that given as pure fact, or, to use their words, by intuition, arrived long ago at the... pure empiricist's thesis that nothing but what we immediately apprehend is genuine knowledge. Their dialectic of negation forced them, therefore, to negate, i.e., reject, the common-sense man's belief in the reality of a persisting determinate substantial self underlying the empirically given sensuous qualities. This happens in the realistic Hinayanistic School of Buddhism and corresponds exactly to the conclusion of David Hume following the latter's acceptance of Bacon's pure empiricism in the Modern West.

In other words, Hinayani (or 'Theravada')¹⁵⁰ Buddhists realised that the self (corresponding to Descartes' 'I') is an abstraction from Dynamic Quality and, as such, a conditioned entity.¹⁵¹ The significance of Pirsig's employing the phenomenological orientated Buddhist ontology rather than Descartes' ontology is that it allows the conceptualisation of reality beyond the mind-matter format. As such, *mental substances* and *material substances* can be perceived as ontologically identical i.e. as intellectual *quality patterns* and inorganic *quality patterns* respectively.

This ontological construction not only circumvents SOM's mind-matter problem but is supported by the scientific evidence (of cosmological evolution) which, indicates that mind (eventually) evolved from matter (despite appearing so radically different). Possibly, the mind-matter problem is partially reinforced by the notion that mind and matter are both types of 'substance'. As noted in Chapter 2, the notion of substance *as defined by Pirsig*¹⁵² is redundant in the MOQ and replaced with the notion of 'quality patterns'. As such, there is no metaphysical difficulty, in the MOQ, in suggesting (as Searle, 1992, p.32 does) that intellectual *quality patterns*

¹⁵⁰ Theravada is the more politically correct term for the Hinayani tradition.

¹⁵¹ From the starting point of 'cogito ergo sum', Descartes aimed to prove such things as the existence of God. However, other than the idea that when thinking occurs, *something* exists, it's unlikely that any other certainties can be realised from this position.

¹⁵² "Substance" is a derived concept, not anything that is directly experienced. No one has ever seen substance and no one ever will. All people ever see is data. It is assumed that what makes the data hang together in consistent patterns is that they inhere in this "substance"... If we ask what this substance is, devoid of any properties, we find ourselves thinking of nothing whatsoever. The data of quantum physics indicate that what are called "subatomic particles" cannot possibly fill the definition of a substance. The properties exist, then disappear, then exist, and then disappear again in little bundles called "quanta." These bundles are not continuous in time, yet an essential, defined characteristic of "substance" is that it is continuous in time. Since the quantum bundles are not substance and since it is a usual scientific assumption that these

(i.e. mind) emerged at a certain stage in the evolution of static quality patterns which originally only contained inorganic *quality patterns* (i.e. material 'substance') though it should be noted that social and biological patterns had to evolve before mind could arise. Moreover, because 'value' doesn't imply absolute certainty it avoids the physicalist problem with determinism - the four static levels tending to become less deterministic (in their typical behaviour) as one rises through the evolutionary ladder towards the intellectual level. (This issue is explored further in the subsequent section).

Furthermore, from a phenomenological point of view, it is apparent that I do not experience myself as resulting from what is prior to myself but I am 'already in the world'. Though I can think of what occurred before me or divide the world into 'mind', 'matter', 'static quality patterns', self' etc., such thinking is second order (as noted by Nagarjuna) in relation to 'my' actual experience (*sunyata*). It is only because of this 'actual experience' that the formulation of such concepts is possible. Furthermore, though such concepts can be abstracted from my immediate surroundings, it is always a fact (as noted by Merleau-Ponty, 1962) that even in this process, my actual experience as a physical body or a social entity is continually mingled within relationships in the environment. It is partly, in this sense, why Nagarjuna asserts that the 'second order' thoughts such as static quality patterns (*sammuti-sacca*) are essentially illusions.

I am, not a living creature nor even a man, nor again even a consciousness endowed with all the characteristics which zoology, social anatomy or inductive psychology recognize in these various products of the natural or historical process - I am the absolute source, my existence does not stem from my

subatomic particles compose everything there is, then it follows that there is no substance anywhere in the world nor has there ever been.' (Pirsig, 1991, pp.107-08)

antecedents, from my physical and social environments; instead it moves out towards them and sustains them. (Merleau-Ponty, 1962, pp.viii-ix)

As Pirsig rejects both mind-substance (i.e. the 'ghost') and matter-substance (i.e. the 'machine') orientated ontologies of the world, he employs one underpinned by value based events. Quality is considered the source of subjects and objects and can be regarded as a Dynamic event (1995a, p.12); an 'event at which the subject becomes aware of the object.' (ZMM, 1974a, p.239) These Quality events (or processes), therefore, obtain the status as the fundamental units or 'primitives' of the universe and provide a unity between the observer and the observed; knowing mind and object. In this respect, the MOQ is supported by Whitehead's work which also recognises that the universe is better described in terms of Dynamic 'events of experience'.

Whitehead thought that the world could better be described as being founded in events of experience; the universe fundamentally experiences itself. This creative activity incorporated the human experience, value-laden as it is, nicely. Pirsig, wrapped up in examining value-differences, eventually arrived at the idea of a universe in process. (Sneddon, 1995, p.76)

Reflecting Pirsig, Whitehead speculates that these universal principles operate at all levels in nature; quantum phenomena and psychological phenomena being their extreme instances. Whitehead terms each manifestation of these phenomena as an 'occasion of experience' all of which, having to some degree, a psychophysical nature though not necessarily existing as a conscious experience. This is indicated by the fact that many human activities are performed 'without thinking', and that our decisions and judgements are often affected by suppressed memories implying that there a continuity between awareness and non-awareness even on the human level. This is supported by Merleau-Ponty who argues that given that the body is a single physical thinking substance, it is no mystery that cutting nerves, or any other surgery

on the brain, will have an affect on our experience. As noted above, our experience is not independent of the biological bodies that mind inheres in and they can only be separated from one another through abstraction. Merleau-Ponty (1962, p.86) argues that by cutting certain nerves in the brain, a certain aspect of our experience becomes absent just as by losing an arm, a certain aspect of experience is lost. The body as nerves and the body as experience are one and the same 'substance'. Only from an SOM viewpoint does the question arise of how in cutting the nerves, a material aspect of the body affects the mind. However, for Merleau-Ponty, when one has cut a nerve, one has simultaneously cut an experience and it is only by beginning with the SOM distinction between mind and body as separate substances do problems of mind-body interaction follow. Our phenomenological experience is of ourselves as a single unified being, not as a separate mind and body interacting with each other.

The union of soul and body is not an amalgamation between two mutually external terms, subject and object, brought about by arbitrary decree. It is enacted at every instant in the movement of existence. We found existence in the body when we approached it by the first way of access, namely through physiology. (Merleau-Ponty, 1962, pp.88-89)

Merleau-Ponty was influenced by Bergson who also questions the traditional 'third person' (or 'objectivist') account of the world. Instead of being concerned with what the world is like independent of it being perceived, Bergson (1911) shifts our attention to our actual experience in the world as it is lived. Reflecting this notion, Whitehead starts at the level of human experience in explaining his cosmology. This is because human experience (at any moment) is itself, an actual event, and the type of event we know better than any other. The act of human perception establishes the causal relation of a subject to the external world and is termed 'prehension' by Whitehead. Prehension involves 'emotion, and purpose, and

valuation, and causation' (Whitehead, 1929, p.25) and, therefore, has obvious similarities to Pirsig's notion of 'value'. For a mind toprehend an object, it is to experience it, perceive it, feel it, or 'take it into account,' though not necessarily in a conscious or reflective way. An 'object', in this sense, can be a physical object, like a pencil, or a conceptual object like a memory. Another similarity to Pirsig's 'value' is that prehension exists at the biological and inorganic levels of reality; as in Pirsig's example (given in Section 2.3.) that a single cell organism such as amoeba can take account of their environment (such as chemicals and other cells).

However, a fundamental difference between Whitehead and Pirsig is that the latter presumes (as observed in the hot stove account in Section 2.3.) that the Quality event occurs before subjects and objects are aware of each other: 'The Quality event is the cause of the subjects and objects, which are then mistakenly presumed to be the cause of the Quality!' (Pirsig, 1995a, p.12) As noted in the previous chapter, that does not entail, as an idealist metaphysics would have it, that intellectual patterns create experience but rather experience creates intellect. In the MOQ, experience is categorised by intellect (as noted above, primarily into the four static levels and a referring term for Dynamic Quality). On the other hand, Whitehead (1933, p.171) still presupposes 'that the subject-object relation is the fundamental structural pattern of experience' and divides reality between eight categories of existence (Whitehead, 1929, p.29) of which 'prehension' is only one category. Moreover, his process cosmology displaces the concept of machine as the primary metaphor for our understanding of the world and, instead, uses the concept of organism. Consequently, Whitehead's work can be regarded as a form of vitalism while the MOQ, though sharing the former's emphasis on the Dynamic, avoids any biological

(or mechanical) analogies; the processes in the MOQ being always reduced to some notion of value. In addition to eight 'Categories of Existence', Whitehead's metaphysics incorporates twenty-seven 'Categories of Explanation' and nine 'Categorical Obligations' which appears a rather unwieldy system, at least, in comparison to the MOQ. Even still, there is no explanatory use regarding cosmological evolution in Whitehead's cosmology despite this theory possibly reinforcing a process philosophy's solution of the mind-matter problem.

It is a dangerous thing to change our mode of thinking - from looking at the world in terms of substances, to thinking of it in terms of events. All, and not just some, of our old Cartesian images have to go. Mind and matter are not separate... and are replaced by the single concept of relational events. These events have characteristics that can be considered matter-like in some respects and mind-like in others.

As an approach that avoids the many of the pitfalls of dualism, materialism and functionalism, I believe it is equally a solid candidate theory of mind, worthy of serious consideration and discussion within the contemporary debate. (Farleigh, 1998)

3.4.1. FREEDOM & DETERMINISM

As noted in the previous section, SOM becomes unstuck with the idea of determinism because if human beings appear to be composed of just physical matter then their behaviour is subject only to the laws of physics. If that is the case, their behaviour is determined and, in consequence, free-will only an illusion. As Richard Taylor (1991, pp.37-38) illustrates:

Everything in nature is and always has been determinate, with no loose edges at all, and she was forever destined to bring forth just what she has produced, however slight may be our understanding of the origins of these works. Ultimate responsibility for anything that exists, and hence for any person and his deeds, can thus rest only with the first cause of all things, if there is such a cause, or nowhere at all, in case there is not. Such, at least, seems to be the unavoidable implication of determinism.

However, compatibilists would disagree with Taylor's conclusion and suggest that free-will is compatible with determinism. It seems that this position has arisen because (in SOM) the alternative (that if everything is not determined then it must be random and chaotic) is equally, if not more, unpalatable. Pirsig (1997c) tackles this controversy by primarily conflating preferences (which are usually regarded as subjective) with probability (which is usually regarded as relating to the behaviour of objects):

When the distinction between them is examined an interesting fact appears. Preference is always supposed to be subjective. It exists only at the intellectual and social levels. At the biological level it becomes controversial as to whether animals such as cats have a preference or if they function according to Skinnerian stimulus-and-response probability. And at the atomic level it is assumed that only probability exists.

As Chalmers (1996, p.294) infers, because of the greater number of preferences available to them, a human being's experience has the potential to be richer and more complex (i.e. more valuable) than other animals or inanimate objects (such as sub-atomic particles). As Bergson (1907, p.179) observes, each evolutionary advance of the nervous system provides an organism with a larger choice of actions which, in turn, open up more potentialities which allows 'consciousness to pass more freely.' Possibly this view is human-centric (thus begging the question) but higher order animals such as parrots, for instance, begin to display negative behaviour if the preferences available to them (in their experiences) are seriously curtailed¹⁵³ while

¹⁵³ **'Parrots are one of the most intelligent species of bird, but they get bored easily and are prone to self-harm if left alone. Dr Irene Pepperberg has been working with an African grey parrot called Alex, whom she has taught to count and to recognise colour. Now, students at the Massachusetts Institute of Technology have come up with an idea to prevent him getting bored: teach him to go online. They have even built a customised mouse made of a flat piece of plastic with a hole in it for him to insert his beak.'** (Dodson, 2003)

Dr Pepperberg (who has worked with parrots for over twenty-seven years) is a research scientist at the MIT and a Research Associate Professor in the Department of Psychology at Brandeis University. In the following, she further explains the problems that parrots

goldfish can seemingly be offered relatively little stimulation or freedom without any detrimental effect.¹⁵⁴

If preference and determinism are on the same continuum, this implies that freedom is also on a continuum from little (or none) at the inorganic static quality level (e.g. I have minimal or no control over the strength of gravity in the universe; it is largely determined), to some freedom at the biological (e.g. I must eat to survive but have control of the nutrition ingested and of meal times), considerable freedom at the social (e.g. choice of clothes, if any), nearly complete choice at the intellectual (e.g. what I believe to be true) and to complete freedom at the Dynamic 'Code of Art' level (e.g. where I place my first brush stroke, if any, on the canvas). In the latter illustration, it should be emphasised that though the (largely) determined sub-atomic particles composing the artist's hand are involved with every brush stroke, it is the artist's mind that is producing the choices where the brush should be directed, not the

possibly develop if neglected:

'What I've tried to explain to parrot owners is that what they have in a cage in their living room is a creature with the sentience of a four to six-year-old child. I try to convince them that you can't just lock it in a cage for eight hours a day without any kind of interaction. I don't mean just interpersonal interaction, or having other birds around; parrots have to be intellectually challenged. In the wild they are constantly challenged... In contrast, what does a pet do? The bird sits alone in a cage all day, with ample food and water in nice accessible cups, and vegetates. Some birds in such situations pluck their feathers; they scream, they bite.' (Pepperberg, 2003)

¹⁵⁴ I state 'seemingly be offered little stimulation' as there is some evidence (as noted by the *New Scientist*) that fish are more aware than previously thought.

'Once the fish have entered the compartment, another click opens a trapdoor to release food. When there's nothing left to eat, the fish resume their aquatic meandering. What [University of Plymouth researcher, Jonathan] Lovell has demonstrated is a classic conditioning experiment, in the style of Pavlov's dogs, where the source of a specific sound becomes associated with the presence of food. His first experiments were on mullet; he's since shown it can work for bass, carp and goldfish. "With two feedings a day you can train a fish to respond to a sound in just two weeks," he says. "And they can remember that sound for at least four months, maybe longer.'" (Watts, 2001, p.40)

particles.¹⁵⁵ As such, it's apparent that this 'value' continuum (of freedom) stretches between largely determined sub-atomic particles to complete artistic freedom. This is important (metaphysically) as this continuum facilitates, in a largely deterministic physical world, a notion of moral responsibility and considerable intellectual freedom for an individual regarding aesthetic decisions.

The MOQ puts an end to this ancient freewill vs. determinism controversy by showing that both preference and probability are subsets of value. As the distinction between subject and object becomes relatively unimportant in the MOQ, so does the distinction between probability and preference. There is no basic difference between mind and matter with regard to free will, only a difference in degree of freedom. (Pirsig, 1997c)

3.4.2. 'HUME'S PRINCIPLE'

The 'is-ought problem' (a.k.a. 'Hume's Principle') is Hume's famous assertion that it's an error to use a set of non-moral facts to support a moral conclusion:

In every system of morality that I have hitherto met with, I have always remark'd, that the author proceeds for some time in the ordinary way of reasoning... when of a sudden I am surpriz'd to find, that instead of the usual copulations of propositions, *is*, and, *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence. (Hume, 1738, Book III/i/I, p.469)

Though not mentioned by Pirsig, the MOQ's reduction of subjects and objects to patterns of value possibly provides a solution to Hume's 'is-ought problem'. As D.J. Taylor (1992) notes:

What is so exciting philosophically in Pirsig's book is that we have finally found an answer to the argument of the sceptic Hume which has so totally undermined moral theory over the last two hundred years: that you cannot derive a (subjective) 'ought' from an (objective) 'is'. [In the MOQ] all experience is moral and 'objects' are mere abstractions [i.e. static value patterns].

¹⁵⁵ Of course, the 'mind' of the artist probably inheres in another set of sub-atomic particles that compose the artist's brain. But these particles will be configured (or 'cohere', to employ Zohar's terminology) in a specific arrangement that is absent from the particles composing the brush or the artist's hand. 'Even amoebas can push particles around in selective ways because they contain chemical patterns in the mitochondria that allow them to do so.' (Pirsig, 2004b)

It, therefore, appears that Hume's Dilemma is possibly an SOM problem caused by dividing reality between a moral subjective realm and a non-moral objective realm. As already observed in Chapter 2, the MOQ differs from traditional ethics in regarding all reality as moral; there is no amoral realm (objective or otherwise). In consequence, *all* facts can be described in value terminology from inorganic patterns of value (low order of morality i.e. as noted above, largely determined patterns with few preferences) to social and intellectual patterns of value (higher orders of morality i.e. considerable autonomy with numerous preferences).

As cosmological evolution is a scientific fact and the basis for the moral grading of the four static levels in the MOQ, a 'thing' *ought* (in a moral rather than a prudential sense) to be treated according to the level of evolution it *is* at. For instance, slavery is immoral because it's treating people as a lower type of evolutionary pattern (i.e. inorganic or biological objects that are owned) so denying the *fact* of the highest evolutionary pattern that they actually manifest (i.e. intellectual patterns). Certainly, in this example, a moral 'ought' has been derived from a factual 'is' though possibly only because there is a hidden premise ('we ought to treat things in a way appropriate to their level') which is already moral and disputable. The issue then turns on, whether or not, we should 'treat things in a way appropriate to their level' to which a possibly reply (on the lines of the MOQ) is that it produces harmony to do so. Reflecting my earlier observations concerning harmony in the context of mathematical discovery (in Section 2.3.4.), Hanfling (1972, p.14) notes 'There is no doubt, to my mind, that emotional feelings do play an important role in moral judgements' even if it is a matter a controversy of the exact role they perform. Moreover, though I may have a strong desire at times to enslave

prospective politicians or salespeople who darken my front door whilst working, I very much doubt that my existence (let alone theirs) would become more harmonic due to the difficulties of restraining them and avoiding the authorities who would eventually venture to discover the whereabouts of the aforementioned.¹⁵⁶ However, this illustration is possibly begging the question (because it's assuming a general belief in society that people, even politicians and salespeople, shouldn't be enslaved) though given that evolutionary criterion is scientifically based; it, at least, gives some guide (outside personal whim or hearsay) for behaviour. In other words, evolution can't be disputed on the grounds of being an arbitrary opinion or a social convention; there are good, rational reasons to believe it. A similar illustration concerning social conventions is provided by Hanfling (1972, p.15):

Many of Jesus' moral pronouncements were out of keeping with what was regarded as normal in his society. But they were not unintelligible or self-contradictory. It was not because people couldn't understand the teachings of Jesus that they found them hard to accept. So if we are to allow for the possibility of innovation in moral standards, there must be more to moral judgements than just stating the moral standards prevalent in one's society.

3.4.3. CAUSATION

Although possibly differing in opinion concerning the 'is-ought problem',¹⁵⁷ Pirsig (1991, p.106) shares Hume's belief that while certain mental events are constantly conjoined with physical events, no *causal* relationship between them is ever observed.¹⁵⁸

¹⁵⁶ Moreover, I highly doubt that politicians and sales people would make high quality slaves. They'd probably talk too much.

¹⁵⁷ Hume possibly rejected the truth of his own principle. See Hanfling, 1972, p.20.

¹⁵⁸ Not that Hume or Pirsig are suggesting anything not realised by Buddhist philosophy well before the eighteenth century. As Guenther (1957, p.180) points out:

Empirically speaking, there is no such thing as causation. You never see it, touch it, hear it or feel it. You never experience it in any way. This has not been a minor philosophic or scientific platypus.¹⁵⁹ This has been a real show-stopper.

Hume (1777, p.81) postulates that the idea of necessary connection between events or successive impressions is simply an idea derived from experience.

Our idea... of necessity and causation arises entirely from the uniformity observable in the operations of nature, where similar objects are constantly conjoined together, and the mind is determined by custom to infer the one from the appearance of the other. These two circumstances form the whole of that necessity, which we ascribe to matter. Beyond the constant conjunction of similar objects, and the consequent inference from one to the other, we have no notion of any necessity or connexion.

Nagel (1979, p.185) explains that Hume maintained that causal necessity is somehow illusory because 'all we ever observe are natural regularities and correlations'. However, when Hume is stating that causation is 'illusory', he's simply asserting the similar claim of Northrop's and Pirsig's that it's only illusory in the sense that it's a concept used to order certain sensory perceptions (and, therefore, subject to the vagaries of Descartes' demon). Nevertheless, Nagel (1979, p.185) argues that Hume was in error as:

'Buddhists never admitted the rule "A causes B", except as a crude suggestion in non-philosophical parlance. As a matter of fact, the Buddhist conception of causation is [that] there is no indefinable relation, except conjunction and succession and that our tendency to accept such propositions as "this causes that" is to be explained by the laws of habit and association.'

¹⁵⁹ Pirsig (1991, pp.104-05) uses the term 'platypus' to note a metaphysical difficulty. This term was named after the monotremata classification created by zoologists to account for the duckbilled platypus and the spiny anteater. The platypus is often marvelled at for being an enigma while the real problem probably lies in the minds of the zoologists themselves.

'In a subject-object classification of the world, Quality is in the same situation as that platypus. Because they can't classify it the experts have claimed there is something wrong with it. And Quality isn't the only such platypus. Subject-object metaphysics is characterized by herds of huge, dominating, monster platypi [sic]. The problems of free will versus determinism, of the relation of mind to matter, of the discontinuity of matter at the sub-atomic level, of the apparent purposelessness of the universe and the life within it are all monster platypi created by the subject-object metaphysics.' (Pirsig, 1991, p.105)

True causes do necessitate their effects: they make them happen or make them the case. Uniform correlations are at best evidence of such underlying necessities. This seems to me clearly true in elementary cases: heat causing water to boil, rocks causing glass to break.

Unfortunately, just by asserting that 'true causes do necessitate their effects' because this seems 'clearly true in elementary cases' (such as heat causing water to boil), is not sufficient for Nagel to prove *beyond doubt* that causal necessity is part of an 'objective' real world. As argued by Hume, this is because in our experience there is an absence of anything that guarantees the continuation of the previously observed uniformity of nature and, furthermore, as Davies (1992, p.195) reminds us, there's also no logical obstacle to the idea of a universe whose conditions of uniformity suddenly cease to exist. This scepticism is shared by Bertrand Russell (1913, p.1) who argues that 'the law of causality, I believe, like much that passes muster among philosophers, is a relic of a bygone age, surviving, like the monarchy, only because it is erroneously supposed to do no harm.'

Nevertheless, even if causal necessity is rejected, this doesn't entail the rejection of the observed uniformity of nature as a less deterministic notion of preference (as employed in the MOQ) can connect two consecutive events:

You can always substitute 'B values precondition A' for 'A causes B' without changing any facts of science at all. The term 'cause' can be struck out completely from a scientific description of the universe without any loss of accuracy or completeness. (Pirsig, 1991, p.107)

The primary difference, according to Pirsig (1991, p.107), between the concepts of causation and value is that value avoids the absolute certainty implied by causation.

In classical science it was supposed that the world always works in terms of absolute certainty and that 'cause' is the more appropriate word to describe it.

But in modern quantum physics all that is changed. Particles ‘prefer’ to do what they do. An individual particle is not absolutely committed to one predictable behavior. What appears to be an absolute cause is just a very consistent pattern of preferences.

Pirsig’s assertion that ‘value’ is a more accurate term to employ than ‘causation’ is also supported by Popper (1990, pp.18/20) who notes that:

The World is no longer a causal machine - it can be seen as a world of propensities, as an unfolding process of realizing possibilities and of unfolding new possibilities... Causation is just a special case of propensity: the case of a propensity equal to 1, a *determining* demand, or force, for realization.

As with freedom and determinism, causal necessity and (absolute) randomness can be placed as the opposing limits of a value (or propensity) continuum. If causation is the case of a propensity equal to 1, randomness would be the case of a propensity equal to 0.

Bertrand Russell also argues for this type of revision as he judges that the problem with the concept of causation is that it involves the law of universal determinism (i.e. ‘every event has a cause’). However, as modern physics indicates that reality is apparently non-deterministic, the concept of causation as a relation between events now serves no useful purpose and should be replaced by a non-deterministic concept of causal laws. Russell’s own proposal (1948, p.333) centres on ‘causal lines’ which are a series of events (such as a person, a table or sub-atomic particle) from which if we are provided details concerning a selection of the events ‘we can infer something about the others without having to know anything about the environment’. In agreement with Pirsig, the concept of ‘substance’ is also rejected by Russell (1948, p.333):

The concept of more or less permanent physical object in its common-sense form involves ‘substance’, and when ‘substance’ is rejected we have to find some other way of defining the identity of a physical object at different times. I think this must be done by means of the concept ‘causal line’.

Again, reflecting process philosophy, Russell's typical entity of causal lines displays 'quasi-permanence' i.e. a lack of absolute determinancy but a trajectory through time in isolation from other 'lines' of similar events. 'Throughout a given causal line, there may be constancy of quality, constancy of structure, or gradual changes in either, but not sudden change of any considerable magnitude.' (Russell, 1948, p.477).

However, Russell's theory is formulated in epistemic terms rather than ontological terms even though it appears that causal processes are an ontic concern rather than an epistemic one. As noted above, his account is constructed in terms of how we formulate inferences while the vast majority of causal processes (since the universe's inception) have occurred quite independently of sentient beings. As such, an advantage with the MOQ's account of causal processes, in this respect, is that it is formulated in ontological terms rather than epistemic terms: values are considered empirical (even at the inorganic and biological levels) and observers aren't required at these levels to provide inferences.

While it is true that causal processes often provide justification for the type of inferences that Russell puts forward, it is not the case that all rational inferences are justified by the existence of causal lines as there are other types of causal structures. For instance, two people who hold season tickets for an identical football club may appear next to each other (when attending matches) at the same time and place every fortnight (for the greater part of the year) but it would be incorrect to conclude there exists a direct causal inference between the two people. There may indeed be a direct causal link in that the two people are a married couple and the wife only

attends the matches to spend time with her husband (rather than to view the sport) while another two people (let's presume strangers) also hold season tickets for the identical football club and appear next to each other (at the same time and place) every fortnight but each of them attends solely to watch the football. In the latter, therefore, it would be incorrect to make a direct causal inference between the individuals though (as observed in the married couple) it may exist.

It's perhaps pertinent to note that as the mechanical philosophy of SOM is revised in the MOQ, the closely related mechanical notion of causation correspondingly alters. Though, this correlation is overlooked by Pirsig, Popper (1990, pp.20/21) confirms that causation was a 'push' theory in its implication that the world is akin to a mechanical clock¹⁶⁰ in which the first cog wheel to move is the first push. Popper (1990, pp.7/8) further reminds us that this Cartesian idea was the dominant physical view of the universe until the development of quantum mechanics. As noted above, it became apparent in the 1920s that the new science made the clockwork universe imprecise; that inorganic patterns contained indeterminacies that gave rise to weighted possibilities:

In so far as these possibilities can, and partly will, realize themselves in time, the open future is, in some way, already present, with its many competing possibilities... It is not the kicks from the back, from the past, that *impel* us but the attraction, the lure of the future and its competing possibilities, that *attract* us, that *entice* us. This is what keeps life – and, indeed, the world – unfolding. (Remember that Newtonian forces too are attractive forces!) (Popper, 1990, pp.20/21)

¹⁶⁰ Originally attributed to Robert Boyle (1627-91) who compared the world to the mechanical workings of the Strasbourg clock in 1672. (Brown, 1972, p.9)

This lure of the future has implications for evolution, and, in turn, the MOQ. Popper (1990, p.26) postulates that evolution is a process which involves *both* chance and preferences:

It is obvious that in the evolution of life there were almost infinite possibilities. But they were largely exclusive possibilities... only comparatively few propensities could realize themselves. Still, the variety of these that have realized themselves is staggering. I believe that this was a process in which both *accidents* and *preferences*, preferences of the organisms for certain possibilities, were mixed: the organisms were in search of a better world. Here the preferred possibilities were, indeed, allurements.

This perception of evolution is shared by complexity theory (as discussed in Section 2.6.0.) and is important for the MOQ world view as it provides an alternative to Davies' (1992, p.194) dichotomy that the universe 'is either a mindless accident or an inevitable consequence of mechanistic laws.' Moreover, without having to resort to arguments involving the supernatural, it challenges Monod's (1972, p.167) theory that conscious beings emerged *merely* because of chance.

3.4.4. CHALMERS' 'HARD QUESTION' OF CONSCIOUSNESS

In light of the above, possibly the MOQ's incorporation of cosmological evolution enables it to suggest a solution to Chalmers' 'hard question' concerning consciousness. Chalmers' (1996, p.xii) question states:

Why is all this processing (by the brain of environmental inputs and internal states) accompanied by an experienced inner life?

Pirsig (and Popper) hypothesise that 'an experienced inner life' gradually developed from expectations (or values) of low level biological patterns (such as amoeba) to enable them to better achieve certain preferred possibilities in their environment:

Organisms and their organs incorporate expectations about their environment; and expectations... are homologous with our theories: as homologous as is the nose of my dog with my nose. So I suggest the hypothesis

that adaptations and expectations [of an amoeba] are homologous even with scientific theories. (Popper, 1990, p.47)

Popper (1990, p.47) further discerns, that in addition to valuations, an organism depends on mobility (hence possibly explaining a reason why consciousness evolved in animals rather than plants):

The organism's structure may incorporate the theory: 'the surrounding water can be dangerous: it may be too hot or too cold, and it may be too much or too little acid.' Clearly such evaluations can evolve only if the organism is able to take action; for example by moving away if it anticipates danger from these environmental states. Problems, values, and activity all evolve together.¹⁶¹

Moreover, if Popper's ideas on evolution are transposed to the social realm, it indicates that consciousness (i.e. our 'inner life') possibly evolved to enable *societies* (of human beings) become more directed in realising certain preferred possibilities.

This theory is supported by Lewin (1993, p.180) who asserts that:

Anthropologists are beginning to see the importance of social interaction as the engine of the evolution of hominid intelligence. Consciousness and language go hand in hand with that.

As such, it is observed that the connection between 'an experienced inner life' and matter is essentially an evolutionary one. Biological value patterns control inorganic ones through key chemical reactions that are the subject of biochemistry. Social patterns control biological ones through the police and the military. Intellectual patterns control social ones through government law and the democratic process. As Pirsig (1991, p.159) notes, the connection only becomes a mystery when the two middle levels of biology and society are overlooked:

The mind-matter paradoxes seem to exist because the connecting links between these two levels of value patterns have been disregarded. Two terms are missing: biology and society. Mental patterns do not originate out of inorganic nature. They originate out of society, which originates out of biology which originates out of inorganic nature. And, as anthropologists know so well, what a mind thinks is as dominated by social patterns as social patterns are

¹⁶¹ This is similar to the amoeba example given by Pirsig (1974a, p.251) in Section 2.3.

dominated by biological patterns and as biological patterns are dominated by inorganic patterns.

However, Chalmers (1996, p.120) dismisses evolutionary criteria in the development of consciousness by advancing the argument that if a physical replica of himself appeared a million years ago, it 'would have been just as conscious' as his present day self. Chalmers' certainty about this hypothesis is questioned by Pirsig (2002e) who inquires:

How does he know this? There is no way a physical replica of him could appear a million years ago. This is an hypothesis contrary to fact; like saying that if pigs could fly they could probably go to 10,000 feet in altitude.

Chalmers' (1996, p.121) assumption concerning his physical replica as being conscious a million years ago as his present day self would indicate (as he argues) that the 'connecting principles' between mind and matter 'are therefore independent of the evolutionary process'. Nonetheless, even if Chalmers' 'pigs could fly' hypothesis was possible, the fact that the operating processes between mind and matter a million years ago were similar to those existing today is irrelevant to the truth concerning the actual evolutionary development of mind from matter. For instance, it seems plausible to postulate that the physical environment a million years ago on Earth could support the breathing and ingestion systems of present day animals. Though, even if this is the case, it doesn't disprove the actual evidence that the present day breathing systems of animals (e.g. lungs) evolved, over the longer term, from more primitive systems (e.g. single cell osmosis). Moreover, if Chalmers' physical replica appeared sufficiently distant in cosmological history (for instance, two minutes after the Big bang) it's quite apparent that its survival would be impossible as the requisite conditions for life (such as oxygen or water) would be absent.

Essentially, it appears that Chalmers is conflating the ‘connecting principles’ for *why* consciousness developed (from physical matter) with the ‘connecting principles’ of *how* consciousness and physical matter operate between each other. Yet, he is addressing the second question when his ‘hard question’ clearly relates to the first. In consequence, Chalmers confuses the metaphysical obstacles of the connecting principles between mind and matter with the scientific explanation of their relationship. Critically, the scientific explanations of consciousness (as with theories concerning phenomena such as electricity or light) are essentially concepts by postulation and, as such, open to continual revision. In consequence, it would be implausible to assume that definitive answers to such phenomena will ever be achieved; only an omniscient God could be positive that such an aspiration had been reached.

The MOQ sorts Chalmers out by dissolving the ‘hardest problem’ whilst reinforcing the irreducibility and ontological priority of experience (Consciousness/Quality). It seems to me that this neat solution may be a possible entry route for the MOQ into the academic mainstream. Granted the dissolution of the hard problem requires a shift in perspective - and this is never a quick and easy thing - but this is the whole point isn’t it? (Gee-Clough, 2002b)

Nevertheless, if Chalmers is actually searching for an answer of *how* consciousness and physical matter operate between each other, the MOQ possibly assists in removing the metaphysical obstacles between these operations by reducing them to patterns of value but it’s outside its remit (as with any metaphysical system) to provide a scientific explanation of these operations. Obviously, it improves philosophical theories if they take into account contemporary science though, as Clark (2002b, p.155) implies, the ‘hard problem’ is essentially a fictional one:

The ‘hard problem’ about consciousness – how such a thing could come about within an essentially unthinking world – is one that we have made up, but

not by pretending to be conscious when we aren't. Our error was to pretend that only the unconscious could be really real.

3.5. CONCLUSION

Idealism and materialism can be considered as being the two extremes of a 'continuum' of the known (or conceptualised) world. Idealism is accurate, to the extent that it's a high quality belief to assume that minds exist (and is one extreme of the continuum); materialism is accurate, to the extent that it's a high quality belief to assume that physical matter does exist (and is the other extreme of the continuum), while dualism is yet more accurate in recognising both the existence of mind and matter in their own right (though it makes the possible error of assuming that they are *absolutely* different). Arguably, the MOQ is more accurate still, as it not only recognises both the 'extremes' (of mind and matter) as high quality ideas but (as shown by cosmological evolution) recognises that they are different manifestations of the same (evolving) type of 'value events' (i.e. Quality). Though such events are also recognised by Whitehead, Popper and Russell as a more productive way of examining the post-Newtonian universe than SOM, Pirsig's system is the only 'process' philosophy to operate without direct reference to 'subjects' and 'objects'.

The Metaphysics of Quality provides a larger framework in which to integrate subjectivity and objectivity. Subjectivity and objectivity are not separate universes that have no connection to each other. They are instead separate stages of a single evolutionary process called value. I can find no place where the words subjective and objective are used where they cannot be replaced by one of these four categories [of static value patterns]. When we get rid of the words 'subjective' and 'objective' completely often there is a great increase in the clarity of what is said. (Pirsig, 1995a, p.15)

In addition, Pirsig (as did Wittgenstein) recognises that not everything that can be *shown* to exist can be written about or conceptualised. Over and above the known aspect of reality, there's also the ineffable and the unknown which are recognised in

the MOQ by the referring term 'Dynamic Quality'. As there's actually nothing known (in an absolute and complete sense), not only does Dynamic Quality go beyond the 'continuum' of the known itself, it fundamentally composes it as well. Moreover, the MOQ gives equal ontological status to the other two distinct manifestations of conceptualised reality (i.e. biological and social patterns) between the extremes of mind and matter. As noted by Pirsig in the above quote, mind and matter are the result of the same evolutionary process (of value patterns) and though there isn't a direct connection between them, they are mediated by biological patterns and – unless a highly original thought appears - *usually* by social patterns.

If Descartes had said, 'The seventeenth century French culture exists, therefore I think, therefore I am,' he would have been correct. Chimpanzees do not philosophize. There has to be an intervening social level. (Pirsig, 2004d)

Epilogue

Among the great things which are to be found among us, the Being of nothingness is the greatest. (Leonardo Da Vinci, Diaries & Notes, p.4)

In this thesis I commenced with investigating the theoretical and practical problems in traditional American anthropology's notion of objectivity (epitomised by Franz Boas) that provided the initial catalyst for Pirsig to refine his metaphysical ideas. After clarifying that it is essentially objectivity in an epistemological context that Pirsig is concerned with (at least, in the sense understood by Boas), a section distinguishing the epistemological and ontological senses of objectivity was provided. This chapter then dealt with Strawson's objection that Pirsig's understanding of Cartesian metaphysics is a straw man. This indicated that Strawson's criticism was largely unfair (in fact, a strawman itself) though if Pirsig had employed established terminology for SOM (such as the 'mirror of nature paradigm') this criticism would have possibly been avoided in the first place. The notions of polysemic meanings (as understood by the anthropology professor, William Davis) and scientific generalisation (as understood by the mathematician, Poincaré) were then examined in reference to Boas' methodology. It was shown that these notions are essential for the social sciences yet, as noted by the first generation of American anthropologists that were taught and influenced by Boas, subjective meanings and generalisation were avoided by him for theoretical reasons (i.e. the positivism of natural sciences that was taught to him as ideal during his university studies in the late nineteenth century).

To perceive how Boas's theoretical underpinnings operated in practice, I then appraised the most prominent instance of an anthropology project of the Boas tradition (namely Mead's research in Samoa) and, in reference to the investigations of this by Derek Freeman, found it highly suspect. As an alternative, I offered Pirsig's suggested 'non-objective' methodology for anthropology (namely the participant approach of Verne Dusenberry) which (primarily by extended and close contact with his subjects) proves more successful in obtaining accurate polysemic meanings. As such, this chapter concludes that Pirsig was correct, certainly to some extent, in his claim that the field would be improved with the MOQ as it facilitates scientific generalisation and the recognition of the polysemic elements in social behaviour. The remainder of the thesis then considers the various metaphysical elements of the MOQ and Pirsig's further claim that it also improves on traditional Western metaphysics.

Chapter 2, then, commenced with an overview of the MOQ with specific reference to the programme's foundations in East Asian philosophy, American pragmatism and the work of F.S.C. Northrop. As noted in Section 2.1., Pirsig claims that his notion of 'Quality' is a synonym for the Zen Buddhist notion of 'emptiness'. As I note, this equivalence isn't absolutely secure but from reading the Buddhist literature listed in the bibliography of this thesis, I have not come across a serious contradiction between these two understandings. Moreover, an absolute consensus even within traditional Buddhist philosophy of how 'emptiness' should be understood seems unlikely.

In this section, we were introduced to some justifications of Pirsig's for why his terms of 'Quality' and 'Value' are an improvement on the traditional terms for reality such as 'emptiness' or 'the Absolute' (namely the logical difficulties it entails for a positivistic-orientated scientist to deny the importance of intellectual values such as truth) and some of the drawbacks with Pirsig's terms (namely the commercial connotations with the term 'Quality' and the numerous contexts the word that value can be employed in). However, whatever the term employed for fundamental reality, there does appear to be some agreement (as observed in Section 2.1.) between Buddhism and physicists in that it is essentially harmonic in nature. An important part of this understanding is Nagarjuna's notion of *sunyata* (non-dual understanding) which he regards as relating to a fundamental harmony. Evidence that this just isn't a romantic whim is provided by Pirsig in reference to the mathematician Poincaré and his colleague in the field of physics, Albert Einstein who both emphasised the harmonic nature of the universe. As I noted in Section 2.1., this recognition is held by other notable scientists such as Feynman, Polkinghorne and Dirac. Other scientists, not mentioned in this section, are the quantum physicist David Bohm who enjoyed a lengthy correspondence with the Indian philosopher, Krishnamurti¹⁶² and the atheist Richard Dawkins (though the latter is keen to emphasis that this doesn't define him as 'religious').

Despite this seeming agreement between Buddhism and some notable figures in science concerning harmony being fundamental, there is also a chaotic element in the universe. The pertinent observation as far as the MOQ is concerned with this issue,

¹⁶² Krishnamurti (1895-1985) was concerned about the fundamental human problem of conflict in the world and the activity and nature of human thought. From 1959 Krishnamurti explored areas of mutual interest with Bohm - especially with how SOM affects the nature of our thought and language.

is that Pirsig's system also implies a tendency towards chaos. If this tendency is equated with evil and Dynamic Quality equated with the Good, then the problem of evil in a spiritual universe is solved – at least for anyone not desiring a personal relationship with a 'universal spirit'. 'The evolutionary problem of evil is no threat to belief in a non-anthropomorphic God, for it is only if God is an omnipotent moral agent that the existence of evil is problematic.' (Stewart-William, 2004, p.21)

In Section 2.2., the history of Pirsig's initial classroom experience in becoming aware of the problem of defining Quality was explored. Though Pirsig and his students shared a general understanding of Quality as shown by their ability to reach a consensus in ordering essays on the level of their Quality, it proved more difficult for the class to establish a 'verbal definition proper' (to use Moore's terminology) for the term. This attempt at definition wasn't assisted by the realisation that the Quality experienced through an essay was neither *purely* subjective (residing solely in the reader's mind) or *purely* objective (residing in the essay itself). As such, Pirsig eventually concluded that Quality is not properly accounted for in SOM and, as such, is better thought of as ontologically prior to subjects and objects. As noted in Section 2.2., Pirsig shows that Quality exists in ZMM – whether it is defined or not - by employing a 'reductio ad absurdum' argument that indicates human existence is not feasible without intellectual and social values. However, this argument does not support the stronger claim that Quality is *everything* that exists. This postulation was only arrived at inductively by Pirsig after realising that such an assumption appears to provide a better metaphysical framework for values (as well as mind and matter) and the correlation he observed between Poincaré's understanding of harmony, the positive affect this understanding has in motorcycle maintenance and Eastern

mysticism. 'The Buddha, the Godhead, resides quite as comfortably in the circuits of a digital computer or the gears of a cycle transmission as he does at the top of a mountain or in the petals of a flower.' (Pirsig, 1974, p.26)

In the remainder of Section 2.2., the limitations in Pirsig's understanding of 'Quality' is given by reference to Beasley (2001) who argues that Pirsig equates 'Quality' with too many other terms and that it is paradoxical to leave it undefined. However, it was explained that when Pirsig states that Quality 'cannot be defined', he is following the Buddhist and Taoist concern that the human mind (which is part of the unconditioned) can't include the whole of the larger unconditioned within itself - a full and complete understanding of the unconditioned always remains out of reach. However, (for similar reasons that Plato used myth in his Dialogues to elucidate truths concerning the Good) I noted that Pirsig extends human understanding of the unconditioned by designing his two texts on the lines of a Zen koan.

In Section 2.3., Pirsig's arguments from ZMM that Quality is empirical though indefinable, is re-stated with reference to the notion of value and his example of sitting on a hot stove. Though Pirsig illustrates this (for clarity's sake) in reference to an extreme situation, his essential point is that objects such as stoves need to be learnt. Moreover, there still remains a difficulty in SOM in assigning values to either the subjective or objective ontological realms (as observed by James, Adam Morton and by Pirsig's hot stove experiment). As such, Pirsig equates empirical *experience* with value and rejects the traditional Western understanding of there being pre-existing subjects and objects as *the conditions for* experience. This denial of pre-

existing subjects and objects as ontologically primary, then, establishes the MOQ as a 'pure empiricism' in which everything arises from a pre-intellectual experience.

As I observed, in this respect Pirsig's system shares similarities to Merleau-Ponty's phenomenology where the 'phenomenal field' is not an inner world or state of consciousness but experience in which subjects and objects are eventually made explicit. Scientific evidence that supports this view is provided by the work of the neurologist Benjamin Libet which strongly indicates that there is always a constant half second of unconscious processing to stimuli before consciousness arises. As noted by Blackmore (2004, p.26) this half-second delay is generally accepted in the scientific community despite controversy surrounding other aspects of Libet's work. The consequence of which, if true, renders the SOM explanation of the world as unfeasible because it shows that existence does not begin with a subject opposing an objective reality but a 'pre-intellectual' reality.

This still leaves the issue of why this pre-intellectual reality should be regarded as primarily an evaluative one. Pirsig (1974, p.311) argues for this conclusion by claiming that for human survival, 'sense data' requires constant evaluation as there is an overwhelming avalanche of facts, sights and sounds that we are exposed to every second. In other words, values 'saturate' immediate experience and precede any further articulation of the world into entities such as subjects and objects. Examples from Pirsig supporting the truth of this claim are provided by the experience of new born babies and single celled organisms - the latter of which lack a notion of a self opposing an objective reality but almost certainly hold a distinction between good and bad. As noted, the distinction between oneself and the world must be learnt and

must have appeared in evolutionary history when creatures thought it of *value* to do so – when subjects and objects became, to use Pirsig’s terminology - static patterns of *value*. Moreover, the existence of an ‘aboriginal’ evaluative element from which everything else is derived is supported by complexity theory (as noted by the biologist Stuart Kauffman) and the evidence in physics (as noted by Kolb and Zohar) which indicate that the universe required quantum fluctuations (or preferences?) to act as primordial seeds for the creation of stars, life and people.

Atoms are created by the preference of quantum forces for certain stable relationships. These quantum forces are not objects of any kind. They are believed to have existed before the Big Bang and can be shown to exist today in absolute atomic vacuums. They are just patterns of preference that appear out of what is called mass-energy. But if one asks what is this mass-energy independently of its preferences one finds oneself thinking of nothing whatsoever. The preferences, that is, the values, which is to say, the quality patterns, are the only reality we experience. (Pirsig, 1997a)

Subsequently, Section 2.4. then clarifies the MOQ’s position regarding idealism and realism. As discussed, this position isn’t straightforward because despite claiming that values are primary in an ontological sense, Pirsig still holds that external, independent objects are high quality explanations for why sense experience is generated. However, this is qualified in that realism (as with any metaphysical theory) is primarily a set of provisional ideas concerning reality i.e. it’s accepted as true while the scientific evidence – which always remains provisional – supports it. At the same time, while the MOQ agrees with idealism that ideas logically precede objects, it does not hold that mind precedes experience but that mind is itself constructed by a primordial sense of ‘value-experience’.

In Section 2.5., the Dynamic and static division that Pirsig employs in the MOQ is made in reference to mysticism, freedom and order. As noted, these terms were

derived from Pirsig's initial plan to write a thesis demonstrating that contemporary North American society originally derived its essential ideas regarding freedom from Native American culture and order from its European heritage. In addition, the value of having a distinct marker for Dynamic Quality (in a metaphysical system) is that it enables a clearer recognition of important intangibles (such as creativity, curiosity, enthusiasm, originality and freedom) which are important and critical for high quality research and teaching. However, with Dynamic Quality being a mystic entity, Pirsig cautions about aligning it too much with a particular property and, as apparent with the meditative techniques practised at Zen Buddhist monasteries, suggests that an understanding of Dynamic Quality is best achieved largely through intuitive means.

In Section 2.6., the Dynamic-static division is examined in more detail, in reference to how the listening experience of a new record is Dynamic but becomes increasingly static as the record is played. This seems a valuable division in that it can be applied to a wide range of experiences (from visiting a new place to formulating a new engineering solution) and, explains why the 'same thing' can move from being an item of interest to a boring experience. Moreover, as Pirsig notes, the Dynamic-static division is an improvement on the ZMM division of Quality into classic and romantic forms as it takes a proper account of mystic experiences. This division of Quality into the Dynamic and static also assists his metaphysics to explain why an experience of a record or a painting can be variable depending on the viewer without assuming such differences are *purely* subjective.

In the remainder of Section 2.6., we were introduced to the four levels of static quality, their cosmological order, the 'fuzziness' in the dividing lines between them, possible improvements to Pirsig's terminology (namely 'stable' rather than 'static') and suggestions for potential additional levels: namely the sub-atomic and Steiner's 'spiritual perception'. Out of the two suggested levels, 'spiritual perception' (which incorporates imagination, inspiration and intuition) appears to me the most plausible as it emphasises these ineffable yet important aspects. Certainly, in education, I can understand (as no doubt seen in the philosophy of Steiner schools) that an emphasis on imagination etc. is important. 'Complexity theory' is also introduced in this section as it throws light on why the static patterns may be evolving on the Dynamic lines that Pirsig suggests i.e. it provides an explanation for the order observed in the universe without having to fall back on the two extremes of a designer God or the claim (of Monod's) that it arose purely by chance.

As noted, Pirsig asserts that the four static levels can be placed in an absolute moral hierarchy and employs the notion of cosmological evolution as the basis for this. Though Pirsig's system follows the general history of cosmological evolution, it appears to have been formulated inductively by Pirsig. So, for instance, the idea of justice which is an intellectual pattern of value could not have appeared before sentient beings existed to think of it. As such, though the intellectual level is considered as absolutely more moral in the MOQ than the social level (which in turn is considered absolutely more moral than the biological etc.), it appears that Pirsig first determined this hierarchy by observing that intellectual values (such as justice) were given more weight in most formal ethical systems than social values (such as a judge or king giving a popular decision on a case despite it possibly being unjust).

After observing this hierarchy, Pirsig then realised that it corresponded to human evolutionary history on the cosmological scale. After the hierarchy was established, new dilemmas could then be dealt with by Pirsig deductively. Certainly, the MOQ clarifies the most obvious moral dilemmas on rational grounds though, as I note in Section 2.7.1., because Pirsig employs only four static levels (and the Dynamic code of Art) the system is not particularly useful with the less obvious dilemmas on the same static level e.g. determining the best Shakespeare play. However, even a rudimentary rational moral framework appears to have its uses and, as Pirsig claims in LILA, this hierarchy improves the philosophy of William James where - as we observed in Section 2.8.1. - his notion of 'usefulness' can be hijacked as a justification for immoral behaviour as displayed by the Nazi treatment of the Jews as beings without intellectual or social worth. However, as an underpinning to a metaphysics, the theory of cosmological evolution isn't without its problems (as noted in Section 2.7.0., there do remain important gaps in the human evolutionary record) it should be emphasised that the theory is generally accepted by the scientific community.

As noted in Section 2.9., the notion of evolutionary development can also be beneficial in regards to a rationalistic type of pragmatism is concerned, as observed in Spinoza's monism. For instance, Spinoza (1677, Part III) describes perfection of the human mind in terms of its power of thinking where joy is an increase in that power to a greater perfection while sadness is a decrease in that power. If joy is the passage to a greater perfection then the good is whatever makes us more perfect. However, Spinoza's *subjective* notion of joy sounds disturbingly similar to the type of relativistic notion of satisfaction found in James' work that can seemingly justify

atrocities such as the Nazis' holocaust. As with James' form of pragmatism, the MOQ can assist in resolving this ambiguity by replacing Spinoza's relativist notion of Good ('whatever gives an individual joy') with a less arbitrary notion based on value evolution. This not only reconciles Spinoza's notion of 'reality and the Good being one and the same thing' but utilises a more rationalistic understanding of ethics that Spinoza (1677, p.163/ Part IV, PXXXV) judges necessary for social harmony.

In so far as men are assailed by emotions which are passions they can be different in nature and contrary to one another... [However,] in so far as they live according to the dictates of reason, [they] do those things which are necessarily good to human nature.

As noted in Section 2.9., another concern with Spinoza's work in comparison with the MOQ, is that his rationalism relies heavily on a regressive method of analysis in the style of Euclid's Geometric proofs. However, as Poincaré realised in 1905, because geometries are human conventions, there is a risk with this methodology of proving only the conventions that you desire to prove (such as Spinoza's own belief in God). Though beneficial in clarifying an argument, a geometric method of proof doesn't *necessarily* lead to legitimate empirical conclusions especially if one (or more) of your initial assumptions are mistaken.

Though the MOQ (as with any moral system) wouldn't prevent immoral behaviour by anyone intent on mischief (or giving social norms priority over intellectual values), it prevents the employment of pragmatism as a *justification* for behaviour as extreme as the Nazis treatment of the Jews. Moreover, keeping in mind that criminal behaviour is best controlled by the courts and the police, it is important that the latter's (intellectual-based) directives are as of high quality as possible, especially in International Courts of Human Justice which have to deal – on occasion

– with the aftermath of Nazi-like atrocities. As observed in Section 2.8.0., John Dewey successfully promoted the use of pragmatic philosophy in the legal system (for instance, in the United States Supreme Court) and, for Pirsig (2004g), this also remains a ‘huge area for the application of the MOQ’.

Unfortunately, the United States is also the place in the Western world where evolution theory (which underlies Pirsig’s improvements to pragmatism) is not accepted by a substantial minority of the general population and, in some mid-West areas, remains banned from being officially taught. The fact that creationist objections to evolution are largely unfounded is not likely to hold much weight for any judge with Fundamentalist Christian sympathies. However, though the recent re-election of a Republican president (with Christian sympathies) – on the face of it - doesn’t bode well for justice of an MOQ pragmatic nature, Pirsig (2004g) observes that the Republicans do contain some pragmatic elements.

The Republicans have exploited the fundamentalists for their votes but the party is dominated by commercial interests that are known for their financial pragmatism. It will be interesting to see how this plays out.

Despite the re-election of the Republicans in 2004, it remains (as noted in Section 2.11.) that the illusion of satisfaction and fulfilment promised by ‘the religion of market capitalism’ (to quote Lorentz, 2001, p.197) is beginning to lose its charm with a substantial minority in the United States, leaving the opportunity open for a spiritually orientated philosophy to develop. If Pirsig’s accessible form of Buddhism can succeed in providing an acceptable Western version of Zen Enlightenment then there is some cause for optimism towards re-incorporating the ‘sacred’ (to return to the quote from Momaday given at the beginning of this thesis) in resolving modern

Western alienation - especially in American society where religious freedom (at least) is held in high esteem. Simply the fact that ZMM has sold over four million copies and LILA 630,000 copies (as of January 2004),¹⁶³ indicates that there is some interest in this respect. As our everyday life continually involves value judgements (from critical life decisions to the normative behaviour we transmit to the next generation to our deepest political convictions), an empirically based system devoted to the Good such as the MOQ is, at least, useful in clarifying a world of multiple value choices and an often bewildering pluralism. Through this clarification, it assists a person to positively contribute to the value of the world and, through this, develop their own character. Moreover, by basing his metaphysics on the 'Good', Pirsig claims that his system assists in resolving a number of previously intractable problems in SOM.

Though there is agreement between post-modernism and the MOQ in that both reject SOM (and its notion that there is a single objective reality that truth corresponds to), post-modernism can be too radical in assuming that different cultural world views are completely arbitrary. However, despite a certain freedom at the social level, for instance in economic structure and cultural norms, world views remain limited by physical and biological constraints. As an illustration, all human beings share certain physiological needs so a culture where food isn't eaten couldn't exist. Moreover, as noted in Section 2.11., the failure to properly recognise Being (which universally grounds human experience) tends to lead to existential angst.

¹⁶³ **'I do not get Bantam's figures for the paperback of ZMM or figures for any of ZMM's foreign sales. I was once told six million, and later 3.2 million, so the 4 million is an estimate. The LILA figures go through an agent who gets them by contract and they are accurate at 636,605 as of Jan. 30, 2004.'** (Pirsig, 2004c)

Furthermore, if Falzon (1998) is to be believed, post-modernism is essentially just social dialogue and *attempts* to avoid all notions of metaphysics. In consequence, though post-modernism and the MOQ both recognise the metaphysical problems in SOM, post-modernism avoids suggesting metaphysical solutions to these while the MOQ strives for metaphysical solutions. It is a wider framework than SOM (by its recognition of Dynamic Quality) but a metaphysical one, none-the-less. As such, Chapter 3 examined Pirsig's claim that the MOQ deals successfully with previously intractable metaphysical difficulties of SOM such as the mind-matter problem. It commenced with how Descartes reached the conclusion that mind and body is absolutely different metaphysically while, in Section 3.2., it examined the scientific ideas of Galileo and Newton which gave rise to the Cartesian notions of mind and matter in considerable detail. These sections indicate that the generation of the mind-matter problem appears to have occurred in SOM primarily due to:

1. A case of misplaced concreteness by Descartes and Locke; as noted by Barrett (1986, p.40):

The whole world of matter, which Locke would make the substratum, or underlying reality, for the world of our common experience, is in fact a high level intellectual construction [i.e. concept by postulation]. It is a case of misplaced concreteness, as the philosopher A.N. Whitehead... has called it: the abstract concepts of physics are taken as ultimately concrete in place of the ordinary world of common experience [i.e. concept by intuition].

Unfortunately, it seems that (unlike East Asian philosophers such as Nagarjuna), Enlightenment philosophers¹⁶⁴ failed to realise that reality is primarily the 'hereness' and 'nowness' of immediate experience and not the postulated entities of atoms or

¹⁶⁴ However, it should be noted that Galileo, Newton, Descartes and Locke were all religious men and, therefore, not as radical in their materialism as later Western scientists and philosophers. For instance, Newton wrote over two million words on religion alone. (Gjertsen, 1984, p.192)

quanta or superstrings etc. As noted by Einstein, the latter, strictly speaking, are only models of understanding that can assist us in manipulating reality (and guide our metaphysical constructions). As Newton's ideas were replaced with Einstein's and his, in turn are being replaced by M-Theory, this process (assuming a stable world environment) will, no doubt, continue:

Classical scientific reality keeps changing all the time as scientists keep discovering new conceptual explanations. Every year they have to say 'Well, last year we thought it was this way, but now we know what it is really like.' (Pirsig, 1997d)

2. By the accident of the Newtonian concepts (concerning reality) leading to the mind-matter problem i.e. the mind-matter problem possibly would not have arisen if Newton had instead devised a less deterministic based mechanics (such as quantum mechanics); and,

3. The appearance of evolutionary theory only subsequent to the era of Descartes, Locke and Kant. If this theory had been contemporaneous with them, one, if not all, may have been alerted to the evolutionary connection between mind and matter and, in consequence, revised their concepts.

The absence of a historical dimension is noticeable in the metaphysical subjectivism of Descartes and Kant. These thinkers are unable to explain how the subject might have emerged, to give any kind of developmental or historical account of it, and they have to posit it as ahistorical, pregiven, an absolute origin. (Falzon, 1998, p.23)

Unfortunately, as things stood, such a revision was perceived by Locke (1690, p.380) as 'repugnant':

It is as repugnant to the idea of senseless matter that it should put into itself sense, perception, and knowledge, as it is repugnant to the idea of a triangle that it should put into itself greater angles than two right ones.

This was possibly an unfortunate analogy to employ because, as noted in Section 2.9., a triangle containing a total sum of angles less than 180 degrees (i.e. two right angles) is possible in non-Euclidean geometry (which like evolutionary theory was not formulated until the nineteenth century). However, to give credit where it's due, Locke (1690, p.387) did recognise that the solution to the mind-matter problem was connected to how the universe was brought into being:

My right hand writes, whilst my left hand is still. What causes rest in one, and motion in the other? Nothing but my will, a thought of my mind; my thought only changing, the right hand rests, and the left hand moves. This is a matter of fact, which cannot be denied; explain this and make it intelligible, and then the next step will be to understand creation.

Even now, as Dawkins (1986, pp.39-40) reminds us, there still remains an 'intuitive credulity' concerning evolutionary development due to the 'immensities of time' involved. It's not too surprising then to hear Searle's complaint (1992, p.54), that the essential problem with the contemporary philosophy of mind debate is that SOM metaphysics – of whatever form - still essentially retains the Cartesian agenda.

Another serious problem with SOM metaphysical constructions is highlighted in Section 3.3. in reference to Northrop's concepts by intuition and postulation. The latter indicate the impossibility of physicalism's construction of a world view without reference to (the partially qualia based) concepts by intuition. Even if mind is a set of properties that 'emerged' at a certain stage in the evolution of material substance, the *immovable* fact remains that mind is experienced in the first person while 'material substance' is basically just an explanation for how the contents of this first person consciousness are generated. In the remainder of this section, it was noted that the principal stumbling block for idealism is its reliance on some sort of supernatural being to 'think' of the physical world while traditional dualism is

problematic because it retains the (erroneous) Cartesian assumption that mind and matter are completely different ontologically. Instead of 'moving on' from the Cartesian agenda, a common tendency of modern philosophers of mind (as indicated in Section 3.4.4. with Chalmers) is the attempt to solve the mind-matter problem by conflating metaphysical and scientific ideas which just further obscures any possible metaphysical solution - it is analogous to explaining the thrills of motorcycle riding to a novice by providing them with a manual on how the combustion engine works.

At least, Pirsig appears to take Searle's criticism fully on board and, as such, entirely jettisons the Cartesian *setting* of the debate - replacing it with a metaphysics based on ideas from quantum physics, the Buddhist notion of 'emptiness' and modern evolutionary theory. This 'shifting of the debate' enables the MOQ to make metaphysical headway with the mind-matter problem (and the related problems of free will and determinism, causation, Hume's Dilemma and Chalmers 'hard question' of consciousness) because the notion of 'emptiness' provides a metaphysical third option to SOM metaphysics' two alternatives of mind and matter so mind isn't reduced to matter (with the corollary difficulties with free-will that this reduction entails) and matter isn't reduced to mind (with the corollary difficulty of requiring a supernatural being to support the material world that this reduction entails). Moreover, following Popper's theory of propensities, the MOQ perceives that value keeps the material world 'together' without the requirement of some type of Newtonian material form of substance and because the MOQ perceives mind and matter as both *value* patterns at different stages of evolution it keeps them ontologically identical and, therefore, able to have a mutual affect on each other without any metaphysical difficulty. Furthermore, as shown in Section 3.4.0., if

Popper, Whitehead and Barrow are correct, quantum physics also supports the MOQ's less deterministic view of the universe.

Admittedly, the complete jettisoning of both the 'folk psychology' *and* 'folk physics' concepts of Descartes' era and their replacement with metaphysical concepts based on contemporary ideas of the natural sciences, social sciences and psychology is an increasingly difficult procedure. This is due to the continual development and expansion of the sciences into ever numerous specialisations which extend the epistemological limits of any new theory of consciousness. Certainly, Pirsig has attempted to keep up to date with the contemporary ideas in the natural sciences (as shown in LILA and his SODV paper which relates the MOQ to Bohr's ideas in quantum physics) and, simultaneously, perceives the social sciences and psychology as valid *sciences* (hence, his rare attendance in the 1990s at an academic conference for psychology – of all things - and, of course, the considerable anthropological element contained in LILA). An attraction of the MOQ for the social scientist, therefore, is a proper recognition of their area in this debate.

Following Pirsig and Dawkins, Dennett (1991, p.202) also takes the idea of the evolution of social value patterns literally:

The theory of evolution by natural selection is neutral regarding the differences between memes and genes; these are just different kinds of replicators evolving in different media at different rates.

The last assertion is the critical one. As Dennett (1991, p.205) observes, memes are travelling 'around the world at the speed of light, and replicate at rates that make even fruit flies and yeast cells look glacial in comparison'. So while, biological value patterns have taken millions of years to significantly evolve, social value

patterns have become a considerable force on human civilisation only in terms of a few thousand years. In consequence, any explanations (e.g. Churchland & Churchland, 1998; Chalmers, 1996) of modern consciousness that fail to take into account their influence will possibly be significantly limited.

A hundred and forty years ago Darwin's theory of evolution by natural selection provided the first plausible mechanism for evolution without a designer. People's view of their own origin changed from the biblical story of special creation in the image of God, to an animal descended from an apelike ancestor – a vast leap indeed, and one that led to much ridicule and fanatical opposition to Darwin. Still - we have all coped with that leap and come to accept that we are animals created by evolution. However, if memetics is valid, we will have to make another vast leap in accepting a similar evolutionary mechanism for the origins of our minds. (Blackmore, 1999, p.8)

Moreover, by recognising social patterns as ontologically real and by incorporating evolution theory in his system, enables Pirsig (1991, p.108) to incorporate the social level in a proper metaphysical relationship with inorganic, biological and intellectual patterns.

Phædrus saw that the 'value' which directed subatomic particles is not identical with the 'value' a human being gives to a painting. But he saw that the two are cousins, and that the exact relationship between them can be defined with great precision.

One of the first to fall, he was happy to note, was the one that got all this started in the first place - the 'Theory of Anthropology' platypus. If science is a study of substances and their relationships, then the field of cultural anthropology is a scientific absurdity...¹⁶⁵

But if science is a study of stable patterns of value, then cultural anthropology becomes a supremely scientific field. A culture can be defined as a network of social patterns of value. As the Values Project anthropologist Kluckhohn had said, patterns of value are the essence of what an anthropologist studies. (Pirsig, 1991, pp.108-09)

¹⁶⁵ Pirsig (1991, p.109) states that if science is a study of material substances the field of cultural anthropology is a scientific absurdity because a culture has no mass or energy. As with the distinction between great and mediocre art, no scientific laboratory instrument has ever been devised that can distinguish a culture from a non-culture.

Not only does a value based metaphysics provide a better framework for anthropology than Boas' positivism, the advantage of using a base term that can be shared by the sciences, humanities and arts, is that it facilitates contextualisation and the cross-referencing of new developments between each field; therein providing an academic a better perspective of their own subject and the intellectual value of others. Moreover, though Pirsig's system is fundamentally a set of ideas, its heart is left undefined by its employment of the Good at its mystical centre. As such, mysticism and art are reconciled with reason, science and technology within the one system hence providing headway with the 'Two Worlds' problem of C.P. Snow.

On a wider context, the understanding of international values can only assist towards peaceful co-operation via the construction of mutually agreed global policies. With increasing globalisation (as observed in the development of multi-nationals, nuclear proliferation and global warming) this is possibly becoming ever more critical. 'If the atomic bomb is ever used to destroy civilization, it will be because men cannot get together sufficiently upon their ideologies to agree upon the social controls that are necessary to meet the situation.' (Northrop, 1947, p.348) It's unfortunate to note that Terry Waite¹⁶⁶ (reflecting Northrop's sentiments of 1947) was still to observe in 2002 that 'the world of international relations is [still] a moral mess'.¹⁶⁷ As such, by focusing on a reconciliation of the different values of the East and West, the MOQ at least assists in Northrop's objective of achieving world peace even if the understanding of global values is not sufficient by itself to provide this.

¹⁶⁶ Waite is the former special envoy to the Archbishop of Canterbury. He is particularly well known for being held captive by terrorists in Beirut from 1987 to 1991.

¹⁶⁷ Quoted from the ITV programme *Moral Questions* (dealing with the theme 'Does peace have a chance?') first broadcast April 21st 2002.

The issues are difficult enough quite apart from the conflict with respect to differing conceptions of human values... There is selfish nationalistic pride. There is also the drive for oil and natural resources all over the world.¹⁶⁸ Science intensifies these competitive factors because the nations with scientific knowledge must secure resources to feed their machines, and these economic pressures are hard enough to control even when the situation is not aggravated by ideological conflicts having their sources in the humanities. (Northrop, 1947, pp.348-49)

To return the backhanded compliment of A.J. Ayer (1936, p.46) towards metaphysics,¹⁶⁹ the above concerns of Northrop indicate that the logical positivist's emphasis on abstract issues (for instance, the preciseness of philosophical terms and logic) was possibly too extreme. However, as noted by Warnock (1992, p.2), there was a shift towards applied philosophy, in the 1960s, due to the occurrence of the Vietnam War. During this time, philosophy lecturers (especially in the United States) 'were forced to discuss not simply the concept of justice, but whether there could be such a thing as a just war' (together with other issues such as draft dodging and civil disobedience). In consequence, the mood that philosophy should be more practical (reflecting Dewey's concerns earlier in the century) developed in the 1970s and, according to Warnock (1992, p.10) is now prevalent in the UK 'and in Australia, as well as the United States.' The recent military conflicts in the Middle East will, no doubt, maintain this pragmatic mood (as indicated in Section 2.11. by the 'reformed post-modernist' Terry Eagleton) of a renewed search for answers to the 'fundamental questions' concerning the present 'urgencies of our global situation.' Though not mentioned by Pirsig, the MOQ is useful in this respect as it

¹⁶⁸ Such a drive for natural resources, in itself, isn't necessarily unhealthy. However, it makes one wonder how much the West's involvement in armed conflict (specifically in the Middle East with Iraq which has the second largest oil reserves in the world) is driven by the need to secure natural resources. I would guess that this drive is considerably stronger than many Western politicians (certainly in the US and UK) would care to openly admit.

¹⁶⁹ In the context of transcendent concepts employed by metaphysicians to describe reality, Ayer (1936, p.46) notes: 'It must follow that the labours of those who have striven to describe such a reality have all been devoted to the production of nonsense.'

maintains a balance between the modernist search for absolute truths and post-modernist relativism by grading truths (of whatever origin) by their value. Despite Pirsig's postulate that reality is composed from Quality sounding strange, strangeness, as recognised by Russell,¹⁷⁰ is not the test of truth and if Pirsig's idea about Quality produces a coherent metaphysical system that solves previously intractable problems of SOM (as I contend the MOQ does) then it must be worthy (as with Einstein's 'Theory of Relativity' which also sounds strange) of academic consideration.

On the other hand, Pirsig's system remains a 'broad brush' as two (or more) judgements concerned with a particular moral dilemma can rely on criteria derived from the same evolutionary level. Moreover, there *is* considerable detail that Pirsig has overlooked from both Eastern and Western philosophical traditions, though this can be provided, to some extent, by researching the philosophers (such as Northrop, Nagarjuna and William James) who influenced his work. No doubt, in-depth comparisons between Pirsig and these philosophers would be beneficial in further clarifying the MOQ. Other issues overlooked by Pirsig are the Taoist quietist concern with the environment, discrimination on the grounds of race, gender, culture or disability, the damage caused by global capitalism¹⁷¹ and the Buddhist emphasis on compassion.

¹⁷⁰ 'The truth about physical objects *must* be strange. It *may* be unattainable, but if any philosopher believes that he has attained it, the fact that what he offers as the truth is strange ought not to be made a ground of objection to his opinion.' (Russell, 1912, p.19)

¹⁷¹ However, a considerable part of ZMM is devoted to examining the alienation generated in the West by the latter's materialist ethos. Moreover, as noted in Chapter Two, the MOQ assists in dealing with discrimination by recognising the reality of social patterns. This is discussed, to some extent, in LILA (1991) pp.314-18.

Pirsig's failure to explicitly mention Buddhist compassion (*karuna*) in ZMM or LILA is possibly his most serious oversight.¹⁷² Compassion is defined by Rahula (1959, p.46) as representing universal... 'love, charity, kindness, tolerance, and such noble qualities on the emotional side' qualified by the following advice:

If one develops only the emotional neglecting the intellectual, one may become a good-hearted fool; while to develop only the intellectual side neglecting the emotional may turn one into a hard-hearted intellect without feeling for others. Therefore, to be perfect one has to develop both equally. That is the aim of the Buddhist way of life: in it wisdom and compassion are inseparably linked together. (Rahula, 1959, p.46)

As numerous world problems are caused or aggravated due to a lack of genuine compassion, it appears highly plausible that a certain consideration of the latter would enhance the MOQ.

According to the *Buddha-dharma*... all the pain we bring to ourselves and others – the hatred, the warring, the grovelling, the manipulation – is our own doing. It comes from our own hearts and minds, out of our own confusion. Furthermore, if we don't see exactly what the problem is, we're going to perpetuate it. We're going to teach our children our confusion, and we'll go on, generation after generation, doing more of the same to ourselves and to each other. (Hagen, 1997, p.16)

¹⁷² In the context of compassion, Pirsig (2002e) states: 'No, I have never thought about it until now' though he does make the following three points:

(1) The MOQ seems to classify compassion as a pattern of social cohesion driven by strong biological emotions. When these two are combined with intellectual patterns of quality the result is a strong force for the good, as in the abolition of slavery. When compassion opposes intellectual quality, however the result can be foolishness or even evil.

(2) Genuine compassion and talk about compassion often have different purposes. When compassion is talked up intellectually there sometimes emerges a certain aroma of unction and piousness that makes me suspicious. Some preachers use compassion the way Uriah Heep [Heep is a character in Dickens' *David Copperfield*] uses humility, i.e. to advance themselves.

(3) The narrative of ZMM is dominated by the compassion of the narrator for his son even though he doesn't talk about it as such, and when Phædrus says Lila has quality he is speaking compassionately and is held in contempt for this by Rigel [the lawyer character epitomising social values in LILA]. Rigel is arguing that Phædrus' compassion for Lila is damned foolishness. Phædrus struggles in subsequent chapters to show that it is intellectually sound.

Another possible difficulty for the MOQ's acceptance is the broad metaphysical rift, in places, between Eastern and Western philosophy. By incorporating elements from both cultures, Pirsig's system is possibly not appreciated to a great extent by either tradition. As he notes himself:

The hardest thing for me to deal with since the publication of *Lila* has been the complete disbelief of many that quality is or can be anything real...

The solution to this cultural resistance to the MOQ may come from the Orient where quality is a central reality. But there the problem is reversed. A famous Japanese Zen master¹⁷³ who read ZMM told me he thought it was a nice book but he didn't see anything unusual in it. He was quite puzzled at its success. Another Japanese tourist to America said, 'This book is not interesting to Japanese people because we already know all of this.' Schopenhauer said that truth is that short interval between the time an idea is a heresy and the time it is a platitude, but the MOQ has managed to be both a heresy and a platitude simultaneously, depending on which culture you view it from. (Pirsig, 1995b)

There is a cultural blind spot to Dynamic Quality in the West but possibly this should be expected as there is an absence of formal activity (as Japan displays in the Zen arts and *zazen*) which assists in revealing it. Moreover, as observed in *Zen in the Art of Archery*, an understanding of Dynamic Quality does not reveal itself easily to the Westerner. For instance, Herrigel studied archery under a Zen Master for six years before 'It' revealed itself to him. I therefore doubt this 'cultural blind spot' will dissipate overnight though it's highly plausible that many Westerners who read ZMM or LILA will have their interest awakened enough in Buddhist philosophy to eventually investigate its traditional East Asian forms. Moreover, the substantial emphasis on Eastern mysticism also indicate why ZMM and LILA were never

¹⁷³ Dainin Katagiri Roshi (1928-1990), the Zen master Pirsig helped to establish in the Minnesota Zen Center, Minneapolis in 1972. Katagiri Roshi was born in Osaka, Japan. From 1960, he attended Komazawa University and trained at Eihei-ji Monastery for three years under the guidance of Eko Hashimoto Roshi. Katagiri Roshi came to the United States in 1963 and practiced and taught at the Zenshuji Soto Zen Mission in Los Angeles, later moving to Sokoji Soto Zen mission and then to San Francisco Zen Center, where he assisted (the then abbot) Shunryu Suzuki Roshi. In 1972, he became the first abbot of Minnesota Zen Center where he oversaw the development of the Center for the next two decades. In 1988, he published *Returning to Silence*. (Pirsig, 2004c) / (Minnesota Zen Center, 2003)

written as analytic texts but, instead, follow the tradition of North American literature that combines both philosophical and spiritual discourses with accounts of physical and metaphorical journeys. Included within this genre is the work by Thoreau, Twain, Henry James, Steinbeck, Hemingway and Kerouac. It is towards the latter, as with the best literature, that Pirsig aligns his writing as a form of literary koan whereby important truths beyond analytical construction are elucidated – especially those concerned with the logically indefinable but metaphorically intuitive Good. By doing so, he assists us in reaching an answer to the fundamental question (if not the most fundamental) initially raised in Section 2.1., namely: ‘How are we to live our life?’

The most commonly repeated praise is the line, ‘This book will change your life.’ It appears over and over again in the Amazon reviews and I think many of the people who say it really mean it. I think the reason for this is that the world we grow up in assumes the universe is scientifically purposeless and meaningless. The Metaphysics of Quality (MOQ) contained in ZMM and Lila argues the opposite: that scientifically and rationally speaking, the world is a completely meaningful place. When people see that this is a real choice they have, and they think this matter through, it tends to have a profound effect on them. (Pirsig 2002g)

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Appendix: The MOQ & Time

A.0. INTRODUCTION

The concepts of change¹⁷⁴ and time are not discussed in Pirsig's published work though as these underlie the evolving nature of static patterns in the MOQ, it's important their position in the system is clarified. In this appendix, then, we will examine change, sensed time and the two key theories of mathematical time elucidated by Newton and Einstein. The latter are differentiated from sensed time in reference to Northrop's concepts by intuition and postulation and the popular work of Stephen Hawking¹⁷⁵ and John Barrow.

A.1. DYNAMIC QUALITY & TIME

As elucidated in Chapter Two, logical priority in the MOQ is given to Dynamic Quality before *all* intellectual concepts. This includes 'time' as Pirsig (1997d) illustrates:

It's important to keep all 'concepts' out of Dynamic Quality. Concepts are always static. Once they get into Dynamic Quality they'll overrun it and try to present it as some kind of a concept itself. I think it's better to say that time is a static intellectual concept that is one of the very first to emerge from Dynamic Quality. That keeps Dynamic Quality concept-free...

The MOQ starts with the source of undifferentiated perception itself as the ultimate reality. The very first differentiation is probably 'change'. The second one may be 'before and after'. From this sense of 'before and after' emerge more complex concepts of time.

In the MOQ, therefore, 'time' and 'change' are intellectual static patterns which are often thought of (in some interpretations of experience such as Newton's) as

¹⁷⁴ Change is usually understood as making or becoming different, to alter or transmute something. (Collins Concise Dictionary, 1982, p.221)

¹⁷⁵ Hawking's *A Brief History of Time* (1988) and its sequel *The Universe in a Nutshell* (2001).

having an independent, objective existence. If change is illusory the logical primacy of Dynamic Quality (in the MOQ) would not be affected.

The evolution described in the MOQ exists within static patterns only. There is no evolution in Dynamic Quality. With Dynamic Quality there is no contradiction and no agreement. Contradiction and agreement are functions of static intellectual patterns. (Pirsig, 1998c)

Nevertheless, as the idea of cosmological evolution is an important component of the MOQ, if the process of change was illusory this would throw doubt on the viability of Pirsig's system as a moral framework i.e. without change, evolution couldn't occur and, therefore, no moral hierarchy could be developed employing evolutionary criteria. The ontological status of change will, therefore, be explored in the next section.

A.2.0. TIME & CHANGE

As apparent from the above, Pirsig perceives the concept of time as a sophisticated development of the concept of change. The difficulty with change as a basis for a definition of time is that (since the era of the Ancient Greeks) doubts have been put forward concerning its ontological status. Certainly, from the *static* viewpoint of the MOQ, modern scientific evidence strongly indicates that physical reality (from the quantum level upwards) does continually alter and that even language and ideas seem rarely to survive without modification especially over periods of hundreds or thousands of years. Chaucer (c.1382) understood this and his Middle English is now a literal illustration of his point:

*Ye knowe eek, that in forme of speche is chaunge
With-inne a thousand yeer, and wordes tho
That hadden prys, now wonder nyce and straunge
Us thinketh hem; and yet they spake hem so.*

For Pirsig, the changing particulars are secondary to the constant underlying reality of Quality which, like Plato's Good, is the primary reality where truth though important for discovering knowledge (about the Good) is secondary.¹⁷⁶ 'It is the cause of knowledge and truth; and so, while you may think of it as an object of knowledge, you will do well to regard it as something beyond truth and knowledge and, as precious as these both are, of still higher worth.' (Plato, c.393 B.C., Book VI, Chapter XXIV, para.508) However, the difference between Pirsig and Plato is that the constant and non-constant are integrated in the MOQ while Plato divides the changing particulars of empirical reality (such as horses) from the Forms (such as horse-ness).

Philosophologists¹⁷⁷ sometimes try to identify the MOQ with Plato but Plato considers the Good to be a subspecies of form¹⁷⁸ while the MOQ considers form to be a subspecies of Good. That is a huge difference. (Pirsig, 2001d)

¹⁷⁶ This sentiment is also shared by Iris Murdoch (see *The Sovereignty of Good*, 1970). However, Murdoch (1970 p.79) perceives no external plan or objective for human life while Pirsig assumes that the point of life is to improve its quality (while still doubting that this improvement is pre-ordained or delineated beforehand).

¹⁷⁷ The term 'philosophologist' is employed by Pirsig to denote people who tend to study the products of other people's philosophy rather than engage in original philosophical activity. This distinction is also noted by Spier (1954) p.1:

'Before we can enter into an examination of the philosophical system before us, we must answer the question: "What is philosophy?" The word philosophy is commonly employed in a dual sense. It can denote the *result* of philosophic activity, and it is in this sense that one speaks of the philosophy of Plato and Kant. In this case one refers to their philosophical *system*, which still exists though these men have long since ceased to be active philosophically [i.e. philosophology]. Philosophy can also designate *philosophic* activity itself, the act of philosophizing, which is a human activity bound to our temporal life. We shall employ the term in its second sense.'

Only the latter activity is deemed 'philosophy' by Pirsig.

¹⁷⁸ Though Plato considered the Good to be above all else, he still considered it as a Form (as confirmed by Book VI, Chapter XXIII of the *Republic*). This reading of Plato is supported by the translator Francis Cornford (1941, p.212) who notes: 'In Greek "the Good" is normally synonymous with "Goodness itself." This is the supreme Form or Essence.'

I would suggest that as evolutionary theory shows even 'horse-ness' changes over millions of years and is never constant, it's the Dynamic element of reality that is more fundamental than the static one.

Moreover, without change, it's difficult to understand the appearance of biological life from inorganic matter or how it evolved further into the intellectual and social patterns that exist today. From the perspective of comparing the universe at the time of the 'Big Bang' to now, it does appear plausible to believe that reality has continually altered. It seems even contradictory to state an objection to the reality of change as it *changes* one state of affairs to another i.e. *no* objection at t1 to *an* objection at t2. As noted in Chapter Two, one famous example of such an objection comes from Parmenides which is examined next.

A.2.1. PARMENIDES' THEORY THAT CHANGE IS ILLUSORY

Parmenides' belief that reality is changeless relies on the assumption that *non-being* is impossible and, therefore, *being* must be necessary and always exists. If *being* always exists then it can neither come into existence nor out of it. If a property (of something) cannot cease to come into *being* or begin to come into *being*, then change must be unreal as change depends on properties coming into and disappearing from being. However, Parmenides' reasoning contradicts his own theory. His theory depends on the assumption that *non-being* is impossible yet there was a time before he thought of his theory when it was in a state of *non-being*. It subsequently *changed* to a state of *being* when he thought of it. Therefore, his theory could not have come into existence without there being change.

From the standpoint of contemporary physics, the Parmenidians [sic] were right to claim a distinction between appearance and reality but wrong in their

claim where the illusion lies. What is illusory is constancy, not change. (Di Santo & Steele, 1990, p.160)

Clark (1999) argues that Parmenides' theory concerning change could be an absolute truth (having the same ontological status as a Platonic form): 'If true, always true' and, therefore, existing before Parmenides discovered it. However, there still was *change* in Parmenides conscious mind from not having the theory (that change is illusory) to having this theory. Moreover, it appears that Parmenides is conflating a description of reality (i.e. being) that *by definition* can't cease to exist with reality itself and is, therefore, begging the question in the first place.

On the other hand, from the Dynamic sense of the MOQ, Parmenides is, strictly speaking, correct as the concept of 'change' is an abstraction from Dynamic Quality and, therefore, (as with anything abstracted) doesn't exist in an absolute sense. Possibly, the koan-like theories of Parmenides and Zeno indicate (and they may have shared similar thinking to Zen masters for such verbal conundrums) the error of assigning absolute truth to a static concept when reality is fundamentally dynamic.

A.3.0. NORTHROP'S CONCEPTS IN RELATION TO TIME

Nevertheless, though change may not be an absolute, it is a 'concept by intuition' (as understood by Northrop)¹⁷⁹ and seems more fundamental than even the 'I' given in Descartes' 'cogito ergo sum.' As far as the related concept of time is concerned, Northrop (1947, p.196) elucidates the important distinction between 'sensed time' and 'mathematical time':

Newton, in the Scholium at the beginning of his Principia, points out that sensed time and sensed space (i.e., denoted by concepts by intuition) are not to

¹⁷⁹ See Section 3.3.1. of this text and Chapter IV of Northrop (1947) for more details of these concepts.

be confused with 'true or mathematical' time or space (i.e., designated by concepts by postulation) with which physics is concerned. One reason for the difference is that whereas the time of physical theory is postulated as flowing uniformly, the time given to the senses flows unevenly. He goes on to add that anyone who confuses the two is guilty of a vulgar ignorance.

Northrop (1947, p.86) notes that Newton's employment of concepts by intuition and postulation in the context of time is continued by Einstein:

Recently, Albert Einstein has replaced Newton's postulates for mechanics with a different set. But in Albert Einstein's theory the same distinction exists between postulated time which flows 'equably' and sensed time which flows non-uniformly. Thus, contemporary as well as traditional modern physics distinguishes between concepts by intuition and concepts by postulation and formulates its theory in terms of the latter.

This type of conceptual division is supported by the psychologist William Friedman (1990, p.5) who notes a historical differentiation between sensed concepts of time and absolute notions of time:

Much of the history of the philosophy of time is a series of attempts to find time's essence, whether in nature or in consciousness. Among those conceptions tying time to the physical world, time has been defined as motions, as the succession of events, and as an absolute, universal framework. Mentalist definitions refer to the perception of succession and simultaneity or the succession of ideas in consciousness.

Yet, despite Newton's and Einstein's apparent realisation that the term 'time' refers to two (or more) distinct contexts, Friedman (1990, p.5) observes there still remains a 'common tendency' to treat time as a single entity:

Perhaps the fact that we have a single word for time has seduced us into searching for its essence. However, at least from a psychological point of view, it seems far more productive to consider the many things that time is, in the world, and the many ways in which human beings experience it.

A.3.1. SENSED TIME

As noted in Section 3.5.1., a concept by intuition is always known through direct perception. Examples of concepts by intuition are sounds, smells, (perceived) colours, pains, pleasures and sensed time. Though it is possible to judge the passing

of sensed time by immediately perceptible changes (such as hunger or the position of the sun) it flows non-uniformly. For instance, a prison sentence might go very slowly at the time yet, retrospectively, seem very quick (maybe due to the relatively lack of interesting events) while an enjoyable holiday might fly past at the time yet seem much slower when looking back (maybe due to the relative abundance of exciting events); the memory of experience seemingly prone both to contraction and expansion.

If (biological) evolution had taken another path, it seems possible that sensed time for human beings would now be quite different. For instance, if temperatures drop only slightly above zero, cold blooded animals such as crocodiles and tortoises lose the ability to see movement; a hummingbird flying past is not visible to them. A human being can see the hummingbird though its wings aren't perceivable while a falcon, whose sense of time passes relatively more slowly, can see the hummingbird's wings.¹⁸⁰ Moreover, it seems apparent that the usual limits of temporal awareness for human beings depend on body temperature and can be altered with the increase or decrease of certain chemicals. It has been noticed in humans that an increase of adrenaline production slows the passage of sensed time so that in times of danger there is an increased ability to act. Undoubtedly, this is why people involved in car accidents or other life threatening situations talk about 'time slowing down.' In addition, there is anecdotal evidence that artificial chemicals such

¹⁸⁰ As shown to great effect by the award winning BBC TV wildlife programme *SuperNatural: Nature's Hidden Time Wheels* first transmitted on April 20th 1999. Tim Macmillan of BBC Graphics (the photographer) and John Downer (the producer & director) were recognised by the Royal Television Society for the innovation and content for the *SuperNatural* series. The culmination of two years' work, the programme featured 'ground-breaking' location and studio camerawork with a wide range of animals. (BBC Two, 1999)

as LSD and cannabis affect temporal awareness.¹⁸¹ Though, it can be assumed that sensed time (outside the use of drugs) has remained, more or less, constant for all human beings this is now open to radical change via genetic manipulation.

Gorman & Wessman (1977, p.44) trace the critical biological advance for temporal awareness in human beings to the development of a bigger brain; particularly an increase in the frontal association areas of the cerebral cortex.

The evolutionary development of the brain... appears to be a necessary substrate for man's advanced temporal awareness. Marked advances in cranial capacity occurred sometime during the past million years, possibly earlier, according to the fossil evidence.

This temporal awareness was, no doubt, reinforced by patterns in nature such as night & day and the cycle of the four seasons.

A.3.2. NEWTON'S MATHEMATICAL TIME

Derived from (and logically posterior to) the concepts by intuition are 'concepts by postulation.' As noted in Section 3.5.1., a concept by postulation refers to entities and relations known only through formal or scientific investigation. 'A concept by postulation is one the meaning of which in whole or part is designated by the postulates of some specific deductively formulated theory in which it occurs'. (Northrop, 1947, p.62) Concepts by postulation include substance, causation, subjects, objects, static value patterns, seconds, minutes, hours¹⁸² and phlogiston.¹⁸³

¹⁸¹ Friedman, 1990, pp.14-15.

¹⁸² Essentially, units of time are (socially agreed) measurements of inorganic patterns. According to Whitrow (1988, p.168), until 1952 a year was calculated from the rotation of the earth. Between 1952 and 1967 a year was derived from astronomical observation and from 1967 was calculated from a new definition of the second (constructed in terms relating to the electromagnetic radiation of the caesium atom). In other words, what is considered as a second, minute, day or a year is a social convention (though within an increasingly small variation).

'Mathematical time' is also a concept by postulation; the two major 'mathematical' constructions of time being Newton's idea of 'absolute time' and Einstein's idea of 'relative time'.

According to Hawking (2001, p.32), Newton produced the first mathematical model for space and time in 1687's *Philosophiae Naturalis Principia Mathematica*.¹⁸⁴

In Newton's model, time and space were a background in which events took place but which weren't affected by them. Time was separate from space and was considered to be a single line, or railroad track, that was infinite in both directions. Time itself was considered eternal, in the sense that it had existed, and would exist, forever.

The concept of mathematical time employed by Newton was based on the analogy between time and a geometrical straight line and was derived from Isaac Barrow (Newton's predecessor in the chair of mathematics at Cambridge)¹⁸⁵ who regarded time as absolute i.e.

Time does not employ motion, so far as its absolute and intrinsic nature is concerned; not any more than it implies rest; whether things move or are still, whether we are sleep or awake, time pursues the even tenour of its way. (Whitrow, 1988, p.128)

Theoretical mechanical and mathematical systems promoted a mechanical view of the universe and soon replaced the previous Aristotelian emphasis on substances as the primary object of scientific investigation.

The physical sciences launched by Copernicus, Galileo, Newton and Boyle secured a longer and stronger hold on the cosmogony-builders than did either their forerunners or their successors. People still tend to treat laws of

¹⁸³ Phlogiston was formerly assumed to be a necessary constituent of all combustible material. It is a good example of a discredited concept by postulation.

¹⁸⁴ Gjertsen (1984, p.187) notes that 'However little read, either in Newton's own lifetime or since, no book has ever achieved the same secular fame and authority.' In recent times, I would guess that Hawking's *A Brief History of Time* comes close.

¹⁸⁵ This position is now held by Hawking.

mechanics not merely as the ideal type of scientific laws, but as, in some sense, the ultimate laws of nature. (Ryle, 1949, p.74)

The belief in an absolute sense of time (in industrialized societies) seems to have been reinforced (in the late seventeenth century) with the application of mechanical ideas by philosophers such as Descartes and the invention of accurate mechanical clocks that could operate uniformly and continually for years. As clocks proceeded to operate without any need for their original designer to intervene, the analogy of God as a creator of a *non-teleological* mechanical universe was soon made. This is illustrated by Robert Boyle (1627-91) who thought the world was analogous to:

A rare clock, such as may be that at Strasbourg, where all things are so skilfully contrived, that the engine being once set a-moving, all things proceed, according to the artificer's first design, and the motions of the little statues, that at such hours perform these or those things, do not require, like those of puppets, the peculiar interposing of the artificer, or by any, intelligent agent employed by him, but perform their functions upon particular occasions, by virtue of the general and primitive contrivance of the whole engine. (Boyle, 1686)

By the seventeenth century, the Church calendar already emphasised the regularity of Sunday every week and was continued by the Puritans who advocated a regular routine of six days of work and one day of rest. The belief in the uniformity of time was reinforced by the development in towns of an economy based on commercial interests. The new mercantile class soon realized that 'time is money' and so shifted the emphasis of time from a seasonal notion (based on agriculture) to a daily one that emphasised regularity and time-saving.¹⁸⁶ The new mercantile class soon realized that 'time is money' and so shifted the emphasis of time from a seasonal notion (based on agriculture) to a daily one that emphasised regularity and

¹⁸⁶ Whitrow, 1988, p.110.

time-saving.¹⁸⁷ It's still apparent in industrialized countries that city living seems 'faster' than agricultural areas. This observation is supported by a study published in 1971 by Lowin, Hottes, Sandler & Bornstein.¹⁸⁸ They found that in U.S. towns with populations of less than 8000, the subsequently described actions took longer than in a big U.S. city (such as New York):

1. Walking 100 feet after leaving a bank;
2. Completing a postal transaction;
3. Waiting for an attendant to arrive at one's car at a petrol station; and;
4. Purchasing cigarettes in a drugs store.

Anecdotal evidence of the difference in the pace of life between country and city life is illustrated by Pirsig (1974, pp.14/15) when recounting his motorcycle journey across the Mid-West:

Paved country roads are the best... Roads free of drive-ins and billboards are better, roads where groves and meadows and orchards and lawns come almost to the shoulder, where kids wave to you when you ride by, where people look from the porches to see who it is, where when you stop to ask directions or information the answer tends to be longer than you want rather than short, where people ask where you're from and how long you've been riding...

The whole pace of life and personality of the people who live along them are different. They're not going anywhere. They're not too busy to be courteous. The hereness and nowness of things is something they know all about. It's the others, the ones who moved to the cities years ago and their lost offspring, who have all but forgotten it.

This observation may involve a piece of urban romanticism though the Industrial Revolution certainly increased the reliance on the clock in commerce. There was the

¹⁸⁷ Whitrow, 1988, p.110.

invention of the chronometer for use at sea (to find longitude) by John Harrison in the 1730s, a British mail coach system based on strict time-keeping was introduced in 1784, the railways employed Greenwich Mean Time (GMT) from the 1830s and international Universal Time (based on GMT) became employed from 1884. In 1839, a railway director wisely refused to supply a compiler of railway timetables (George Bradshaw) the times of his trains, having realized 'it would tend to make punctuality a sort of obligation.'¹⁸⁹ Moreover, there was a proliferation of pocket watches from the late eighteenth century, the manufacture of cheap Swiss watches in their millions from the 1860s, the Victorian introduction of the idea of 'spare time' (as a reward for hard work) and the requirement of workers to 'clock in' and to 'clock out'. In 1850, the Nepalese ruler Jang Bahadur on a visit to England observed that 'Getting dressed, eating, keeping appointments, sleeping, getting up - everything is determined by the clock... everywhere you look, there you see a clock. (Whitrow, 1988, p.164) It's therefore noticeable that modern industrialized society is dependent on time to a greater extent than any society previously recorded¹⁹⁰ and that an Enlightenment notion of time still supports an Enlightenment form of work (i.e. capitalism).

While advanced science and personal experience may admit relativity; the practical world does not. We are [still] regulated by the Newtonian world of timepieces. (Gorman & Wessman, 1977, p.47)

However, this dependence on time-keeping is not a necessary facet of human life as indicated by less-industrialized societies. P.M. Bell reports that Ugandan children

¹⁸⁸ Friedman, 1990, p.111.

¹⁸⁹ Whitrow, 1988, p.160.

¹⁹⁰ With the possible exception of the Maya who, according to Whitrow (1988), were heavily dependent on time measurement for their religious life.

in comparison to Western children (of a similar age) have a reduced notion in judging duration. For instance, a two hour journey by bus was estimated at ten minutes by some Ugandan children while others gave a time of six hours. Moreover, though Australian Aborigine children can read the hands of a clock as a memory exercise, they supposedly find it hard to relate the time they read to an actual time of the day.¹⁹¹ It has been suggested by some anthropologists such as La Barre, Lee and Whorf (1936, pp.57-64) that certain non-Western cultures (such as the Hopi Indians) have no concepts for time (even a relational notion) though Gorman & Wessman (1977, p.45) point out that the absence of conceptual time in some cultures is far from established:

Certainly most, and possibly all, languages possess time words and allow their speakers to communicate regarding temporal features of experience. Also, context and paralinguistic features probably would allow implicit temporal references that might not be clearly codified in speech. We doubt that any group could function or survive without some degree of effective communication regarding the temporal features of both the natural world and social interaction.

Finally, it seems the ability of human beings to acquire socially shared symbols and abstract relations seems to have facilitated the conceptualization of time. Even hunter-gathering which involved activity then rest for relatively long stretches (not requiring precise time measurement) must have necessitated future planning:

Many of the significant discoveries and practices of early man clearly required foresight and planning or indicate considerable temporal awareness and concern, for example, tool making, fire making and tending, agriculture and settled habitation, and burial customs. These prehistoric practices must have been accompanied by the development of social communication and speech, which permitted the maintenance and transmission of cultural practices and traditions. Language facilitates memory and enhances capacity for imagination and planning, thereby extending time span into past and future. (Gorman & Wessman, 1977, p.44)

¹⁹¹ Whitrow, 1988, p.7.

A.3.3. EINSTEIN'S MATHEMATICAL TIME

Both Einstein's and Newton's notion of mathematical time passes 'equably' and uniformly at points in space-time that are at rest with respect to each other (e.g. the stones at Stonehenge) though it is observed in Einstein's theory of general relativity of 1915¹⁹² that when points (in space-time) move at *relatively* different velocities in relation to each other, then time passes at different rates between the points (e.g. Stonehenge in relation to a spaceship a light year away travelling in close proximity to the speed of light).

This required abandoning the idea that there is a universal quantity called time that all clocks would measure. Instead, everyone would have his or her personal time.... Einstein had overthrown two of the absolutes of nineteenth-century science: absolute rest, as represented by the ether,¹⁹³ and absolute or universal time. (Hawking, 2001, pp.9/11)

As noted above, Newton's 'mathematical' theory of time considered time as absolute. Consequently, it was thought that when bodies moved or forces acted there was no effect on space or the rate of change though Einstein's theory of general relativity indicates this as false because the curvature of space-time is affected by the distribution of matter.¹⁹⁴ In Einstein's theory, time was no longer an independent property but was now considered as just one direction of a four-dimensional continuum termed space-time. In consequence, it was realised that time (at least, as

¹⁹² Einstein's special theory of relativity was formulated in 1905 with assistance from Henri Poincaré. This was successful in showing why the speed of light is constant for all observers but left a discrepancy in that gravitational effects were instantaneous i.e. faster than the speed of light. This difficulty was only solved when Einstein postulated that space-time is curved in the theory of general relativity. (Hawking, 1988, pp.32-33)

¹⁹³ Like phlogiston, the ether and an absolute universal time are also two concepts by postulation once thought true and then subsequently discredited. As implied in the MOQ, this is one of the reasons why a concept of absolute truth is not a particularly good one to metaphysically hold. Absolute certainties have a habit of being proved false!

¹⁹⁴ The present acceptance of the theory of relativity is noted by Hawking (2001, p.11): 'The theory of relativity is now completely accepted by the scientific community, and its predictions have been verified in countless applications.'

space-time) was distorted by physical properties such as gravity, mass and motion.

As Hawking (1988, p.38) illustrates:

Before 1915, space and time were thought of as a fixed arena in which events took place but which was not affected by what happened in it... The situation, however, is quite different in the general theory of relativity. Space and time are now dynamic quantities: when a body moves, or a force acts, it affects the curvature of space and time - and in turn the structure of space-time affects the way in which bodies move and forces act.

The typical illustration employed in support of Einstein's relative notion of time is the flying of two accurate clocks in opposite directions around the world. When the clock times are compared after the flights, the clock that has been in the plane flying east, records slightly less time. (Hawking, 2001, p.9) Another example is provided by Barrow (1988, p.104). This is the observation that if the Newtonian theory of time were correct, then we would never observe muons¹⁹⁵ on the Earth's surface since they are formed at an altitude of nearly 6000 metres and in their fleeting lifetime can only travel a fraction of this distance. However, according to Einstein's theory of relativity, as the muons are travelling close to the speed of light, this 6000m distance distorts (from the muon's point of view) to only 270 metres. As the muon can travel this distance before it decays, it is therefore observed at the Earth's surface.

It should be stressed that these counter-intuitive aspects of relative space and time are not just illusions or perspectives, in the way that a body appears to have a different shape when viewed at an angle... The muons really do reach the Earth's surface; they would not if space and time were absolute Newtonian concepts. (Barrow, 1988, p.104)

¹⁹⁵ Muons are unstable sub-atomic particles that decay on average after about one and a half micro-second i.e. one and a half millionths of a second.

However, as Clark (1999) notes, possibly the scientists on the day of the above experiment observed some unusually long lived muons!¹⁹⁶

As elucidated above, space and time only exist as a combined concept by postulation in the theory of general relativity: 'It is impossible to divide the four-dimensional continuum into a three-dimensional spatial continuum and a one-dimensional temporal continuum in any way that makes sense from the objective point of view.' (Einstein)¹⁹⁷ Despite this, the notion of an objective, absolute time remains the 'common sense' notion as noted by Hawking (2001, p.108): 'It is the [Newtonian] view of time that most people and even most physicists have at the back of their minds.' Though the relational theory of space-time is presently dominant in theoretical physics, it is only more accurate than Newton's laws of time at speeds close to the speed of light. Moreover, Newton's laws of motion are considerably simpler to operate:

Understanding the technicalities of the general theory of relativity is a truly daunting task, each separate equation is much more complicated than Newton's simple inverse square law and calculating anything useful using the full theory is beyond all but the most dedicated specialists. While the application of Newton's theory of gravity requires one equation to be solved, Einstein's theory has no less than ten, which must all be solved simultaneously. (Coles, 2000, p.22)

¹⁹⁶ A serious point behind Clark's comment is that the degree of accuracy required in experiments to prove new theories (such as Einstein's) is always pushing the limits of technology to the edge. For instance, the telescopes & photographic plates that the British astronomers Eddington & Crommelin employed in 1919 to test the theory of general relativity (during a solar eclipse) were hardly able to measure the difference conclusively between the predictions of Newton's and Einstein's respective theories. Moreover, as Eddington & Crommelin obtained only a relatively small sample of experiments, their findings were treated cautiously by the scientific community. (Coles, 2000, pp. 34-40)

¹⁹⁷ Einstein quoted in Capek (1975, p.361).

A.4. THEORIES OF EVERYTHING

In the latest physical ‘Theory of Everything’ (M-theory), the universe is possibly one of many in a ‘multi-verse’ (or to describe the theory another way, the laws of physics are inconsistent and alter depending which area of the universe you are situated). As such, Newtonian absolute time could possibly be the norm – on the larger scale of things though Hawking (2001, p.175) does emphasise that there are significant parts of M-theory still not understood and, presently, other ‘universes’ and their laws are just speculative. The latter point is confirmed by Penrose (1989, pp.200-01) who thinks that ‘Theories of Everything’ should be only regarded as ‘tentative’ due to their relative lack of ‘significant experimental support’.

Finally, the ‘Theories of Everything’ alluded to by Hawking and other physicists are not, strictly speaking, theories *of* everything as they only explain inorganic value patterns and possibly beg the issue by employing a physical theory in this fashion. Only a theory that can explain all aspects of reality (i.e. the inorganic, biological, social, intellectual and mystical) coherently could be considered as a ‘true theory of everything’ and, as observed by chemists, even their particular field cannot be presently reduced to physical explanations; let alone the areas studied by biologists, social scientists and psychologists. Hawking (2001, p.105) argues that, in principle, the laws of quantum electrodynamics do allow the prediction of chemical and biological patterns though such determinism only works if (physical) information is not irretrievably lost in cosmic phenomena such as wormholes and black holes. According to Hawking (2001, p.126), this is presently an open question though if confirmed would have devastating consequences for physics:

This means that there isn’t *any* measurement outside the black hole that can be predicted with certainty: our ability to make definite [physical] predictions

would be reduced to zero. So maybe astrology is no worse at predicting the future than the laws of science.

Even if all physical information is retrievable, Ryle (1949, pp.74-75) believes that physical laws are analogous to the rules of chess; the rules are fixed but the games are not pre-destined by them. For instance, a scientist could observe and learn all the rules of chess but this still wouldn't provide definite predictions of how a particular game would play out:

Physicists may one day have found the answers to all physical questions, but not all questions are physical questions. The laws that they have found and will find may, in one sense of the metaphorical verb, govern everything that happens, but they do not ordain everything that happens. Indeed they do not ordain anything that happens. Laws of nature are not fiats. (Ryle, 1949, p.75)

Ryle's central line of reasoning is that the same process (such as an orchestra playing) can be in accordance with different types of laws that are irreducible to each other. The laws of physics (like a chessboard) may be necessary for biological, social and intellectual laws but are not sufficient by themselves to explain them.

A.5. CONCLUSION

'Change' and 'time' appear to be concepts founded in the biological development of the human being's brain. In prehistoric social groupings, the brain facilitated the learning and remembering of abstract concepts such as 'change', 'past', 'present' and 'future.' With writing, it became easier to distinguish past times and ages and in the era of the Ancient Greeks, philosophers were already wondering whether time had an independent physical existence or was simply a mental phenomenon. With the emergence of Newtonian physics and the construction of the first mechanical clocks in the seventeenth century, the idea of an absolute universal time became dominant and still remains the case in the social arena of the world's industrialized areas.

However, the formulation of general relativity by Einstein undermined the Platonic idea of an absolute universal time, time becoming just the fourth dimension of space-time which measures the physical changes in gravity, mass and motion. This entails that three distinct entities are now referred to by the term 'time' in modern thinking.

These are:

1. Sensed time (a concept by intuition);
2. Newton's absolute time (a concept by postulation); and,
3. Einstein's space-time (also a concept by postulation).

I assume that sensed time has been, more or less, constant since the first human beings appeared. On the other hand, the concepts by postulation (i.e. mathematical time) have changed since the first recorded times and, no doubt, will continue to do so. 'For although our awareness of time is a product of human evolution, our ideas of time are neither innate nor automatically learned but are intellectual constructions that result from experience and action.' (Whitrow, 1988, pp.5-6) The provisional nature of our theories of time is supported by Hawking (1988, p.11):

Any physical theory is always provisional, in the sense that it is only a hypothesis: you can never prove it. No matter how many times the results of an experiment agree with some theory, you can never be sure that the next time the result will not contradict the theory.

And tends to support Pirsig's caution about assigning anything objective as an absolute reality independent from any observer.

Classical scientific reality keeps changing all the time as scientists keep discovering new conceptual explanations. Every year they have to say 'Well, last year we thought it was this way, but now we know what it is really like.' ...even when it is explained to them carefully the SOM people are so inured to their way of thinking that they still don't understand. I had one letter asking, 'On the day before Newton was born did apples obey the law of gravity?' I think he thought he had me trapped.

I had to answer him, ‘No. Apples did not follow the law of gravity on the day before Newton was born. On that day apples just fell.’ (Pirsig, 1997d)

If evolution is thought of as a process of growth then the concept of change is certainly implied by this and seems relatively straightforward. Nevertheless, it's not immediately obvious which notion of time should be employed if evolution is defined as 'biological change over time.' Possibly, the answer lies with Einstein who only allows space-time to have a non-mental existence. As such, evolution is possibly more precisely defined as 'change within a segment of space-time' (rather than just 'change over time'). Such a revision in definition points to the difficulties that arise when a concept (and especially a concept by postulation) is thought to be absolute as Pirsig (1998d) points out (echoing Parmenides):

According to the Metaphysics of Quality, time and change did NOT act to evolve the static universe. Only Dynamic Quality did this. 'Time' and 'change' are primary concepts used to describe this evolution but they do not cause evolution any more than Newton's law of gravity causes the earth to stick together.

When Pirsig states that 'only Dynamic Quality evolved the static universe', this echoes Popper's (1990, p.21) theory of propensities in that it's 'not the kicks from the back, from the past, that *impel* us but the attraction, the lure of the future and its competing possibilities, that... keeps life – and, indeed, the world – unfolding.' In addition, it seems that the newer static levels (such as the intellectual) seem more responsive to the open-ended 'possibilities' of Dynamic Quality. The inorganic patterns take millions of years to substantially change, biological patterns thousands of years, social patterns hundreds of years and ideas only decades if not minutes. This would imply that the increase of freedom related with Dynamic Quality will become even more extended as the intellectual patterns gain control in manipulating

the other levels. Finally, it is worth noting that though this increased freedom would have benefits, it would also entail a risk towards degeneracy:

Static quality patterns are dead when they are exclusive, when they demand blind obedience and suppress Dynamic change. But static patterns, nevertheless, provide a necessary stabilizing force to protect Dynamic progress from degeneration. Although Dynamic Quality, the Quality of freedom, creates this world in which we live, these patterns of static quality, the quality of order, preserve our world... A tension between these two forces is needed to continue the evolution of life. (Pirsig, 1991, pp.124-25)

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