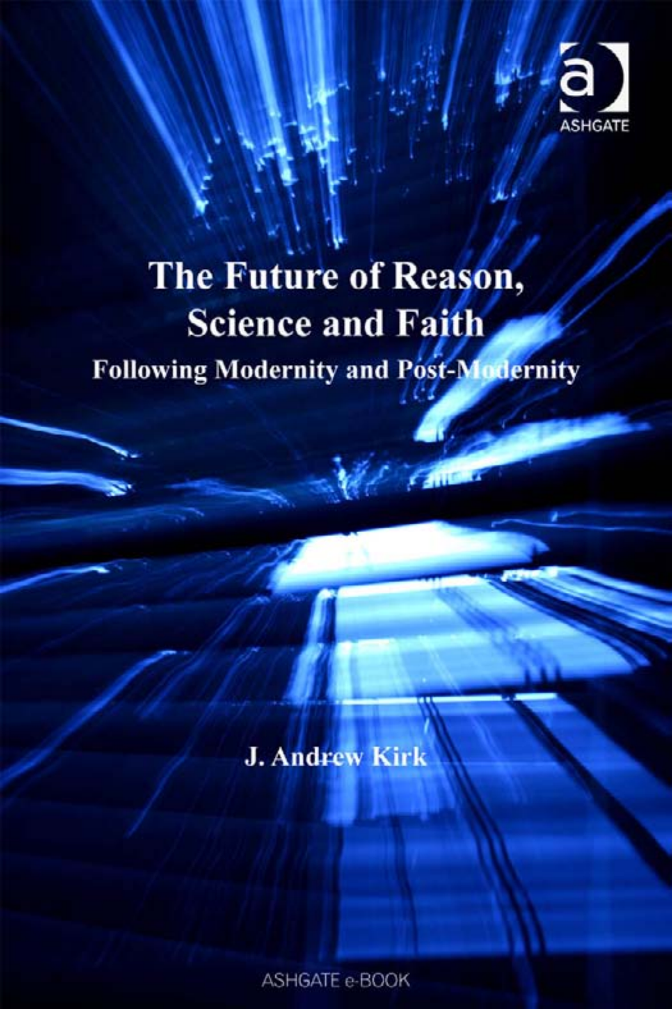

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The Future of Reason, Science and Faith

Following Modernity and Post-Modernity

J. Andrew Kirk

ASHGATE e-BOOK

THE FUTURE OF REASON, SCIENCE AND FAITH

Focusing on the history of ideas, this book explores important questions concerning knowledge in relation to philosophy, science, ethics and Christian faith. Kirk contributes to the current debate about the intellectual basis and integrity of Western culture, exploring controversial issues concerning the notions of modernity and post-modernity. Repositioning the Christian faith as a valid dialogue partner with contemporary secular movements in philosophy and ethics, Kirk seeks to show that in 'post-Christian' Europe the Christian faith still possesses intellectual resources worthy to be reckoned with.

This book's principal argument is that contemporary Western society faces a serious cultural crisis. It explores what appears to be an historical enigma, namely the question of why Western intellectual endeavours in philosophy and science seem to have abandoned the search for a source of knowledge able to draw together disparate pieces of information provided by different disciplines. Kirk draws conclusions, particularly in the area of ethical decision-making, from this apparent failure and invites readers to consider Christian theism afresh as a means for the renewal of culture and society.

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The Future of Reason, Science and Faith

Following Modernity and Post-Modernity

J. ANDREW KIRK

ASHGATE

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Finally, I would like to thank a small group of people that met on a regular basis within the University of Birmingham to consider the relationship between matters of science and issues of faith. They kindly allowed me to present a first draft of chapter two to one of the meetings. The comments that followed were perceptive and helpful. The chapter has subsequently been modified in a number of directions.

J. Andrew Kirk.

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Introduction

Interest in the subject of this book began to be kindled in me some fifteen years ago, when I was invited, with a number of other people, to explore the relationship between Western culture and the Christian message. A five-year study project was initiated. Several groups were formed to look at different aspects of the topic, following different disciplines – historical studies, philosophy, anthropology, sociology, healing sciences, theology, and the arts. I chose to be part of a group that would study the condition of epistemology, or the search for the grounding of knowledge, in the Western world. The concern was to consider in what ways shifts in philosophical thinking in recent times challenged the faith and practice of Christianity and to suggest creative responses. Participation in the small group of seven people from four different nations, working together over several years was, for me, an exceptionally stimulating experience.[1]

My own published contribution to the discussion represented only the first tentative steps in the exploration of a field of study with which, hitherto, I had not been particularly familiar. When the project closed in 1997, I was motivated to continue my own studies, convinced that the field of epistemology was a pivotal and pressing matter for Christian witness in these times. I still needed to try to grasp more of the scope and complexities of the subject, continuing to learn the meaning and use of intricate language and concepts and to relate them to the world-view or, as is more fashionable to call it today, the narrative of Christian faith.

As a result, my principal research work for the last seven years has been in the area of contemporary epistemology and its impact on Christian believing. It took some time, and not a few false starts, to clarify a suitable structure for the study. Motivated by the work of two colleagues in the study project, whose expertise was in the philosophy of science, it began to dawn on me that one could view the whole history of Western philosophy over the last 400 years as a variety of attempts to come to terms with the cognitive implications of the experimental sciences. The rise of modern science and the accompanying technological advances have altered the consciousness of Western people, fundamentally changing their perspective on every aspect of life. Not least, they have caused a colossal revision of attitudes towards a supposed reality beyond the natural world.

Several different reactions to this phenomenon have emerged. For some people, the sum total of what we can know is provided for us by the empirical methods of investigation perfected by the sciences. Any claims to knowledge beyond these are valueless. For others, human experience has now come to be divided into two different kinds of realm: the sphere of public knowledge and the sphere of private opinion. The former incorporates all knowledge based on universally tested methods of research and which, for the sake of intellectual integrity, compels belief. The latter encompasses the diverse worlds of morality, aesthetics and religion, whose epistemological status is quite questionable. Probably the majority of the populations of Western nations believe that these worlds are important (in the case of morality essential) and yet, nevertheless, knowledge of them is, at the most, uncertain, disputed and multiform. It is impossible to have the same assuredness about claims to truth in these areas as in the case of the sciences. In either case, a formidable cultural consensus has built up that knowledge has to be separated into distinct categories – the matters about which we are universally compelled to believe and those which are open to inconclusive, personal judgements. Although, by and large, Western people have learnt to cope with this bifurcation, it brings many problems. The most stunning, perhaps, is the loss of a sense of identity, purpose and destiny for human beings. The contemplation of origins in purely biological terms, for example, doesn't satisfy the deep-seated human yearning for significance. The conclusion that the only option open to us is to create our own meaning appears hollow, given that our self-awareness seems to contradict fundamentally the supposition that we are *nothing more* than the 'highest' achievement of a chance process of biological adaptation to the environment, arrived at over millions of years.

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[1] The results of the group's work were published in J. Andrew Kirk and Kevin J. Vanhoozer (eds), *To Stake a Claim: Mission and the Western Crisis of Knowledge* (Maryknoll, NY: 1999).

There is much to be said for interpreting the history of Western culture, since the birth of modern science, as the (unequal) struggle to come to terms with this dichotomy. In general terms, the cultural realities encapsulated in the designations, *modernity* and *post-modernity*, bear witness to the ways in which Western people have wrestled with the sense of alienation caused by the epistemological rupture between knowing facts about the world and knowing the reality of their own experience. The various answers to the enigma, caused by experiencing our humanity, produced on the basis of the inevitability of this split, have convinced few people. There is a small group of intellectuals who still believe that, given time, an exhaustive analysis of the internal workings of the human brain will reveal all. Even if this were a realistic hope for some future age, it does not help those living today. Many people have turned to esoteric beliefs, related to the cycles of nature and alleged supra-human forces, to try to find some kind of orientation to life. Their attempts to *re-enchant* the world are marked by beliefs, recipes and rituals that, in previous times, would have been linked to paganism and superstition. They indicate a revolt against both rationalism and monotheism in that they display characteristics of polytheism (many spirits) or pantheism (one spirit pervading and connecting everything). However, the way in which people move from one belief to another or try a belief for a limited period of time, before reverting to a more secular way of thinking, suggests that these responses to the dichotomy do not resolve the tensions.

Consumerism is another way of trying to cope with the split. Although it might seem rather far-fetched, the constant pursuit of acquisitions could be interpreted as having an ontological intention. Some years ago, a distinction was being drawn, in ideological critique, between *having* more and *being* more. The obsession of Western culture with possessions and the status they were supposed to give was interpreted, using neo-Marxist tools of analysis, as the *fetishism* of the commodity, in which material objects are invested with certain values and powers. These powers then become, not only independent of the human agency, but a controlling force. People begin to define themselves (who they *are*) in relation to the material goods they own (what they *have*). Their being is determined by access, or lack of access, to multiple consumer choice. In a liberal market economy, what one wishes to be can be manufactured according to taste. There are plenty of books and magazines that make a business out of persuading people to adopt distinct life-styles; advice is readily available on how to conduct almost every aspect of life – relationships, fashions, food, home decoration, parenting, holidays, diets, fitness, cars, leisure pursuits, and much more.

What one is depends in large part on the image one is able to project. Production in a consumer-society is predicated on the ability to create multiple images of the 'good life'. One's sense of identity is bound up with the projected world one would in one's imagination wish to inhabit. Now, if human beings are no more than the sum total of their material origins, elevated to a fairly sophisticated level of evolutionary development, and if belief that the true meaning of human life comes from beyond the material is an illusion, then there is no option but to create a sense of purpose out of the things to hand. Systematic and unfettered materialism seems to be the only philosophy we can live by. Brought up within this dominant belief-system, young people are perfectly consistent in adopting a thorough-going hedonistic approach to life. It would be wrong of them to aim for or expect any other dimension to life. It is particularly hypocritical of an older generation, having tasted to the full the pursuit of happiness through the objects that money can buy, and having found the promises unfulfilled, to criticise their children for choosing trivial and frivolous pursuits. They are simply the latest generation to have inherited the consequences of a so-called 'sacred-secular' divide, in which an assumed non-material dimension to life is stated to be fictitious and spurious.

If human beings could live completely contented and fulfilled lives on the basis of materialist presuppositions, there would not be much to discuss. Then alternative interpretations of existence, which rely on the existence of another reality, co-extensive with, but not absorbed by the material universe, would become redundant. Everything we need to be as fully human as is possible is given to us in our understanding of the natural world. However, a small amount of introspection and the observation of how other human beings behave will show that a life of consistent materialism is not attainable. People yearn for meaning, recognition, a sense of self-worth, contentment and fulfilling relationships which, experience confirms, are not achievable through the pursuit of purely economic ends. If human beings can be classified as simply the highest form of evolved life, the result of a totally chance and completely aimless process, then the ineradicable sense that life should have meaning and purpose is inexplicable. We are aware of dimensions of life that break the bounds of explanation in terms of simple material causes.

The response of many people to this dilemma is to advocate a do-it-yourself approach to meaning. As the universe and the evolutionary operation within it are totally silent, it is incumbent on every individual to create his, or her, own personal set of goals for life. This might seem to be an adequate response were it not for the fact that it evades the need most people experience for a satisfactory answer to the question of purpose itself: in an utterly meaningless universe, how on earth did the insistent sensation of meaning arise? Another line of argument that a materialist might wish to adopt is to suggest that this sense of purpose is nothing more than the residue of a (‘spiritual’) world-view which precisely trades on being able to give an acceptable answer to this deep-seated feeling within human consciousness. Now, however, we are in a circular argument: for the assumption is that it is the worldview that has been created in order to account for the sense of purpose, which, because it existed prior to the world-view, still needs to be explained apart from the world-view thesis.

This study has been undertaken in the conviction that Western culture, following the portentous verdict that knowledge has to be divided into belief, which cannot reasonably be doubted, and belief which is a matter of individual taste, is now in a serious impasse. The fragmentation of knowledge leads to an unhealthy and disjointed society, one in which different ‘tribal groups’ peddle their own (unverifiable) versions of reality in competition with others. I see myself as writing for people who are willing to think outside the common categories, inherited from the Enlightenment, that there is an unbridgeable divide between assured knowledge and contested beliefs. Such an approach to knowledge and understanding of the human world is no longer serviceable in the twenty-first century. Our culture has played out the dream of modernity that liberty from all past interpretations of reality would set humanity free for a qualitatively new future for the human race. The cluster of views that have become standard and commonplace as a consequence of the impact of the self-styled ‘Age of Reason’ are no longer radical. They now represent convention and tradition, a hide-bound wisdom that needs challenging. A more radical perspective and solution to the central dilemma of our time may be to return again to the roots of our modern culture, in order to assess critically what positive and negative lessons can be legitimately gleaned from the intervening history and whether it might be possible to propose a more solid epistemological basis for a more human society for the future.

Such, at least, is the ambitious intention of this inquiry. I set out in the first chapter what appears to be, given the intellectual and experimental potential of the birth of modern science in the seventeenth century, the strange mystery of how two approaches to knowledge became so radically separated. I explore the consequences of this in the rise of two antithetical interpretations of history – modernity and post-modernity – assuming that each represents a more or less coherent response to the past. I then set out my own interpretation, discussing in brief outline how I believe the mystery may be explained and its negative consequences overcome. The second chapter is an account, based on the most respected sources, of the way in which obstacles were overcome, so that the scientific enterprise could flourish, and of the contribution of a Christian view of reality to that endeavour.

Chapters three and four explore some of the reasons that began to arise in the early eighteenth century for the breakdown of the consensus regarding the unproblematic unity of faith and science, still the assumption of most scientists in the previous century. The search for indisputable knowledge founded in the human cognitive faculties and a growing disposition to distrust claims to knowledge apart from the results of empirical research led to either a marginalisation or rejection of theistic belief and heralded the arrival of modernity. In chapter four, I set out in a preliminary way the thesis that the method of reasoning known as inference to the best explanation could be a useful heuristic tool both to explain the full range of human experience and to heal the breach between science and faith as complementary paths to the completeness of knowledge.

Chapters five and six examine some of the philosophical influences which have led to the cultural and intellectual condition known generally as post-modernity. In the first place, I look at the affirmation that all knowledge, understanding and truth-claims are relative to time and place and are, as a result, contingent, non-absolute and permanently revisable. In the second place, I review the allegation that language creates human 'life forms' and humans collectively create language to reflect reality as they experience it. I discuss in particular the heavy investment that Heidegger makes in language, especially that of the poet, in the disclosure of 'Being', the hermeneutical theory of Gadamer, the views of the post-structuralist, Derrida, and the shift that Wittgenstein made from language structure to language games. I conclude with a short survey of the relationship between statements and truth.

The first two chapters of Part IV are dedicated mainly to a description and analysis of some of the principal intellectual forces that have shaped the way of thinking that is largely taken for granted in the Western world today. I try first to show what appear to be the strengths and weaknesses of both the modern and post-modern 'project'. In chapter seven, I defend, against contemporary forms of scepticism, the conceptual and practical benefits brought by the scientific enterprise, for example the confirmation of a real world, accessible to human cognition, the democratisation of thought and technological advance. At the same time, I criticise the tendency of modern thought, perhaps because of the overwhelming success of science, to be satisfied with an epistemological reductionism, in which access to knowledge is limited to what is implicitly open to confirmation by empirical methods. I point out that neither reason alone nor science alone are able to do justice to the full range of what humans are convinced they know, for example the nature of science, the origins of and reasons for moral obligation and the standards of rational justification. In chapter eight, I endeavour to give a fair assessment of the reasons for the post-modern disillusionment with the modern project, particularly its rejection of all types of 'Hegelian', grand syntheses. I survey its main positions regarding issues of epistemology and culture: foundationalism, instrumental rationality, truth claims, realism and the 'death of God'. I then indicate what, to me, are the inadequacies of its epistemological relativism – namely, the insistence that all we can know is given in the form of wholly contingent, limited and indeterminate historical, cultural and linguistic perspectives – in giving an adequate explanation of ordinary ethical discourse, rationality and the achievements of the natural sciences. I finish this discussion by alluding to the consonance between post-modern thought and the latest developments in global capitalism.

The following two chapters are designed to demonstrate that the underlying epistemological assumptions of both modernity and post-modernity are deficient in explaining the entire scope of human experience. I argue, for example, in chapter nine, that science is not a self-justifying enterprise, that the post-modern attack on truth is self-refuting and that there are a number of logical fallacies implicit in the underlying beliefs. To illustrate these difficulties, I discuss, by reference to contemporary ethical theories, the failure of empiricism and rationalism adequately to ground morality. Chapter ten continues the contemporary debate about moral reasoning. Specifically I consider the enormous ethical investment made into the concept of human rights and wonder whether it might function as a possible solution to the modern/post-modern dichotomy. I survey some of the real problems caused by relying on the language of rights as an adequate source for moral belief and action. The second half of the chapter is given over to a comparison of naturalism and theism as alternative grounds for moral reasoning. I weigh up the attractions and dilemmas of evolutionary theory in relation to explaining human moral sentiment and also the problems attached to a theistic basis. I finish with a discussion of the epistemology of revelation within the Christian tradition, noting and responding to some of the vexed questions that have been raised concerning its validity.

The final chapter summarises the argument of the book by giving a brief précis of the historical material, posing again the enigma concerning the way in which Western thought has departed from a unified field of knowledge. I draw some of the main consequences of this historical development and invite the reader to reconsider the Christian theistic alternative as the best basis for the renewal of culture and society.

What is offered here is an extended essay which attempts to use different disciplines, according to their own integrity, and yet to weave them together in a way which displays the ultimate, overall coherence and consistency of knowledge, whatever its source or methods of discourse. I have tried to stand back just a little from an immediate and unreflective immersion in contemporary history and culture to look at the general picture of the main elements in the development of beliefs about how and what we can know. I make no claim to be an impartial judge or detached and unconcerned observer. I am quite consciously arguing a particular case, one I believe that has not been set forth recently with the robustness that it merits. I hope that in the course of the discussion I have been able, here and there, to offer a fresh, creative view of a stunning journey already undergone, its present whereabouts and its possible future destination. My main concern, undoubtedly, is that the Western world might regain, what I trust is not irretrievably lost, a consistency between thinking, believing and acting that is a prerequisite for the true flourishing of human life.

PART I

Worlds Apart

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Chapter One

An Enigma and an Idea

The importance of the case

The discussion which follows will begin to explore a theory, which might help explain a vexing social and cultural enigma which has dogged the history of the West for over 300 years. Like other investigations it will seek to understand and interpret complex evidence, with a view to suggesting a possible solution. Modernity, as an amalgam of intellectual convictions and social change (namely, the confidence in reason alone to discover the truth about the whole of life and the power of technology to alter social patterns and disturb cultural assumptions),[1] has been the main engine that has driven forward historical mutations on a breath-taking scale since the end of the seventeenth century.[2] Post-modernity has arisen as a theory translated into practice that the modern period has run its course. However, due to the nature of its analysis of the modern project's apparent failure to live up to its own dreams – in particular the criticism of any interpretative theory that claims a privileged explanation of all the data – it avoids language about the beginning of a new era.

Both modernity and post-modernity, as sets of social phenomena understood within particular theoretical frameworks, shape the contemporary world in both hidden and overt ways. By understanding their respective impacts on society as a whole, it is possible to appreciate why certain beliefs and values became accepted first tentatively as a plausible explanation of changing experiences and later embedded in the collective consciousness of society as self-evidently true. To use the analogy of crime detection, by comprehending the motives of the principal actors in a felony, the detective is able to unravel the plot. Investigations are intended not only to solve the main elements of a mystery but (as for example in the case of a serial rapist) help make the environment a safer place to live in.

The case to be investigated

Within the sweep of several centuries of history, modernity as a distinct, self-conscious, rational process has seemingly turned out to be a *digression* from a promising, but rather quickly obstructed, intellectual tradition – namely the exploration of the implications of the symmetry of two complementary sources of truth, the *word* and *world* of God. Post-modernity, on the other hand, is proving apparently to be not so much an advance on the modern project as a *regression* to ideas which ostensibly exalt irrational thinking.[3] In the midst of a volatile and erratic cultural situation, due to the harmful consequences of both the digression and regression, an unprecedented challenge faces current thinking to retake the threads of a promising beginning and develop them into a contemporary agenda for the renewal of thought and life. This study will seek to test the thesis that mainstream Christian belief, shorn of the temptation to convert itself into an institutional power-base, is the best contender to take on this task. It will endeavour to accomplish this formidable quest by assessing the relevant evidence for its claim to possess superior explanatory and re-creative powers in comparison with major alternatives.

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[1] The strength of particular beliefs (Weber) and the potency of productive forces (Marx) as instigators of change are both accepted in this account as necessary explanations of the phenomena.

[2] The period when modern science became established in the work of Isaac Newton and modern political discourse was initiated in the writings of Thomas Hobbes and John Locke.

The tools of investigation

In attempting to solve any crime, detectives will come across a number of clues which may begin to identify the perpetrator. Not all the clues give clear evidence. If the criminal is clever enough, he or she may well lay false trails. Often, the crime remains unresolved until a pivotal clue is uncovered. Similarly with an investigation of the causes of a serious assault on the promised dawning of a new era some three centuries ago there are many clues to hand. They are provided by the analytical powers of different disciplines, all of which are important. But the essential clue is still missing. The inability of opinion-formers today to stem the incoming tide of pessimism and apprehension is not easily explained by using the instruments of interpretation fashioned from within the modern project itself. Often, the assumptions on which they are based reflect the problem. They are prone to reject, as inadmissible, the very evidence needed to clear up the enigma of contemporary Western society. The process is equivalent to overlooking, through myopia or prejudice, the key piece of evidence that would resolve the case.

An enquiry, from a Christian perspective, into the significance of the data is not a guarantee of easy solutions; it does not propose a short-cut through difficult terrain nor offer a quick fix at the rub of a lamp. It does, however, provide a standpoint which does not exclude *ab initio* any explanation which looks like proving fruitful. More particularly, it offers a framework in which to test the conjecture that the harmonious correlation between the word and world of God is a necessary assumption for making sense of the deep intellectual, ethical and spiritual unease apparent today in the cultures which are the result of the project of modernity. To demonstrate that this is the decisive key will require serious, critical investigation.

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[3] See, Susan Haack, *Manifesto of a Passionate Moderate: Unfashionable Essays* (Chicago, 1998), *passim*; Donald Wood, *Post-Intellectualism and the Decline of Democracy: The Failure of Reason and Responsibility in the Twentieth Century* (Westport, 1996), pp. 1–44.

The abandoned tradition

In brief, the tradition which momentarily promised to come to fruition some 350 years ago suggested that the best hope for authentic human flourishing would come through harnessing the resources of two sources of truth: the word and the world of God. Human beings would understand their true destiny and would be able to enjoy it to the full only as they 'read' and lived on the basis of the two 'books': the Bible as the record both of God's action within and interpretation of the whole of reality and the natural world as a source of human nourishment and pleasure. Neither 'book' was self-contained as the source of all knowledge and wisdom. Both books had to be opened and read with the other present for cross-referencing. Each needed a commitment of faith, or belief in a particular prior understanding of reality, for the process of reading to make sense.[4]

The subversions of the tradition

Unfortunately, the tradition was swiftly sabotaged from within and distorted from without. Indeed, the existence of the tradition may be more theoretical than real, more of an ideal than anything that can be identified historically as having possessed a self-conscious existence.[5]

From within, the tradition was vandalised by a particularly devastating *will-to-power*. At around the time of the birth of modern science, the gigantic conflict between the forces of the Reformation and the Counter-Reformation was still being played out. The 'territorial tragedy'[6] of Christianity encountered its nadir in the Thirty Years War, one of the last major attempts to maintain the coercive force and authoritarianism of the religious state over the non-violent compulsion of truth and the authority of conscience. In some instances, this absolutism was also mobilised against the incipient findings of scientific discovery. The enemies of the tradition failed to perceive the nature of genuine Christian freedom,[7] which, whilst stating that there is an inviolable form given to reality, nevertheless affirms the legitimacy of free investigation and freedom of belief.

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[4] Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago, 1958) and others have argued that faith in the intelligibility of the world is a necessary basis for scientific investigation. In an analogical way, belief in a reliable source of knowing external empirical data is a necessary basis to search for a fully human knowledge. In the case of science, the confirmation of sense perception and the discovered regularity of mechanisms in the world help to authenticate the 'faith' in the reliability of empirical investigation; in the case of biblical revelation, the ability to give, over the long-term, comprehensive answers to life's major dilemmas helps to authenticate faith in the word. However, as there are proper external criteria for testing truth-claims, the initial commitment of faith should not imply the circular reasoning which leads to 'fideism': c.f., the discussion between Harold Netland and Lesslie Newbigin in P. Sampson, V. Samuel and C. Sugden (eds), *Faith and Modernity* (Oxford, 1994), pp. 85–87, 106–111.

[5] However, see, W. Mark Richardson and Wesley J. Wildman, *Religion and Science* (London, 1996), pp. 8–12; Stanley Jacki, *The Origin of Science and the Science of its Origin* (Edinburgh, 1978), pp. 1–21, and the discussion of the origins of modern science in chapter 2.

[6] Namely the identification of one political region with one form of Christianity to the exclusion of others, see, Thomas Munck, *Seventeenth Century Europe: State, Conflict and Social Order in Europe 1598–1700* (Basingstoke, 1990), pp.277ff.

From without, the tradition was deformed by the *will-to-independence*. The humanist impulse, begun in the Renaissance,[8] was about to embark on its ‘rationalist’ turn provoked by the intellectual project of Descartes.[9] Autonomous self-reference (the human mind alone as the measure and guarantee of assured knowledge) began its fateful march.

The consequences of subversion – modernity

It was by no means inevitable that the ‘reading of the world’ (the scientific enterprise) should have been conducted independently of, even less in opposition to, the ‘reading of the word’. There are some signs that the destruction caused by the divorce of the two is now being recognised as the result of an unnecessary polemic. For example, the assumptions, methods and conclusions of science raise theological and ethical questions that only sources of knowledge beyond those that science itself supplies can answer satisfactorily, and theology and science share some of the same basic principles of rational enquiry.[10] It seems almost trite to claim today that ‘if God is the source of all truth, there should be a consonance between the right conclusions of human scholarship and theological conclusions based on revelation’.[11] And yet the ‘conditional’ of this sentence is precisely what has been, and continues to be, the most basic matter of dispute in Western thought since the seventeenth century.

However, we can only deal with history as it unfolded. The modern project, it is generally recognised, can be traced to the attempt to ground the attainment of indubitable knowledge on irrefutable grounds.[12] To avoid the acids of scepticism and the destabilising effect brought about by radical uncertainty, influential thinkers believed that the process of reasoning needs to be self-validating without having to appeal to authority or depend on faith. It has to be able to generate from itself a set of necessary, self-evident principles which no one could doubt without being self-refuting:

> In Descartes’ system, reason first clears away all preconceptions and then elaborates its own first principles, accepting only clear and distinct conceptions which can survive the most rigorous examination … For the system to work, the universe must be modelled

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[7] See, J. Andrew Kirk, *The Meaning of Freedom: A Study of Secular, Muslim and Christian Views*, (Carlisle, 1998), chapter 9.

[8] See, David Cooper, *World Philosophies: An Historical Introduction* (Oxford, 1996), pp. 228–231.

[9] See, chapter 3 of this book.

[10] These claims will be explored as part of the concluding discussion in Part IV.

[11] Philip Clayton, *God and Contemporary Science* (Edinburgh, 1997), p. 77.

[12] See, David West, *An Introduction to Continental Philosophy*, (Cambridge, 1996) pp. 10–13.

> on a deductive system, so that what happens in it must be deducible from the laws of its operation and its initial state.[13]

This desire to build, from utterly secure foundations, an incontrovertible body of knowledge about the world which humans inhabit had an emancipatory intent. It was believed that humans had it within their grasp to liberate themselves from all disputable, uncertain and arbitrary beliefs that intrinsically could not validate themselves, in order to build knowledge afresh from non-controversial, universally acceptable, initial postulates. Humanity would come to self-realisation in the struggle 'to separate truth from falsehood, reason from unreason, fact from fiction'.[14]

As well as deductive reasoning from incontrovertible axioms, the inductive proceedings of the scientific method, based on meticulous observation and well-tested hypotheses, seemed to guarantee the fulfilment of the aspiration for incontestable knowledge, of a different order from mere opinion or belief. It had the twin merits of being rationally accessible to anyone who grasped its methods of operating and universal in character, i.e., not contingent on factors (such as culture, situation, personality, upbringing) which could relativise perspectives. Science, it is claimed, more than any other force within history, has the ability to make all equal, since it obeys a logic and set of rules that no-one can control but only submit to.

This approach to knowledge – from a firm foundation building upwards – and the cumulative discoveries provoked by the scientific method suggested an evolutionary, progressive or dialectical dimension to human history.[15] Progress seemed to be the inevitable accompaniment of a rational analysis of human problems in which the causes of the defects of human life could be objectively examined and put right in an ascending progression towards human perfection.[16] It is not surprising that dreams of the future dominated the imagination, the dream of a society of social equality and harmony, free from oppression, ignorance and bigotry. Such was the stuff of the utopias proclaimed by the Marquise de Condorcet,[17] Saint-Simon,[18] Fourier, Owen and others.[19]

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[13] Keith Ward, 'The Decline and Fall of Reason,' in Ursula King (ed.), *Faith and Practice in a Postmodern Age* (London, 1998), pp. 22–23, 20.

[14] Christopher Norris, *Reclaiming Truth: Contribution to a Critique of Cultural Relativism* (London, 1996), p. 141.

[15] The orderly progression of science from conjecture to hypothesis to the testing of evidence to confirmation or revision has been disputed by Thomas Kuhn in his elaboration of 'paradigm shifts', see, *The Structure of Scientific Revolutions*, 2nd edn (Chicago, 1970), pp. 92–110. However, some commentators believe that Kuhn's theory has confused too readily the distinction between the context of discovery and the context of justification, see, Martin Curd and J.A. Cover, *Philosophy of Science: The Central Issues* (New York, 1998), pp. 230–245; Christopher Norris, *Against Relativism: Philosophy of Science, Deconstruction and Critical Theory* (Oxford, 1997), pp. 82–96. Kuhn's historical approach to scientific discovery will be explored later in this study (see chapters 4 and 5).

[16] See, J.D. Hunter, 'What is Modernity? Historical Roots and Contemporary Features', in *Faith and Modernity*, p. 21.

By contrast, the past was a dark age to be overcome, a vale of intellectual obscurity, primitive emotional drives and unproductive labour. Religion and faith belonged to this stage of human society, superstitious and pre-critical. Indeed, 'religion, faith and rationality present themselves as three successive layers in a historical process, as human instruments that gradually unfold and become distinct'.[20] The egg turns into a caterpillar and the latter into a chrysalis from which the butterfly gradually emerges and flies away free, discarding the earlier stages of its life. The development was irreversible; there was no turning back. As a matter of temporal sequence, rationality simply superseded faith.

The whole process has been well documented. There have been many twists in the tail (tale) of the story, which have been described and analysed at length. Now, however, modernity is sorely wounded, though, in the immortal words of Mark Twain (applied to himself), notice of its death is greatly exaggerated. In many ways it is bankrupt, but it is not obvious that it has yet been superseded. At the risk of over-simplification, the fundamental problem appears to be, not the use of reason itself as an instrument of awakening and edification, but the entrusting to reason a weight of expectation it cannot bear. Reason became isolated from all the other aspects of human life. Paradoxically, the theory about its ability to perform universal functions could not be tested by the light of reason alone. Once the 'book of the word' was shut tight and allowed to gather dust in the basement of history, the 'book of the world' became ever more mystifying. Principles like justice, mercy and forgiveness do not present themselves as self-evident truths to the rational mind.[21] The very existence of the world and its order, and the ability of rational minds to understand reality, are not self-explanatory, they need explicating by recourse to a theory which is held prior to empirical investigation.[22]

From being an instrument which could help define means within a context in which the ends were discerned by other principles, reason became the sole actor in the field. It became an autonomous power which carried other potentially oppressive powers within its bosom – capitalism, colonialism, technology and state bureaucracy – , but without sufficient power of discernment to see the inherent dangers:

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[17] 'Sketch for an Historical Picture of the Progress of the Human Mind', see Lawrence Cahoone (ed.), *From Modernism to Postmodernism: An Anthology* (Oxford, 1996), pp. 72–82.

[18] K. Taylor (ed.), *Saint-Simon: Selected Writings on Science, Industry and Social Organization* (London, 1975).

[19] See, K. Taylor, *The Political Ideas of the Utopian Socialists* (London, 1982).

[20] Bert Hoedemaker, *Secularisation and Mission* (Harrisburg, 1997), p. 18.

[21] See, Lamin Sanneh, *Religion and the Variety of Culture* (Valley Forge, 1996), p. 60.

[22] Diogenes Allen, *Christian Belief in a Postmodern World: The Full Weight of Belief* (Louisville, 1989), pp. 3–4.

> The idea that the free market is self-stabilising is an archaic, curious relic of Enlightenment rationalism.[23]

By pretending to be the measure of the knowable, reason became reductionist. Having presumed that the chief end of human existence was accessible to reason and having discovered its limitations in practice, there developed an increasing divorce between the objective world created by technological rationality and the subjective world of meaning and purpose.[24] The person is simply reduced to choosing between objects in the outside world put there by the harnessing of instrumental reason to the domination of the book of nature. But pure choice, when there is no ultimate reason for choosing, because the meaning of existence is unknowable through reason alone, is degrading; it shrinks the complexity of the full potential of humanness.[25]

Modernity – not so much progress as diversion

Paradoxically, the modern project, in trying to secure an unshakeable hold on reality by eliminating what has been considered *mere* belief, has lost the most powerful reason for believing there is such a thing as reality, namely the divine warrant. Reliance upon the imminent powers of reason alone has inevitably given rise to an intellectually irrefutable scepticism.[26] The main problem resides with the strong foundationalist claim that there are self-validating criteria for distinguishing between genuine knowledge and mere opinion in all cases. The sceptic disputes the claim that we have a reliable basis for confidence in our ability to conceptualise the world as it is.[27] Richard Rorty traces scepticism to the 'representational' conception of belief and its close ally the correspondence theory of truth; in other words, the very assumptions on which a firmly realist view of the objective world is based.[28]

Even if a radical, philosophical scepticism is not justified, it has to be admitted (according to the nature of reasoning) that belief is an indispensable component of rational endeavour. Belief and rational critical method are linked together in an unbreakable chain: knowledge is impossible without prior belief; belief can only assume the status of knowledge if there is sufficient propositional evidence for it. In other words, knowledge is not possible without the acceptance of some fundamental assumption(s); belief is not warranted unless supported by good evidence.[29] Consequently, it is a major conceptual mistake to suggest a necessary dichotomy between belief and reason. Donald Wood commits this fallacy in a stark, yet all too common, form:

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[23] John Gray, *False Dawn: The Delusions of Global Capitalism* (London, 1998), p. 198.

[24] Alain Touraine, *Critique of Modernity* (Oxford, 1995), p. 5.

[25] See, G.M. Tamas, 'A Clarity Interfered With', in T. Burns (ed.), *After History? Francis Fukuyama and His Critics* (London, 1994), pp. 86–87.

[26] Scepticism is the conviction that 'all so-called knowledge is groundless belief", see, Michael Williams, 'Scepticism', in John Greco and Ernest Sosa (eds), *The Blackwell Guide to Epistemology* (Oxford, 1999), p. 41. The proper place of belief in reasoning about reality will be explored more fully in Part IV of the book.

[27] See, Crispin Wright, *Realism, Meaning and Truth* (Oxford, 1993), p. 2.

[28] See, J. Dancy and E. Sosa (eds), *A Companion to Epistemology* (Oxford, 1992), p. 89. It will be necessary to meet the sceptical challenge later. Suffice it to say here that the position appears to be self-referentially inconsistent, in that it cannot justify its own demands, and ultimately irrelevant, in that in making ordinary judgements we have to suspend scepticism, see, Stephen Nathason, *The Ideal of Rationality: A Defense within Reason* (Chicago, 1994), pp. 209–211. The common-sense view is put colloquially by Dostoyevsky: 'A hundred rabbits don't make a horse and a hundred suspicions don't make one single proof .. that's just common sense', *Crime and Punishment* (London, 1951), p. 463.

> By definition, *faith* is belief which cannot be verified by *reason*. Faith is the blind acceptance of an idea or doctrine without any rational evidence or tangible proof. Faith is non-intellectual.[30]

Modernity appears to be a classical case of disposing of the baby with the bath water! Reliance on reason alone (rationalism) has led inexorably and paradoxically to an unnecessary lack of confidence in the place of reason in understanding the world (rationality), and consequently to various experiments with irrational postulates as ways of negotiating the world. According to the theory we wish to test, the rejection of confidence in the truth of the word leads, *pari passu*, to a loss of confidence in the truth of the world. Driving a wedge between the two has created a number of false dichotomies, which have led to an immensely significant, 300-year, digression of Western consciousness. Holding together the two sources of knowledge allows for an effective way of being able to distinguish between proper belief and irrational superstition, between justified true belief and a knowledge that is supposedly immune from error (infallible), refutation (incorrigible) and doubt (indubitable). Being constrained by the truth of the word and the world eliminates an unstable human autonomy that tends towards incoherence, but without, however, having to compromise a genuine freedom.

The tendency to split apart what should remain together has led to an unfortunate and unnecessary demand that a belief in foundational assumptions must be able to answer the 'infinite regress' dilemma.[31] In other words, it is claimed that those who wish to argue for a foundationalist approach to knowledge are obliged to defend the strong version. The critics seem to assume that, if the acquisition of significant knowledge cannot pass the three-fold test of freedom from error, refutation and doubt, then foundationalism must be abandoned altogether. This demand for the strong version or no version at all is fortunately not self-explicating; fortunate, because all alternatives to some kind of foundationalism as a theory in epistemology

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[29] Dancy and Sosa, *A Companion to Epistemology*, p. 437.

[30] Wood, *Post-Intellectualism and the Decline of Democracy*, p. 250.

[31] The dilemma that there seems to be no end to the chain of necessary justifications: 'each step in the chain (of the search for ultimacy) demands a further explanation, and if it is not forthcoming, everything that depends on that step is "ungrounded"', Roger Scruton, *Modern Philosophy: An Introduction and Survey* (London, 1994), p. 4.

(holism, coherentism, pragmatism or behaviourism) end up with more problems than they solve.[32]

Without denying the importance of the role that coherence plays in the justification of true beliefs, the possibility of gaining access to knowledge demands a *moderate* foundationalism if it is to escape from an unresolvable relativism. To have knowledge one must *assume* a source of direct knowledge or directly justified belief and any other knowledge or justified belief is traceable to this source. The difference between the strong and moderate forms of foundationalism lie in the requirements: the former has to be incorrigible, the latter is defeasible (i.e. open to correction).[33]

There seems no reason to dispute a priori the possibility that the Christian view of divine revelation – God's personal and rational communication of truth to human beings (the word of God) – can act as a foundation in this moderate sense. Likewise, the empirical discovery of the natural world forms a foundation on which trust in the reliability of certain mechanisms can be built.[34]

The question for Christian faith that arises from this discussion, and to which we will return in the last section of this chapter, and more fully in Part IV, concerns the relationship between the task of making sense of and living in the world as we experience it and the foundational assumption that only in the revelation of the personal God is knowledge, and its conditions, properly established, vindicated and completed. This is a matter which encompasses the 'plausibility of beliefs' in a given culture, questions about right and wrong living (e.g. peace, justice and the integrity of the environment[35]) and the truth, or otherwise, of 'other gospels' (both religious and secular). Before we turn to this debate, we need to explore the other current alternative to modernity, namely post-modernity.

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[32] Thus, for example, the coherentist version of epistemic justification, namely that 'knowledge … is true belief that coheres with the background belief system and corrected versions of that system' (Dancy and Sosa, *A Companion to Epistemology*, p. 69) is implausible as a wholly adequate account. Laurence BonJour finds three reasons why it is inadequate: it entails that epistemic justification requires an input from or contact with the world outside the system of beliefs; many alternative systems of belief can be invented, each of them entirely coherent; there is no clear connection between the coherence of a system of beliefs and the cognitive goal of truth, 'Foundationalism and Coherentism', in Greco and Sosa, *The Blackwell Guide to Epistemology*, p. 122.

[33] This position is argued for persuasively by Robert Audi, *Epistemology: A Contemporary Introduction to the Theory of Knowledge* (London, 1998), pp. 204–207. Precisely because knowledge is justified true belief about a proposition or state of affairs, it is open to being challenged as unwarranted and mistaken.

[34] BonJour argues that 'the basis for the needed inference between sensory appearance and objective fact is to be found in … first their involuntary, spontaneous character and second, the fact that they fit together and reinforce each other', Greco and Sosa., *The Blackwell Guide to Epistemology*, p. 138. (This epistemological observation combines foundationalism and coherentism).

[35] See, J. Andrew Kirk, *What is Mission? Theological Explorations* (London, 1999), chapters 6, 8 and 9.

Post-modernity – not so much advance as regression

The cultural phenomenon generically referred to as postmodernity manifests itself in a variety of ways, through architecture, art, philosophy, cultural theory, lifestyles, the media and politics.[36] The name suggests that it is a way of viewing the world which comes after modernity, with the inference that it is, at least, reinterpreting, if not seeking to replace the traditions which have flowed from the Enlightenment. Its significance is hotly disputed. Some see it as having signalled quite clearly and forcefully the demise of the modern project, others see it as in essential continuity with modernity (a kind of late, or self-reflexive modernity[37]), yet others view it sceptically as a clichéd reaction to a decaying movement that still clings on to the last vestiges of a faded intellectual legitimacy. Whatever the interpretation, and we will discuss at much greater length the post-modern condition later, it manifests many beliefs that appear to be largely untouched by the cultural and intellectual impact of the Christian message on Western history.[38]

Post-modernity can best be described as a complex cultural and social movement which is premised on a thoroughgoing critique of the normal assumptions associated with the Enlightenment:

> Typical of postmodernism is its scepticism concerning the central role assigned to reason and rational thought. Over against indubitable truth-claims, an overconfident faith in science, and a metaphysical way of reasoning, the interrelatedness of truth-perspectives, ethical pluralism, and cultural relativism is typical of the postmodern perspective.[39]

It is commonly associated with the phrase, ‘the end of metanarratives’.[40] By this is meant the impossibility of finding one over-arching interpretation which does justice to the whole of reality. Rather, the history of humankind is judged to be a discontinuous succession of fairly random events without any transcendent meaning or purpose. For post-modernity there is no *alpha* and *omega* to the human story; indeed, there is no one story, only fragments of many stories (or, perhaps, fables).

In one sense, this affirmation is less a description of what is perceived by the post-modern apologists to be the case as a judgement of what ought to be the case. It is not so much an empirical observation as an ethical demand. Modernity is interpreted as an ideology in the sense that the assumptions on which it is based simply mask the play of power. Its view of rationality, progress and the ‘end’ of history is little more than a legitimisation of a set of relationships in which certain sectors of society and certain nations of the world maintain their dominance and privileges:

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[36] See, Stuart Sim (ed.), *The Icon Dictionary of Postmodern Thought* (Cambridge, 1998); Hans Bertens, *The Idea of the Postmodern: A History* (London, 1995).

[37] See, Anthony Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Cambridge, 1991).

[38] Unlike modernity, postmodernity in general explicitly ignores the cultural and intellectual impact of Christianity on the West. If it is touched by this tradition at all, it is only indirectly by being part of a historical process affected subconsciously by the Christian worldview and moral teaching.

[39] J. Wentzel van Huyssteen, *Essays in Postfoundational Theology* (Grand Rapids, 1997), p. 187.

[40] Richard Kearney, *Modern Movements in European Philosophy* (Manchester, 1994), pp. 123–127; also called ‘master’ narratives because of their supposed tendency to dominate and oppress, and to represent an exclusively masculine view of reality.

> Knowledge is always the relative and questionable expression of a particular constellation of relations of power or force. The symbiotic relationship between power and knowledge is ….at the heart of Foucault’s account of the parallel emergence in modern societies of the human sciences as ‘disciplines’ with scientific pretensions and what he calls ‘disciplinary power’.[41]

The great attraction of post-modernity probably lies in its uncompromising exposure of the pretensions of the modern discourse, and in particular the claims sometimes made on behalf of science that it has the power to deliver an increasingly problem-free world. The post-modern sensibility appears to be a new force which defends the legitimate aspirations of ‘the other’, namely those who are ‘different’ from me, giving them back the right to shape their beliefs and lives in accordance with their own subjectivity and not another’s interpretation of what is right or wrong for them. It allows for a heterodoxy which challenges the orthodoxy of a late capitalist, globalised system, which manifestly coerces and oppresses vast segments of humanity. It calls in question what is taken for granted. It is iconoclastic, irreverent, counter-cultural. It appears to be radically tolerant of difference, incoherence and permissiveness, critical of seriousness and passionately committed to play. It is highly compatible with a post-revolutionary, post-ideological, pluralist age. It catches and challenges admirably the *zeitgeist* of modernity with its passionless rationalism and unremitting tedium.

Yet, for all its potentially beneficial analysis of contemporary social and cultural forms, overall it represents a regression to an unattractive past. To begin with, in so far as it is largely a reaction against something else, it is not likely to be particularly visionary. It knows what it does not like, but is confused about alternatives. In this sense it follows other reactions to the Enlightenment project – Romanticism and Existentialism being, perhaps, the most significant. The Romantics ‘placed the determinate effects of unconscious passion at the centre of human subjectivity’.[42] They vigorously disputed the Enlightenment notion of progress and returned to a re-evaluation of the primitive (Herder) or original innocence (Rousseau): the so-called ‘savage’ who loves his family and his tribe is a ‘truer being than that shadow of a man, the refined citizen of the world’.[43] They criticised the exalted view of rationality as the supreme quality of human life, emphasised feelings as at least an equal source of knowledge to reason and, in anticipation of the contemporary ‘linguistic turn’, emphasised the subjective powers of language.[44]

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[41] West, *An Introduction to Continental Philosophy*, p. 171.

[42] Anthony Elliott, ‘Psychoanalysis and Social Theory’, in Bryan S. Turner (ed.), *The Blackwell Companion to Social Theory* (Oxford, 1996), p. 172.

[43] Quoted in Cooper, *World Philosophies*, op. cit., p. 281.

[44] ‘Here, perhaps, are the earliest intimations, in the West at least, of that “linguistic relativism” which was to become an important tendency in twentieth-century philosophy’, ibid., p. 283; see, Maurice Cranston, *The Romantic Movement* (Oxford, 1994), p. 21ff..

Existentialism can be identified as a kind of Constructivism, the view that 'humanity has now reached a point of self-conscious development at which it must construct its own values, and not expect them to be delivered by some higher authority'.[45] The higher authority now being rejected was no longer that of religion but of reason. Neither God nor universal reason predetermine what we shall be – existence precedes essence –; therefore, human beings are free from any possible 'given' to create their own reality and values. This, says Sartre, places on the individual an enormous responsibility, for he or she has to choose which chief ends to pursue; no-one nor anything – God, tradition, reason, nature – gives answers. The individual is 'condemned' to make his or her own world and face fully the consequences of his or her own creation. Every attempt to hide behind the decisions or responsibilities of others, pretending that we are forced to play certain roles, is 'self-deception' and 'bad faith'.[46]

Post-modernity shares these historically preceding movements' emphasis on the priority of the primordial,[47] inter-subjective, attitudinal or prescriptivist account of ethical knowledge, which claims that values are not given as universal, categorical imperatives but represent the desire or decision of the individual will. They arise, as it were, from below, not from above (given by Reason, Revelation or Nature). Practical reason cannot bring us to a consensus which all intelligent, well-educated persons would be bound to accept if they were able to rise above partisanship and prejudice. Post-modernity denies all pretensions to the intrinsically given because of its 'sceptical mistrust of all truth-claims, normative standards or efforts to distinguish vertical knowledge from current and contingent "good in the way of belief"'. It marks an epochal shift 'from the regime of truth to the absence of all validity-conditions'.[48]

The result is a radically relativistic approach to knowledge and decision-making, clearly exemplified in the pragmatics of Richard Rorty. In one particularly robust article, he outlines with brutal clarity the stark achievements of post-modern (post)philosophy:

> Recent philosophy helps us to see practices and ideas … as neither natural nor inevitable – but that is all it does. When philosophy has finished showing that everything is a social construct, it does not help us to decide which social constructs to retain or replace.[49]

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[45] Bernard Williams, 'Ethics', in A.C. Grayling (ed.), *Philosophy: A Guide through the Subject* (Oxford, 1995), p. 555.

[46] See, Calvin Pinchin, *Issues in Philosophy* (Basingstoke, 1990), pp. 289–301; Kearney, *Modern Movements*, pp. 67–68.

[47] Post-modern poetry is 'marked by an acceptance of the primordial, or spiritual and sexual necessity, of myth, the latest understandings of science, chance and change, wit and dream', Donald Allen and George Butterick, *The Postmoderns: The New American Poetry Revisited* (New York, 1982), p. 11, quoted in *The Idea of the Postmodern*, op. cit., p. 51.

[48] Norris, *Reclaiming Truth*, pp. 182, 183.

[49] 'Femininism, Ideology and Deconstruction: A Pragmatist View', in Slavej Zizek (ed.), *Mapping Ideology* (London, 1994), p. 227.

He continues by recognising the almost impossible dilemma that post-modernity has posed for the feminist movement. Feminism is based on the distinction made in all ideological critique since Marx between reality and false consciousness and on the notions of distortion and dissimulation practised by the ruling classes seeking to legitimise their interests. However, ideas like 'false' and 'distortion' presuppose a representational view of an objective reality that is in clear conflict with the pragmatist and deconstructionist argument that everything is a matter of social construct. If it is impossible to talk of 'distorted communication' or 'distorting ideas' without believing in objects external to discourses, capable of being accurately or inaccurately represented by these discourses, then 'there is no point trying to distinguish between "natural" and merely "cultural"; no point in appealing to "way things really are"'.[50] The outcome of Rorty's position is Nietzschean in tone and consequences:

> Neither pragmatists nor deconstructionists can do more for feminism than help rebut attempts to ground these practices (namely patriarchal) on something deeper than contingent historical fact – the physical strength of men over against women. *All that is left for women is to grab power when they can.*[51]

Here we can see the inevitable outcome of the dogma of 'the end of meta-narratives'.[52] It seems as if the solution to the seriously ill patient is to prescribe a deadly poison. Rather than diagnosing the true symptoms and applying an appropriate medicine, post-modernity's answer is euthanasia! If recent history can be likened to a sea voyage, post-modernity represents mutiny – the determination to wrest the steering mechanism from the self-appointed ('enlightened') owners of the ship. Once having 'deconstructed' the (authority of) the captain and won over the crew, the mutineers go on a pleasure trip which may take them anywhere or nowhere – there is no map, no compass and the natural fixed-points of sun, stars, wind and currents are unreliable. No matter! The idea of destination, or of home-coming, is an absurd illusion. Like the porpoises and whales (probably more intelligent than humans) the boat's passengers can give themselves up to endless play. When the engine runs out of fuel, we can sink the ship and take to the life-boats. Each group of passengers can then decide for itself which destination it wishes to take, none are right and none are wrong.[53]

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[50] Ibid., pp. 229–230.

[51] Ibid., pp. 233–234 (italics mine).

[52] Every bit as much a dogma as Fukuyama's 'end of history' thesis, *The End of History and the Last Man* (London, 1992). Thus, for example, 'Lyotards's conception of justice conforms to the general experimental anti-representationalism of the postmodern condition, except, of course, in the absolutist ban on the elimination of rival players from a game. Although this meta-rule involves him in contradiction – it is clearly not subject to experimentation – it is also clearly necessary for the viability of his experimental/political model', Bertens, *The Idea of the Postmodern*, p. 129.

[53] 'In post-modern writing there is very little that allows any direct application to existential situations except as ironic stances for negotiating a world so full of signifiers it must be empty of beliefs', Charles Altieri, 'Postmodernism: a question of definition', *Par Rapport*, 2,2, 1979, p. 98. 'Post-modernism means cutting ourselves adrift from solid and

Getting back on track

Speaking inevitably in general terms, modernity has been characterised by the attempt to build a universally valid explanation of existence from the basis of human reason alone, an intellectually satisfying theory that encompasses everything. It proposes a verifiable view of reality which is not historically contingent, culturally loaded or socially prejudiced, but acceptable to every right-minded thinker. It is a grand scheme to bring unity to human discourse and community out of the conflict of sectarian interpretations. It aspires to adhere to W.K. Clifford's famous aphorism: 'it is wrong always, everywhere and for everyone, to believe anything upon insufficient evidence',[54] where evidence means experimental data that is intrinsically open to being falsified.

Post-modernity, on the other hand, is characterised by its 'absolute' conviction that any attempt to build a uniform body of knowledge is not only doomed to failure for good epistemic reasons but actually hides a sinister design to impose upon all peoples only one right way of looking upon the world. The outcome of the modern project is exclusion of difference, uniformity, monotony and vapidity. It reduces a richly textured, multi-form world into a grey, drab, monotonous tedium. Modernity means control; postmodernity advocates the breaking of all bounds, experimentation, rebellion against the 'experts', diversity, acceptance of divergence and incongruity, the celebration of eccentricity.

However, as attempts to encompass a meaningful approach to life (and postmodernity is no less a 'meta-narrative' than its rival) both are fatally flawed: reliance upon a unifying, ultimately unambiguous rationality leads eventually to a scepticism it cannot answer on its own terms, whilst the dismissal of rational criteria for judging the veracity of beliefs is self-defeating and leads to indifference and relativism. There does not seem to be any way out of this impasse, unless an epistemology can be discovered (or rediscovered) that can allow for and give an account of both unity and diversity in the knowledge and explanation of the whole of life. It should be an epistemology that is able to critique ideologies, sustain an unpretentious science, recognise truth and admit error, reunite a fragmented world whilst allowing for creative diversity. It should be realist, fully rational, consistent, non-relativist and non-sceptical whilst being fallibilist. If such an epistemology (perhaps wisdom would be a more adequate concept) is unavailable, contemporary Western society would appear to be condemned to perpetual confusion about the most basic propositions concerning human life.

Assuming that the conflict between modern and post-modern ways of assessing life best describe the cultural condition of the West in the twenty-first century, and that both have exhausted their resources in explaining and re-creating contemporary

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stable, boundary markers of what is right and wrong, good and bad, correct and incorrect, true and false, real and illusory and sailing off into the unknown without benefit of map or compass'; H. Gene Blocker, 'An Explanation of Post-Modernism', in Alburey Castell, Donald Borchert and Arthur Zucker (eds), *An Introduction to Modern Philosophy: Examining the Human Condition* (New York, 1994), p. 678.

[54] *Lectures and Essays* (London, 1879), p. 185.

society in a way conducive to real human thriving, the hypothesis of this study is that the only fully sustainable epistemology is one that allows mutual respect for and the interplay of knowledge through the 'world' and through the 'word'. It means a thorough re-examination of these two sources of knowledge in such a way as to eliminate an unnecessary and false rivalry and to avoid the Scylla of scepticism and the Charybdis of relativism. The hypothesis has to be able to do justice to both the ordinary and specialist use of language[55] and has to be consistently workable in practice. Quite probably the most potentially fruitful place to begin to explore the hypothesis is in the field of ethics, moral philosophy or practical reason. It has been the French philosopher, Levinas, who in recent times has strongly advocated ethical discourse as the real *locus* for epistemology.[56] Seeking for knowledge either through a disembodied ontology or an objectivifying epistemology, whilst ignoring the absolute claim of the 'other', will always lead to a stultifying reductionism of epistemological possibilities.[57]

Others have also either hinted at or developed the rewarding epistemological possibilities inherent in ethics. Thus John Bowker argues that to know is not dependent so much on the certainty that one thinks as on the observation that, without exception, human beings make ethical judgements, i.e. valuations of what is right and wrong behaviour, what one is responsible to do and avoid doing.[58] Stephen Nathason explores the deep relationship between criteria of rationality, the examined life and what are intrinsically *good* ends.[59] Linda Zagzebski believes that the normative side of epistemology is crucial to a satisfactory answer to its fundamental questions:

> My purpose in writing this book is to draw more attention to the side of epistemology that overlaps with ethics and, in particular, to show how one form of ethical theory – a pure virtue theory – can be developed in ways that are rich enough to permit the kinds of evaluations of epistemic states that are crucial of epistemology.[60]

It is well known that Alasdair MacIntyre develops epistemological themes out of attention to 'the good' and, in a sense, tests his theory about traditions in the ethical, political debate about the common good.[61]

An ethical approach to epistemology seeks to discern what is justified true belief in relation to action. It brings theoretical discussions about both the possibility of knowing and the adequacy of beliefs into the arena of every day living. The issues raised cannot be ignored as belonging only to the concerns of professional academics. They touch the lived experience of the 'average person-in-the-street'. Important for this account of knowledge is the consistency between intellectually defined belief and the moral decisions of daily life. The fundamental question is not how do I justify my beliefs or know that I can rely on my perceptions or memory or the witness of others, but how do I justify my actions. To know *what* is right to do is more important than either knowing *how* the world works or *which* beliefs seem the most valid to hold. Empirical knowledge and faith assumptions are crucial to ethical judgement, but can be most clearly seen as a way of substantiating the way we conduct ourselves. Thus, for example, if I wish to examine the reasons for and against a married couple being divorced, I need to know what the best empirical research says about the effects on children of divorce, or of an unresolved conflictive relationship, and I need to have a well-grounded view of marriage and the family. I may look at alternative beliefs to the traditional ones about male-female bonding. I may assess how much changing cultural styles affect decision-making. But in the long run the important issue is: what should be done?

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[55] Discussion of a number of crucial issues in philosophical thought about language will be dealt with in chapter 6, 'The Turn to Language'.

[56] See, Zygmunt Bauman, *Postmodernity and its Discontents* (Cambridge, 1997), pp. 46–52.

[57] See, West, *An Introduction to Continental Philosophy*, p. 163.

[58] *Is God a Virus? Genes, Culture and Religion* (London, 1995), pp. 110–113.

[59] See, *The Idea of Rationality*, pp. 224–229.

[60] *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge*, (Cambridge, 1996), p. 336.

[61] Cf., 'Moral Relativism, Truth and Justification', and 'Politics, Philosophy and the Common Good', in Kelvin Knight (ed.), *The MacIntyre Reader* (Cambridge, 1998), pp. 202ff., 235ff.

Philosophical systems, religious beliefs and ethical stances are of no ultimate value unless they can be lived consistently. Living consistently raises then the question of what is right and what is true, and these questions in turn raise the ultimate issues of primary assumptions. It is through daily ethical dilemmas, I believe, that we come to realise that neither modernity nor post-modernity has the resources to provide satisfying answers. They are both ship-wrecked on the rocks of the 'deontological fallacy' – namely, that one can know what ought to be the case from knowing what is the case – for neither reason, empirical research, social consensus nor personal judgement by themselves can ground moral judgements. They may help in deciding what means should be used to achieve certain ends, but the choice of moral ends depends on what moral values or virtues one believes in and these depend in turn on having reliable access to the answers to fundamental questions about the purpose, meaning and worth of life.[62]

Given the fact that we all live a moral life and all make moral judgements, another way of getting a handle on the epistemological question is by analysing the cogency of different ethical theories in establishing ethical decision-making. The main alternatives in contention within the modern period have been *ethical intuitionism, (Kantian) rationalism, utilitarian empiricism* and *non-cognitivism (expressivism).*[63] Each of these attempt to give both an account of moral notions and reasons for acting in particular ways. However, given an explicit rejection of the idea that goodness and truth are given realities within the human horizon, each of these positions builds its theory from an assumption of human autonomy and from within human experience rationally or empirically mediated. Methodologically they succeed in giving reasons why it might be right or wrong to engage in some actions but they still beg the question about the content of the good or the virtuous.

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[62] These are controversial statements, set out here by way of a preview. They will be argued for in Part IV of this study.

[63] See, Robert Audi, *Epistemology,* pp. 264–267; Robert Audi, 'Moral Knowledge and Ethical Pluralism', in Greco and Sosa, *The Blackwell Guide,* pp. 271–278.

Thus, we have, in the need to find an adequate epistemological rationale for ethical decision-making, a (the?) major intellectual and practical challenge for Western society in general and the Christian community in particular. Although the latter should be conscious in theory and practice of its minority position within a belligerent but brittle culture in the West, it has a responsibility to propose (but not impose) an epistemology in which truth claims are substantiated by their ability to ground a coherent ethics. One of the tasks of such an epistemology would be to evaluate the traditions of modernity and post-modernity in order to incorporate into contemporary ethical discourse that which is of proven value whilst rejecting the unfounded claims. In this sense, the Christian community has, as one of its undertakings, a continuing dialogical and prophetic assignment with respect to the formative theories that drive current perceptions of the good in the West.[64] Christians cannot afford to be plausibly accused of trying to revert to a pre-modern world, by ignoring or undervaluing the massive changes of thought, belief and lifestyle of the last 300 years.

If the main reflective enterprise for the Church in the West is to retake the promise of the fruitful alliance of word and world, it has to be done within the changed circumstances that acknowledge that we live (chronologically at least) *after* modernity and post-modernity. Thus, for example, if the 'reading' of the word implies a coherent theory of revelation,[65] this will be re-examined in the light of the hypothesis that it is not a concept unique to monotheistic faiths, but is present, in different forms, in both modernity (nature 'speaks') and post-modernity (art and language 'give meaning'). In other words, 'revelation' is an indispensable necessity for the avoidance of ontological and ethical nihilism, it is a foundationalist assumption that permits the construction of a coherent life, not least by substantiating arguments in favour of freedom and tolerance.[66] Its inescapability is demonstrated in practice by the observation that, even when classical forms of revelation are abandoned as unsustainable, new varieties have to be invented.

It is crucial for the Christian community to realise that it lives *after* modernity and post-modernity in another sense, namely that its 'cultural dialogue and evangelism' are undertaken in a world in which it no longer can expect privileges. The alliance of throne and altar is irrevocably (and rightly) broken in the Western world, even though there are attempts by some people in all religions to sustain it, or even revive it. The Christian community finds itself in a world much closer to that of the first century, with one imperium (global capitalism)[67] and a plethora of beliefs. Like the early

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[64] A recent historical analysis and current discussion of these from a 'classical' humanist perspective is contained in A.C. Grayling, *What is Good? The Search for the Best Way to Live* (London, 2003). The author lays down a considerable challenge to what he calls transcendental (religious) views. It is precisely this challenge that has to be taken up and answered, if the thesis of this study is to be vindicated.

[65] As, for example, Nicholas Wolterstorff's comprehensive advocacy of the God who speaks, cf., *Divine Discourse: Philosophical Reflections on the Claim that God Speaks* (Cambridge, 1995); also Roger Trigg, *Rationality and Religion* (Oxford, 1998), 209–214.

[66] See, Andrew Kirk, *The Meaning of Freedom*, pp. 190–221.

[67] Chapter 18 of the *The Book of Revelation* gives an account of the trading arrangements going on between the 'centre' (Rome) and the 'periphery' (its conquered colonies), which

Christian community in the Mediterranean basin, in political and cultural terms, it is inconsequential.

Nevertheless, also like the first generation, Christians today are called to surpass their generation in intellectual endeavour and integrity. They are to emulate the practice of their forebears, described by one historian in the following terms:

> The Christian read the best books, assimilated them, and lived the freest intellectual life the world had. Jesus had set them to be true to fact…Who did the thinking in that ancient world? Again and again it was the Christian. He out-thought the world.[68]

However, the task is not for self-aggrandisement, but for the sake of helping to repair the damage being done to human life by the tacit acceptance of cultural assumptions which have torn apart the unity and wholeness of knowledge. This study is offered as a way of showing *why*, culturally and ethically, the task is so vital, and *how*, epistemologically, it might be accomplished.

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echo global economic relations in the twenty-first century. It is not surprising that the writer intones a lament over the city-state, because it is under judgement and will collapse.

[68] T.R. Glover, *The Jesus of History* (Montana, 2005 (first published in 1914)) p. 217; also, *The Conflict of Religions in the Early Roman Empire* (London, 1910), chapter V.

PART II

The Arrival of the Modern World

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Chapter Two

An Enquiry into the Origins of Modern Science

Introduction

It is central to the thesis of this study to be able to show that the ways in which the worlds of modernity and post-modernity became concrete within recent historical development represent an intellectually unnecessary and fateful split between the ‘word’ and ‘world’ of God. These latter represent what Francis Bacon, at the beginning of the seventeenth century, retaking a more ancient tradition, called the ‘two books’ – the books in which are recorded God’s special and ordinary disclosure of knowledge about human and natural existence. As I will continue to argue, this split is the paramount reason for the contemporary problems of Western thought, first in being able to understand whether human existence has any intrinsic meaning and purpose and, second, in being able to discover a unified theory of knowledge, which could reintegrate the unrelated fragments of information and perception that mark so much of contemporary life.

The outcome of the split seems to be that Western culture moves uncertainly between adherence to a reductionist rationality that refuses to acknowledge the existence of assured knowledge outside of empirically-testable, and intrinsically falsifiable (by experimental means), evidence and a relativism that gives the impression of allowing an equality of status to any belief system. The result is a deep confusion about the direction in which society is, or ought to be, heading that produces a profound pessimism and anxiety. The preferred antidote to this state of affairs seems to be a trivial hedonism, which can easily lead to the commodification not only of material goods but also of other people, by using the latter to further personal choices.

The first stage in testing the thesis that this rupture between two distinct, but congruent, modes of knowing was a historical accident is to show that, at the beginning of modern science, the pioneers had no difficulty in maintaining the unity. At the least, the negative proposition needs to be demonstrated historically, namely that the early scientists did not assume that knowledge gained through an inductive, empirical method contradicted or lessened the truth-claims coming through revelation, understood as God’s personal self-communication.[1] At the most, it is sufficient to show that the accord between science and faith was taken as 'read', seeing that there were no good reasons to challenge it. At a second stage of historical investigation, it will be important to indicate that reasons for the split arose only after the first flourish of scientific enquiry and were not directly related to scientific methodology, but to extra-scientific contentions, sometimes evinced by understandable, but historically fortuitous, considerations of anti-religious polemic.

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[1] As modern science began in Europe, revelation from God would have been understood in terms of the Scriptures of the Old and New Testaments and the tradition of their interpretation within the Western Church.

This part of the main thesis will be substantiated, if the evidence points strongly in the direction that belief in a God of revelation was a necessary motivation and justification for the scientific task. It is more than possible that, in the new dialogue between science and theology of the last few years, tools are being forged which will show the epistemological convergence between reason and revelation, knowledge and faith, and the empirical and non-empirical sources of understanding reality in its completeness. The task of this book is to argue the case, from the perspective of a number of different fields of enquiry, for such a convergence. As the methods of the scientific enterprise encapsulate (with good justification) the modern confidence in the ability of reason to discover truly the mechanisms of life and the principles of mathematics, we need to start with the origins of the modern scientific venture and enquire into its relation to knowledge based on revelation.

The Coming of a Revolution

There is a massive consensus that 'modern' science was born towards the end of the sixteenth century and, within one hundred years, its practical and theoretical procedures had become irreversibly established – roughly the period between Tycho Brahe[2] (and Johannes Kepler[3]) and Isaac Newton:[4]

> Although science has a long history with roots in ancient Egypt and Mesopotamia, it is indisputable that modern science emerged in the seventeenth century in Western Europe and nowhere else.[5]

It is right to call the extraordinary unfolding of the new methods of observation and testing, based on the development of new instruments, a revolution, because ancient, traditional, deeply-embedded and highly venerated beliefs had first to be overturned. There was no automatic, smooth, uncontroversial progression from, say, the work of Copernicus to the founding of the Royal Society in 1660. It is at least linguistically appropriate that Copernicus's major work was called, *De Revolutionibus orbium coelestium* (1543). Not for nothing, Martin Luther is said to have asserted of him, 'the fool will turn astronomy upside down'.[6]

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[2] *Mechanics of the New Astronomy* (1588).

[3] *The Mystery of the Universe* (1597).

[4] *Principia Mathematica* (1687).

[5] Edward Grant, *The Foundations of Modern Science in the Middle Ages: their Religious, Institutional and Intellectual Contexts* (Cambridge, 1996), p. 168.

[6] Quoted in Colin Ronan, *The Cambridge Illustrated History of the World's Science* (Cambridge, 1983), p. 330. Even though the remark may be apocryphal, the content reflects the massive implications of the theory.

Resistance to the changes persisted well into the seventeenth century. Medieval science was carried out within an Aristotelian framework with goals very different from those of Galileo and his successors. From 1250 to 1650, the philosophy of Aristotle formed the core of the universities' curriculum throughout Western Europe. Science was but a branch of philosophy.[7] The authority of Aristotle was massive and the struggle to dethrone his system lengthy and costly:

> There is little doubt that from the end of the sixteenth century onwards Aristotle was adhered to more frequently than during the thirteenth, fourteenth and fifteenth centuries. In 1624…the Parliament of Paris threatened with the death penalty anyone who maintained a doctrine contrary to Aristotle.[8]

Invalidating Aristotle

Although there were some surprisingly early attempts to break free from the domination of Greek categories in conceiving the nature of the universe,[9] the most significant first step was taken probably by Etienne Tempier, bishop of Paris, when he publicly condemned a number of propositions held by the Christian followers of the Islamic scholar, Averroes (1126-1198), the great Arabic commentator on Aristotle. The most significant theses, derived from Aristotle's cosmology, which offended against orthodox belief included the affirmations that God could not move the heavenly bodies with rectilinear motion because a vacuum would result, that he was bound by the laws of logical necessity, that nothing can be made out of nothing, that the human will is subject to the power of the celestial bodies and that God cannot make several worlds.[10]

The main offence was the denial of God's complete sovereignty and freedom in creating and ordering the universe and the consequent belief that God was subject to forces greater than himself. One of the results of the bishop's pronouncements, if unintentional, was to remove limitations to scientific theorising.[11] The French historian and philosopher of science, Pierre Duhem (1861-1916), identified the action of Etienne Tempier as the most important initial contribution to weakening the Aristotelian hold on natural philosophy. He even suggested that modern science was born on 7 March, 1277![12]

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[7] Ian Barbour, *Religion and Science: Historical and Contemporary Issues* (London, 1998), p. 4.

[8] Harold Nebelsick, *Renaissance and Reformation and the Rise of Science* (Edinburgh, 1992), p. 160.

[9] For example, Philoponus (c.490–c.566); see, Harold Turner, *The Roots of Science: An Investigative Journey through the World's Religions* (Auckland, 1998), p. 101.

[10] David Goodman and Colin Russell, *The Rise of Scientific Europe 1500–1800* (London, 1991), p. 27.

[11] R Hooykaas, *Religion and the Rise of Modern Science* (Edinburgh, 1972), p. 32.

[12] Stanley Jaki, *The Origin of Science and the Science of Origin* (Edinburgh, 1978), p. 70. This is the date of Tempier's judgement.

Greek thought (if one may generalise) presents an ambiguous contribution to scientific progress. On the one hand, it created a general attitude 'of rational investigation of nature by means of logic, mathematics and observation,'[13] which laid the foundation for some scientific advances, mainly in the fields of astronomy and optics. Greek learning provided a certain systematisation in 'the observation of nature, the application of mathematical measurements to these observations and the development of a largely coherent and ordered system of knowledge'.[14]

On the other hand, it represented a number of factors which hindered the furtherance of a truly scientific method. The following have been identified as critical: the deification of nature, the underestimation of art and disregard for manual work which militated against experimentation;[15] the subordination of natural realities to divine essences – phenomenal objects deemed to be less real, basic and reliable than the unchanging, 'divine' and 'necessary causes' that order reality;[16] all reality being subject to time and, therefore, in a state of continual decay, a 'devolutionary process characterised by suffering, misery, deterioration and chaos…antithetic both to the harmonious, complete and restful image of eternity and to the golden age of the past'.[17]

The main obstacle that had to be overcome, however, was the tenacious adherence to the deductive method of acquiring knowledge. Observation remained theory-dependent. All data was interpreted within a given rational framework, in which all phenomena were understood to be manifestations of first and final causes. As long as the Aristotelian axioms dominated the intellectual life of the centres of learning, properly empirical methods, through which causes were discovered inductively from observation, were considered either illegitimate or futile.[18]

Aristotelianism was also, to a certain extent, compatible with the promotion of a magical worldview, such as was associated with Hermeticism. The quasi-mystical views associated with Hermes Trimegistus, thought to have originated in Egypt at the time of Moses, were revived in the court of Cosimo de Medici (1460) by Marsilio Ficino, the Plato scholar:

> It was a corpus of teaching that mixed magic and metaphor, that mingled Neoplatonism with mysticism; it contained mysteries which only the initiate, the Magus, could understand…Its universe was the Aristotelian-Ptolemic universe of spheres, but guided by divine beings and operated upon by magic, astrology, alchemy and the other occult 'sciences.'[19]

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[13] Hooykaas, *Religion and the Rise*, p. xii.

[14] Nebelsick, *Renaissance and Reformation*, p. 184.

[15] Hooykaas, *Religion and the Rise*, p. 82.

[16] Nebelsick, *Renaissance and Reformation*, pp. 92, 97.

[17] Ibid., p. 174.

[18] Ibid., pp. 82–84. The use of inductive and deductive methods in scientific discovery is a matter of degree. The early scientists never abandoned prior hypotheses as an aid to experimental work. They were, however, understandably suspicious of any attempt to short-cut rigorous experimental research.

[19] Ronan, *The Cambridge Illustrated*, op. cit., p.275.

Although in its application in magic practices (particularly those of alchemy) it encouraged a certain interest in experimentation,[20]compatible with the scientific revolution still to come, its overall effect was to encourage a renewal of the mythicalisation of nature through collapsing together the divine and natural spheres. This particular interest in discovering how natural objects function had some impact on the adoption of inductive logic and thus contributed to the overthrow of Aristotelianism.[21] At the same time, its inclination to ascribe causes to occult operations ultimately militated against a systematic and open investigation of the workings of natural objects. Sooner or later, the new natural philosophy had to be dissatisfied with non-empirical, mystical explanations.[22]

The Advance of the Empirical Method

It would be a grave mistake in the art of historical reconstruction to overemphasise any one, or even a few, major factors which brought about a transference from a general confidence in deductive reasoning to explain the world to that of the inductive processes of observation and testing. The rise of modern science was dependent upon a number of conditions being in place. Harold Turner suggests that there are at least four major circumstances needed for modern science to be established: an adequate technology (such as the creation of more sophisticated telescopes); a certain level of development in mathematics; the material resources of society through wealth-creation and the right kind of cosmology.[23] This is correct and refutes any simplistic account which suggests that major changes were due almost wholly either to a noetic paradigm shift, to gradually accumulated experimental evidence or to a favourable conjunction of material forces.[24] Nevertheless, for the purposes of this discussion, interest lies more in the presuppositional beliefs of the early scientific pioneers than in other historical ingredients. Whereas the latter offered indispensable historical conditions for the new surge in experimentation, the former alone produced the vitally necessary, theoretical preconditions without which a massive shift in the intellectual climate would not have been possible.

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[20] ‘The new philosophers…believed that the study of nature could benefit from the study of artificial devices, since, ultimately, their operation depended on natural laws’, John Henry, ‘Magic and Science in the Sixteenth and Seventeenth Centuries’, in R.C. Olby, G.N. Cantor, J.R.R. Christie and M.J.S. Hodge, *Companion to the History of Modern Science* (London, 1990), p. 588.

[21] See, John Schuster, ‘The Scientific Revolution’, in ibid., pp. 224, 235–236.

[22] ‘Casaubon’s demolition of the accepted date of Hermeticism…played a part, helping to complete the process of weaning Renaissance scholars from magic, so that those in the seventeenth century were able to examine the natural world without recourse to magical ideas or the Cabala’, Ronan, *The Cambridge Illustrated*, pp. 276–277.

[23] Turner, *The Roots of Science*, p. 56. ‘*The rise of modern science* was, of course, a complex social phenomenon, covering several centuries and influenced by numerous factors, such as the growth of trade and commerce and the availability of wealth and leisure. Technological interest was encouraged by practical problems in metallurgy, navigation, the trades and military weaponry. Skilled craftsmen and artisans were learning to make tools and scientific instruments’, Barbour, *Religion and Science*, op. cit., p. 27.

[24] See, Roy Porter, ‘The History of Science and the History of Society’, in Olby et al., *Companion to the History*, pp. 39–41.

Interestingly, in this context, Harold Nebelsick divides the intellectual convictions into two major strands:

> It is legitimate to argue that science and western civilisation have been expedited both by the divorce between the sacred and the secular, and the marriage between mental and manual labour.[25]

Disenchantment

For a free, experimental methodology to take hold, human beings had to be assured that they were not tampering with holy objects, for fear that these might somehow wreak vengeance and cause all kinds of calamities. Further, they had to be convinced that the creative investigation of the world, particularly the human world, was not only legitimate, but a noble art, a worthy and beneficial pursuit, sanctioned by the world's Creator and by the positive benefits it could bring in improving human life.

Both time and space had to be desacralised; that is, all imminent 'spirits' had to be ejected, in order that human beings might have space to experiment, to attempt new avenues of knowledge through trial and error. Modern science needed a world in which risks could be taken, mistakes be made and discoveries happen as the result of *a posteriori* reasoning. The theoretical portrayal of such a world was given in the Judeo-Christian doctrine of Creation.[26]

The doctrine of Creation put in place a number of essential elements. In the first place, the natural environment, both animal and human worlds, was separated in its modes of being from the divine. God, the originator of all things, was infinite; everything else was finite. Finitude conveyed contingency and subordination; infinitude carried with it implicitly both sovereignty and freedom. Creation itself was (and is) a series of acts of unrestrained and unforced choice by a self-subsisting and self-sufficient Being. This means that it could be understood as an act of pure predilection and grace. Nothing has to be the way it is.[27] Clearly, then, in order to know *how* it is, human beings have to investigate the way it functions. The mechanisms of the world can only be discovered through experimentation; they are not known a priori purely as the result of thought-processes.

And yet, second, at the same time, it does have to conform to the nature of the One who brought it into being: rational, non-arbitrary, consistent, intelligible, perspicuous. A God who sought to confuse his creatures by creating a world whose mechanisms were random, erratic and unpredictable would be a contradiction in terms: a deceiver and, therefore, an evil spirit. The God of the Christian tradition is in his nature the definition and upholder of absolute goodness. It would be impossible to deny himself by acts of capricious power. Therefore the way the world functions is utterly dependable:

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[25] Nebelsick, *Renaissance and Reformation*, p. 184.

[26] It would have been theoretically possible for disenchantment to have happened on the basis of a secular, naturalist world-view. However, to postulate such a possibility is historically anachronistic and speculative. It could be argued that the Judeo-Christian doctrine of creation already carried the seeds of the secular, but not naturalist, stance which came to full flowering in the mid- to late eighteenth century.

[27] See, Roger Trigg, *Rationality and Science: Can Science Explain Everything?* (Oxford, 1993), pp. 231–236.

> God is a very elegant, economical and fruitful explanation for the existence of the universe. It is economical because it attributes the existence and nature of absolutely everything in the universe to just one being, an ultimate cause which assigns a reason for the existence of everything, including itself. It is elegant because from one key idea – the idea of the most perfect possible being – the whole nature of God and the existence of the universe can be intelligibly explicated. It is fruitful because it is the basis of human confidence in the basic intelligibility of nature (so it is the basis of science)…[28]

Moreover, thirdly, the doctrine of *imago Dei* established that humankind shared the same form of rationality as the Creator. It was possible for human beings to 'think God's thoughts after him', to use their rational faculties to discover the ordering of nature, as the solver of a crossword puzzle seeks to penetrate the mind of its author. Not only this, but human beings enhance their dignity and fulfil an essential function in satisfying an intrinsic and insatiable curiosity. As the Swedish taxonomist, Carl Linnaeus (1707-1778), said in his book, *Reflections on the Study of Nature* (1754), 'man is made for the purpose of studying the Creator's works that he may observe in them the evident marks of divine wisdom'.[29] It was said in his own day, 'God created, Linne organised',[30] thus following in the footsteps of Adam who 'gave names to all the livestock, the birds of the air and all the beasts of the field', 'whatever the man called each living creature, that was its name' (Gen. 2:20, 19).

From the premise that, because God creates freely, the world need not *be* at all (nor be the way it is), it follows logically that for human beings to know the world they must experiment; they cannot discover the way the world is by abstract reason alone. Also, tampering with the workings of nature is not profane, since nature is not sacred:

> Thus we both (morally) can and (epistemologically) must experiment with nature to gain knowledge.[31]
>
> Faith in the reliability and harmony of creation, unique to the thought of Europe, is a direct result of theological thought…For science to begin, nature had to be seen as dependable, intrinsically worthwhile and knowable. It had to be understood in terms of a contingent rationality appropriate to it rather than in terms of a divine rationality that penetrated it.[32]

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[28] Keith Ward, *God, Chance and Necessity* (Oxford, 1996), pp. 98–99.

[29] Quoted by John Hedley Brooke, 'Science and Theology in the Enlightenment', in W. Mark Richardson and Wesley J. Wildman (eds), *Religion and Science: History, Method, Dialogue* (London, 1996), p. 12.

[30] Goodman and Russell, *The Rise of Scientific Europe*, p. 322.

[31] Robert J. Russell, 'T=O: Is it Theologically Significant?,' in Richardson and Wildman, *Religion and Science*, p.203.

[32] Nebelsick, *Renaissance and Reformation*, pp. 155, 156.

One of the marvels revealed by the whole scientific enterprise is the complete fit between the rational processes of the human mind and the processes of the natural world. That human beings have an intellectual capacity to uncover, represent to themselves and harness for their use material reality cannot be taken for granted or just accepted as a quirk of existence, it demands a satisfying rational explanation. A theistic world-view offers a credible theory which accounts for the perfect match between the two. As we shall see later (in Part IV), alternative theories do not do equivalent justice to the evidence.

Differentiation

For the new scientific method to succeed two further preconditions were necessary: the study of the secular world had to be separated from the exercise of sacred authority, and the dignity of the hand had to be made equal to that of the brain.[33]

A misuse of the Bible, still in some quarters a mere handmaid of Aristotelian philosophy, had led ecclesiastical authorities to condemn Galileo. But the fiasco of forcing him to recant the results of experimental investigation meant, in the long term, that the spheres of science and faith became more clearly demarcated. In Galileo's own immortal words, 'the Bible teaches how to go to heaven, not how the heavens go'.[34] Pascal, later in the seventeenth century, denied the competence of Church authorities to decide matters of a scientific nature.[35]

Francis Bacon assigned a central role, in his efforts to found a convincing method of reasoning about natural phenomena, to practical experimental investigations which would yield secure conclusions.[36] In this he laid a substantial foundation for the new disciplines to be uncoupled from unproven speculation. He distinguished between physical and metaphysical studies by appealing to Aristotle's four causes: physics studies the *efficient* and *material* causes of the 'common and ordinary course of nature', whilst metaphysics focuses on the *final* and *formal* causes, engaging with the 'eternal and fundamental laws' of nature.[37] By the time of John Locke, philosophy was beginning to become detached from the sciences. He pushed forward the belief that real knowledge, in contrast to the opinions discussed by philosophy, was based on the empirical method of discovering the behaviour of objects.[38]

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[33] An equalisation of the status of different human tasks took a great stride forward in the Reformation insistence on the nature of God's calling to specific vocations. Equality is assured once one assumes that each person has a specific calling from God, different from *but* of equivalent worth to all others.

[34] Quoted in Cooper, *World Philosophies: An Historical Introduction* , p. 236.

[35] Hooykaas, *Religion and the Rise*, op. cit., p. 134.

[36] Barry Gower, *Scientific Method: A Historical and Philosophical Introduction* (London, 1997), pp. 41–57.

[37] Dion Scott-Kakures et al. (eds), *History of Philosophy* (New York, 1993), p. 100.

[38] Ibid., pp. 165–166.

The Study of Two Books

In spite of what might appear, to later generations, the beginning of a logical rift between theology and science (metaphysics and physics), there is little to suggest that the pioneers of the experimental procedures in the natural sciences would have considered such a rupture either necessary or agreeable. They managed to maintain a methodological separation but an epistemological unity.

There are two main possible interpretations of the much-commented fact that the early scientists found no contradiction between their adherence to Christian faith and their development of empirical methods of investigating the material world. The first view that they were mistaken to maintain the link and that, sooner rather than later, such a synthesis would become intellectually untenable has won the greatest acceptance in the Western world.

By the time of Jean d'Alembert's *Preliminary Discourse to the Encyclopedia of Diderot* (1751), the history of the scientific revolution was being rewritten as a period of emancipation of the human mind from 'the shackles of superstitious religion and outmoded metaphysics' and the guarantor of 'political and social progress'.[39] This interpretation has dominated Western intellectual discourse. It has become almost self-evident that the Christian faith of the seventeenth century innovators in science was part of an archaic worldview (along with Aristotelianism), inherited from an unreconstructed super-naturalist past, which these people did not yet quite have the insight or courage to jettison.[40]

The alternative view that, contrary to such a long and well-established prejudice, the complete coherence between faith and science was, and is, the necessary foundation for the systematic study of nature has not been given the attention it deserves. The assumptions, about which John Christie writes, have effectively caused such a possibility to be dismissed as unworthy of serious consideration. It is the contention of this study that a serious examination of this second view and its favourable and productive consequences for understanding the whole of life is long overdue. I hope to demonstrate that it is the right view to hold and, as a consequence, is of immense value not only to the future of human social well-being but to the scientific enterprise itself. Conversely, I wish to establish the thesis that the first view has outrun its claim to be an emancipatory force and actually has a regressive and damaging impact on human affairs. This is the hub around which the treatment of the question of overcoming the dichotomies will revolve:

> During the seventeenth century the provinces of 'science' and 'religion' had been *differentiated* in many ways that facilitated innovative inquiry; but the study of nature

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[39] John R.R. Christie, 'The Development of the Historiography of Science', in Olby et al., *Companion to the History*, pp. 7–8.

[40] 'It was the Enlightenment, therefore, which first constructed and launched upon the world a historically-based view of science's intellectual, political and social significance for humanity. In the course of so doing, it laid down a series of assumptions concerning science and its historical existence which have been so influential that *all* Western historians of science have been formed within them.' Ibid., p. 7.

> largely remained a study of the book of God's works, complementing that of His words.[41]

The notion of two complementary sources of knowledge about God and his world came to prominence in the thinking of Francis Bacon.[42] Galileo also emphasised the image of nature as a book that we learn how to read; in order to make sense of its content, he argued, we need a dictionary and an index to interpret the particular language in which it is written.[43] Just as a study of God's word would deliver humanity from the arid speculation of scholasticism, so the study of God's works would release it from the apparently self-evident rationalist axioms of the philosophers and demonstrate, or refute, what were held to be common-sense ideas about the world.

In the Third Book of *De Augmentis Scientarum* (1623), Bacon draws a distinction between the revealed knowledge of the divine and sensory or natural knowledge.[44] He makes the distinction, not to suggest a radical divergence between them, but to point to the distinct methods by which knowledge in each case is to be appropriated.[45] For Bacon, 'Christian faith encourages the increase of natural knowledge both because it "leadeth to greater exaltation of the glory of God", and because it preserves "against unbelief and error." Man is created to understand nature: "God hath framed the mind of man as a glass capable of the image of the universal world"…(and also) "to discern those ordinances and decrees which throughout all these changes are infallibly observed."'[46] Finally, 'Bacon warns that, as in "the inquiry of divine truth", men have "ever inclined to leave the oracles of God's word", so in the "inquisition of nature they have ever left the oracles of God's works."'[47]

Isaac Newton held similar views. Through the study of nature it is possible (and desirable) to come to a greater understanding and appreciation of God's power and wisdom, for the Divine intelligence is revealed in the workings of the natural world and human intelligence has been created to be attuned to its presence there. In this sense, Newton would have agreed completely with the Apostle Paul's proposition that 'since the creation of the world, God's invisible qualities – his eternal power and divine nature – have been clearly seen, being understood from what has been made' (Rom. 1:20):

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[41] Richardson and Wildman, *Religion and* Science, p. 10 and John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (New York, 1991), chapter 2.

[42] Hooykaas, *Religion and the* Rise, p.40, citing Francis Bacon, *Advancement of Learning* (1605), Book I.

[43] Gower, *Scientific Method*, p. 49.

[44] Scott-Kakures et al. (eds) *History of Philosophy*, p. 99.

[45] 'Bacon praised the Puritans for their biblical preaching…He regrets that England's universities did not train ministers "to preach and handle the Scriptures with wisdom and judgement"', Nebelsick, *Renaissance and Reformation*, op. cit., p. 193, quoting from John Spedding (ed.), *Letters and Life of Francis Bacon* (London, 1861), Vol. I, p. 88.

[46] Ibid., p. 205, quoting from Francis Bacon, *Interpretation of Nature* in *Works*, Vol. III, chapter 1.

[47] Ibid., p. 205, quoting from Bacon, ibid., 'With Bacon, science took on a new role – utilitarian, utopian, the material and human counterpart to God's plan of spiritual salvation', Richard Tarnas, *The Passion of the Western Mind: Understanding the Ideas that have Shaped our Worldview* (London, 1991), p. 273.

> Recent scholarship has suggested that Newton's scientific insights were based on his religious beliefs and world-view. Seen in this way the *Principia* is not just the product of mathematical and astronomical research, but is part of a larger intellectual and religious synthesis. Newton insisted that God was involved *continuously* in preserving his creation; space, the sensorium of God, and time were part of the Divine presence.[48]

Space is not sufficient to elaborate on this theme in the writings of such people as Robert Boyle, John Wilkins, John Wallis and William Petty.[49] The final witness, perhaps, for the natural conjunction of faith and science is given by the Royal Society (founded in 1660), whose charter instructed its members to direct their studies 'to the glory of God and the benefit of the human race'.[50] A large percentage of the fellows 'were men to whom the traditional Puritan values meant a great deal…Underlying the bewildering variety of parties associated with science was a common core of biblical common allegiance to Puritanism, to the wider Calvinism and indeed to Protestantism as a whole. Of the resonance between that allegiance and the growth of science there can be no possible doubt.'[51] It is evident that their particular interpretation of the Christian faith gave strong support to scientific work, because 'the study of nature was held to be at once intrinsically fascinating, beneficial to humankind, and religiously acceptable, for it would reveal God's handiwork and exemplify rational and orderly activity'.[52] They certainly believed that faith and science were mutually supportive. For example, their doctrine of good works as evidence of salvation led them to value science as an efficient instrument of good works and social improvement. The Puritan doctrine of 'calling' implicitly gave to manual labour a dignity denied to it in a more hierarchically-ordered view of society. To make instruments for measuring the reality of creation and to use one's hands in conducting experiments, like the dissection of the human body, was to work out the purpose that God had foreordained for each one.

Support for the importance of belief in stimulating and supporting the rise of early modern science, mainly from the writings of the early scientists themselves, is not intended to deny due weight to accounts of the scientific revolution that stress the contingent events of social history.[53] A proper balance between both seems to be a necessary corollary of a wide view of historical processes. What is being argued here is that, during the seventeenth century, a creatively promising conjunction of two independent but complementary sources of knowledge available to humanity came together for a short time in the thinking of men who were both eminent scientists and theologians.

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[48] Goodman and Russell, *The Rise of Scientific Europe* op. cit., p.223; 'he hoped that "considering men" might find in his *Principia* grounds "for belief of a Deity"…in perceiving a pathway "from nature up to nature's God"', p. 257.

[49] 'Their scientific ideas were coloured by natural theology; the wish to demonstrate by purely rational arguments the existence and attributes of God and the main tenets of Christian belief', ibid., p. 209.

[50] See, Barbour, *Religion and Science*, p. 19.

[51] Colin Russell, *Cross-currents: Interactions between Science and Faith* (Leicester, 1985), pp. 83–84.

[52] Ibid., p. 25; see, Robert Merton, *Science and Technology in Seventeenth Century England* (New York, 1970) and, for a critical assessment of Merton's theory, I. Bernard Cohen, *Puritanism and the Rise of Modern Science: The Merton Thesis* (New Brunswick, 1990).

It is now history that the concurrence became contention. The probable reasons for this will be explored in the next chapters. It is not self-evident, however, that the way in which the relationship between faith and science did in fact develop was historically inevitable. My thesis, in the light of this survey, is that it was not only unnecessary but in the long run has become profoundly detrimental to subsequent human history. The case for this proposition will be laid out by surveying the (mainly) intellectual consequences for a culture of attempting to dispense with a source of knowledge coming from outside the mundane world of sense experience. This rejection of the short-lived attempt to link the sacred and secular worlds in an indissoluble unity, in which each nevertheless had its own proper space and freedom, has left a legacy of intellectual confusion, cultural vacillation and moral irresolution which threatens to undermine the very foundations on which some progress in human well-being has been made.

The Christian community, which is the inheritor and guardian of the tradition of integration, is a debtor to the world to demonstrate, by argument and life, the pressing need to find a convincing way of reuniting two spheres of reality that should never have been separated, and to persuade a doubting and hesitant culture to discover the immense potential of what has been lost. This present study is one attempt to realise this goal.

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[53] However the propositions of the ‘Strong Sociology’ School of historical reconstruction, namely that scientific discoveries and advances are to be explained almost exclusively in terms of social (ideological) circumstances, seem far too unilateral and constructed for polemical ends. By its own light, it too suffers the same fate. Cf., Mary Hesse, *Revolutions and Reconstructions in the Philosophy of Science* (Brighton, 1980), pp. 29–60; Norris, *Against Relativism*, pp. 265–294.

Chapter Three

The Turn to Rationalism: Justification by Reason Alone?

The previous chapter has set out to demonstrate the congruity between belief in the God of the Christian faith and the emerging scientific enterprise in Europe. The case has been argued that not only are science and faith compatible, but the birth of a truly modern scientific programme was dependent upon the conviction that the world owed its origin, form and continuing existence to a personal divine being. With some exceptions, this was the overwhelming consensus of the early scientists in the second half of the seventeenth century.

However, by the middle of the following century, the consensus had broken down. There was an increasing tendency to break the link between faith and the pursuit of empirical knowledge. Not only were the two worlds kept strictly separate there was a growing tendency to reject faith (or revelation) as a legitimate source of knowledge at all. During this time, the cluster of ideas, generally linked together under the designation ‘modernity’, came to dominate intellectual life; the characteristics of a consistently naturalist approach to reality became ever more influential. This present chapter will try to trace this dramatic, and perhaps surprising, change of perspective and give an account of its causes.

The main evidence has to come from an investigation of those thinkers – scientists, philosophers and political analysts – who proved to be most influential in changing irrevocably the thought-patterns of the Western world. One way of proceeding is to elucidate the beliefs of those who came to champion an interpretation of the world for which the existence of a personal God became both an unnecessary hypothesis and an actual distortion of human self-consciousness and then trace backwards the process by which such beliefs came to be propagated.[1]

Arguments against the need for theistic belief

We take as our first witness the German philosopher Hegel. In his *Lectures on the History of Philosophy* he recognised that something momentous had happened by the second half of the eighteenth century. He locates its epicentre in Paris:

> We should not make the charge of atheism lightly, for it is a very common occurrence that an individual whose ideas about God differ from those of other people is charged with lack of religion, or even with atheism. But here it really is the case that this philosophy has

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[1] A useful compendium of such beliefs is contained in Isaac Kramnick (ed.), *The Portable Enlightenment Reader* (Harmondsworth, 1995).

> developed into atheism, and has defined matter, nature, etc. as that which is to be taken as the ultimate, the active and the efficient.[2]

By ‘here’ he means the salons of Paris, and by ‘philosophy’ he means the thinking that had as its most potent expositors, Diderot and d’Holbach. They and the circle of friends they drew together for debate[3] were the first to elaborate systematically a view of reality that was uncompromisingly materialist, in the sense that matter is the ultimate substance of all that is, and naturalist, in the sense that no super-sensory reality exists. In the first stage of analysis, God was eliminated as a redundant explanation for human existence; in a second stage, the notion of God was attacked as a harmful superstition.

Diderot elaborated his reasoning in the *Pensees philosophiques* (1746).[4] In examining the claims of faith, he adopts a method akin to that of the natural sciences, in particular using the criterion of simplicity to forward his case. He seeks to test the validity of the claims against the nature of the evidence that is brought forward to substantiate them, and in comparison with alternative, or counter, claims. He questions the epistemological basis for the claim that a supreme being exists in a reality different from the one inhabited by humans. What is the warrant for any statement about the existence or attributes of a divine person? What resources are brought into play for making any theistic assertion? What are the foundations for valid religious discourse?

The ambiguity of religious experience

In his argument, Diderot resorted to a species of hypothetico-deductive strategy. He looked at the theories or hypotheses and then examined the legitimacy of the reasoning used to substantiate them. He postulated that theism was based on three major premises: God’s existence could be demonstrated from religious experience, from the evidence of design in nature and from the attestation of miracles. With regard to claims for religious experience, he concludes that the evidence is overwhelmingly ambiguous, simply because such contrary claims about the divine are made by different religious enthusiasts. He judges that the differences, which eliminate any coherent picture, are due to the individual temperament or passions of the believer:

> Base your reflections upon immediate religious experience, and the norm which actually governs your judgment and constitutes the criterion for your assertion is nothing but your *temperament*. Since temperaments differ so radically, the lineaments of god change as various enthusiasts draw them. Contradicting voices come from contradicting experiences,

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[2] *Lectures on the History of Philosophy* (Atlantic Highlands, 1983), 3:387.

[3] Amongst others Helvetius, D’Alembert, Condillac, Condorcet, Hume, Gibbon, Priestly, Walpole and Franklin took part, c.f., Castell, Borchert and Zucker (eds), *An Introduction to Modern Philosophy: Examining the Human Condition* (New York, 1994/6), p. 93.

[4] See, Denis Diderot, *Oeuvres philosophiques*, (P.Venniere (ed)) (Paris, 1961). The summary of his thinking in Michael Buckley, *At the Origins of Modern Atheism* (New Haven, 1987), pp. 194–250, is helpful.

> which depend on contradicting temperaments. As these contradictions emerge, scepticism about any theological assertions rises with them.[5]

Doubts about reasoning from design

The argument from design might seem more promising. As we have already seen, it played an important part in the underlying convictions of many early scientists. Experimental physics suggests that a remarkable organic connection lies at the heart of matter and life, such that the assertion that it has occurred simply by a chance combination of a multitude of atoms over a vast expanse of time, due to innumerable throws of the dice, is highly improbable. The relationship between fully developed entities and their beginnings cannot be explained on the basis of mechanics alone; the organisation needed suggests a purposive intelligence.

However, according to Diderot, the argument from design at the most demonstrates the god of deist belief, namely a god resembling the architect of a building: one who drew up a plan, then worked with builders to construct it and, when it was completed, walked away. Such a being may be inferred from the finished product, but is not otherwise available to sensible experience. More significant are two further facts. The argument from design may be taken for granted by those with sight, but those born blind are not so easily persuaded. To engage the world, they tend to develop more abstract powers of reasoning, touch and hearing than those able to use sight as well as touch and hearing. For those who depend more consistently on their mental abilities, the introduction of a divine prime mover to account for the mechanistic ordering of nature is not so obvious. There is a perfectly explicable alternative, *la matiere se mouvoir* or *la matiere en fermentation.* The hypothesis that takes the place of god is 'matter in a state of ferment, matter to which motion is not an arbitrary addition but an intrinsic necessity'.[6] The introduction of a god hypothesis is simply an attempt to avoid admitting ignorance; a self-contained science gives a perfectly adequate explanation:

> Motion continues and will continue to combine masses of matter, until they have found some arrangement in which they may finally persevere…What is the world…but a complex, subject to cycles of change, all of which show a continual tendency to destruction: a rapid succession of beings that appear one by one, flourish and disappear; a merely transitory symmetry and a momentary appearance of order.[7]

The other consideration that makes the argument from design problematical is the abundance of evidence that the design is defective, that monstrosities exist in nature, that mechanisms do not always work with maximum efficiency, that there is untold suffering and wastage; all of which seem to point to a process of chance. And, even where design seems to be detectable, the most obvious explanation is that the defective combinations of matter have disappeared and those that we observe have survived because their mechanisms have been able to support and perpetuate themselves.[8]

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[5] Ibid., p. 199.

[6] Ibid., p. 221.

[7] Diderot, 'Letter on the Blind for the Use of Those who See', in *Diderot's Early Philosophical Works*, (Chicago, 1916) pp. 113–114.

Scepticism towards miracles

Finally, in Diderot's armoury of sceptical arguments comes the observation that the evidence for miracles as a way of testifying to the existence of an active god (the architect who periodically returns to make repairs to a defective building) is imprecise and vitiated by a prior propensity to believe. Accounts of miracles are insufficient to offer compelling demonstration of a supernatural agent. Many accounts of miracles are no more than fables designed to boost the credentials of a particular religion. History is witness to the many false claims that have been made by the credulous. They are the result of the will to believe and are often embellished by features that are designed to make them look more credible. However, they derive from superstition founded upon the existential need to believe. The calculus of probabilities weighs heavily against their reality.[9]

The enclosing of the world

D'Holbach elaborated these initial arguments for atheism, for the elimination of a faith perspective as an interpretation of life, into a comprehensive system.[10] He accepted Diderot's epoch-making hypothesis that, as movement was not an effect *on* matter but an effect *of* matter, there was no necessity to postulate the existence of god giving to nature, as inert mass, the movement it lacked. Nature is the concrete totality of all that is and knowledge can only be secured from experience of what is there in front of us:

> The axis of truth runs from sense perception, through experience and reason, to universal nature, generating a revolving but advancing solid of scientific enquiry and poised in absolute opposition to the constant sources of error: imagination, enthusiasm, habit, prejudice, and authority.[11]

It was evident to D'Holbach that if motion was inherent in matter, and if matter is the sum total of all that exists, or ever has existed, the postulating of another world somehow detectable by the eyes of faith is a vain enterprise. The world is enclosed, with matter becoming the self-causing and self-sustaining principle of itself:

> Religion is destroyed by an alternative synthesis, made possible by the recognition and description of the invariant laws of motion. Nothing in nature justifies the hypothesis

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[8] Buckley, *At the Origins*, p. 220.

[9] We will deal later with Hume's more famous debunking of the miraculous.

[10] His most substantial and influential work was *Le Systeme de la Nature* (Hildersheim, 1966), first published in 1770 under the pseudonym of Mirabaud, a person who had died 10 years earlier.

[11] Buckley, *At the Origins*, p. 276.

> that this chain of cause and effect is broken; everything points to its regularity and determination.[12]

A naturalist explanation of religion

Now, a system that attempts to give a total alternative explanation of reality to that of religion is challenged to offer also an explanation of religion. If there is a rational solution to the question of the origin and subsequent development of life, there should be as well a rational account of the origin of the religious impulse. D'Holbach develops one of the first 'projection' theories to explain religion.[13] Human beings experience the world as both agreeable and disagreeable. They translate this into sensations of happiness and misery or pain. This is to realise in human life the general physical laws of attraction and repulsion. The experience of pain is felt as a destabilising force, threatening human well-being. Religion is the result of human beings' desire to control that which appears to menace their existence. God is projected as an all-powerful being who is able to work on behalf of people trying to cope with forces that bring harm:

> The cradle of religion is ignorance and terror, and the model on which the imagination fashions its creations is the human person writ large. Once fashioned, this chimerical agent is open to prayers and sacrifices, appeals of penitence and self-denial, which will disarm his anger and control the outrages of nature. Religion is the magical way of controlling the causes of human tragedy.[14]

Once the real nature of nature is laid bare and understood, the existence of religion can be explained as a way of dealing with ignorance. D'Holbach's explanation of both the origin of matter and the creation of a supernatural world is intended to make the existence of God and all the accoutrements of religious practice redundant. Humanity is delivered from superstition and from the power of the religious system to manipulate ungrounded fears. The beginning of Enlightenment has been achieved.

If this is the outcome of a process of reflection which took some one hundred years to germinate and come to fruition, we need to follow the processes of thought which led in this direction. Although Diderot and D'Holbach were the most powerful exponents of a purely empirical explanation of the universe, they were not the first to eliminate a personal God as a necessary hypothesis to account for existence. In Britain, Toland avows pantheism in his work *Pantheisticon* (1720) and Anthony Collins's pantheistic materialism, elaborated in *A Discourse of the Grounds and Reasons of the Christian Religion* (1724) is to all intents and purposes atheistic. In France, the *Testament* of Jean Meslier also espoused atheism, even if somewhat clandestinely.

Although it is not always possible to make a direct connection between them, atheism was a consistent progression beyond deism. D'Holbach used the same evidence and arguments as Newton and came to a radically different conclusion. It was not surprising perhaps that the two major intellectual impulses of the seventeenth century – the desire to elaborate a sound empirical method which would yield assured knowledge of the book of nature and the need to refute sceptical views about the possibility of knowing anything – should lead to a concentration on the ability of the human mind to comprehend reality by itself.[15]

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[12] Ibid., p. 289.

[13] See, 'The Atheism of D'Holbach and Naigeon', in Michael Hunter and David Wootton, *Atheism from the Reformation to the Enlightenment* (Oxford, 1992), pp. 273–300.

[14] Ibid., p. 294.

The separation of knowledge from belief

For Bacon, empirical investigation meant that one had to abandon a method which started with abstract generalisations and then argued, by way of deductive reasoning, to logical conclusions, thereby forcing phenomena, if necessary, into pre-arranged patterns. Rather, Bacon affirmed, one had to begin with a dispassionate analysis of concrete data and then reason inductively to conclusions supported by well-tested empirical evidence. Although theology was a perfectly legitimate discipline, it had its own method of study and could not justifiably intervene in any dispute regarding the discovery of the workings of nature. Its data – the book of God – was of a different order from that with which science worked. The subject matter was by its nature more conjectural and uncertain, for it could not be tested by a careful experimental method.[16]

The views of John Locke

The father of modern empiricism was John Locke who developed the theory that the only kind of reliable knowledge is derived directly from experience provided by the senses. He was an empiricist in the sense that he did not believe in the existence of innate knowledge present in our minds before contact with the external world. He was not, however, a sensationalist in collapsing the distinction between thinking and sensations.[17] For Locke the acquiring of knowledge was a two-fold process, the reception through observation of *perceptions* of the external world which are taken up by the mind and *reflected* upon. The act of reflection is an act of introspection in which the mind becomes aware of its own thoughts and organises them into meaningful patterns. Locke was convinced that we could have a justifiable certainty about what we claim to know through this double process. He took the common-sense view that our senses deliver reliable knowledge. There are facts of the matter about which we have no option but to believe them true. They have a validity which is absent from other sources of knowledge such as hearsay, visions, dreams or dogmas.[18]

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[15] Below, we will examine the impressive attempt to synthesise the two made by Kant in his *Critique of Pure Reason*.

[16] Tarnas, *The Passion*, op. cit., pp. 272–275.

[17] It was Condillac, some half century later, who, in his *Treatise on Sensations* (1754), sought to establish not only that all ideas are derived from sensation but all the activities of the mind are mere transformations of the senses.

This places understanding of God, acquired through revelation, in a different category. It cannot strictly speaking be said to be knowledge, but only belief. Moreover, this belief must be subject to the faculties of reasoning which are able to comprehend what is necessary for the moral life and for salvation.[19] Locke articulated cogently a view of knowing which effectively drove a wedge between assured knowledge of the natural world, gained through the empirical methods of observation and experiment, and belief about an invisible world derived deductively through the intermediary of an authoritative text. Nevertheless, he did not think that a proper attention to empirical methods dictated atheism, and (a significant affirmation in the light of the development of the debate between science and faith) he believed there were good probabilistic arguments in favour of the truth of the divine record:[20]

> The *Essay* (*On Human Understanding*) is chiefly concerned with issues in what would today be called epistemology (or the theory of knowledge), metaphysics, the philosophy of mind and the philosophy of language. As its title implies, its purpose is to discover, from an examination of the workings of the human mind, just what we are capable of knowing and understanding about the universe we live in. Locke's answer is that all the 'materials' of our understanding come from our 'ideas' – both of sensation and of reflection (that is, of 'outward' and 'inward' experience respectively) – which worked upon by our powers of reason to produce such 'real' knowledge as we can hope to attain. Beyond that, we have other sources of belief – for instance, in testimony and in revelation – which may afford us probability and hence warrant our assent, but do not entitle us to *certainty*…Locke held a strong personal faith in the truth of Christian religious principles, which may seem to conflict with the mildly sceptical air of his epistemological doctrines. In fact, he himself perceived no conflict here…Reason, he thought, does not conflict with faith, but in questions of faith to which reason supplies no answer it is both irrational and immoral to insist on conformity of belief.[21]

Locke may be said to be one of the first thinkers who articulated a view that matters of faith, to be warrantably believable, had to be substantiated by reason making judgements about the credibility of evidence:

> Whatever GOD hath revealed, is certainly true; no Doubt can be made of it. This is the proper Object of *Faith*: But whether it be a divine Revelation, or no, *Reason* must judge; which can never permit the Mind to reject a greater evidence to embrace what is less evident, nor allow it to entertain Probability in opposition to Knowledge and Certainty.[22]

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[18] See, A.C. Grayling, *Philosophy: A Guide Through the Subject* (Oxford, 1995), pp. 488–508.

[19] See, Dancy and Sosa, *A Companion to Epistemology*, pp. 260–261.

[20] See, 'Reasonable Faith', in Garrett Thomson, *On Locke* (Belmont, CA, 2001), pp. 62–67; Nicholas Wolterstorff, 'Theology and Science: Listening to Each Other', in Richardson and Wildman, *Religion and Science*, pp. 97–98.

[21] E.J. Lowe, *Locke on Human Understanding* (London, 1995), pp. 4–5.

[22] *On Human Understanding*, 4.18.10, quoted in ibid., p. 181.

The views of Rene Descartes

In contrast to the empirical tradition, the rationalist assumptions of Descartes were faced with a different problem. Like empiricism he was concerned to stem any conceivable sceptical regress.[23] The method used to achieve this end sought to adduce axioms that could be seen to be self-evidently true to the faculty of intellectual intuition, as long as the rational mechanism of humans remained unimpaired, because they were clear, distinct and free from internal contradiction. We could come to know unassailable truth by observing the operation of our own minds. Whereas, it is possible that most of what we conceive to be knowledge about the world could be undermined either by the unreliability of our senses (against overdue reliance on pure observation as a reliable source of knowledge), or by being unable to distinguish between the state of being awake or that of dreaming, or by a malicious demon who was able to deceive us into believing that we had direct contact with a real world or that even the cast-iron certainty of mathematical and geometrical conclusions might be false, it is quite impossible to doubt that we are thinking:

> We cannot suppose…that we, who are having such doubts, are nothing. For it is a contradiction to suppose that what thinks does not, at the very time when it is thinking exist. Accordingly, this piece of knowledge – *I am thinking, therefore I exist (cogito ergo sum)* – is the first and most certain of all to occur to anyone who philosophizes in an orderly way.[24]

The very act of doubting is itself the product of a rational, thinking process. Hence, rational beings know that their self-awareness is assured and that they exist distinctly from the external world.[25]

Descartes comes to the conclusion that there are affirmations about himself which could only be doubted if he were prepared to admit absurdity. His method is an attempt to overcome the lingering doubt that must always be present in the empirical method, namely that I am in direct contact with external objects. The only reality with which I have an immediate and irrefutable contact is my own thinking apparatus. The thinking subject's own self-consciousness is, then, the fortress from which we may sally forth to slay all the dragons of doubt and scepticism. The certainty of knowledge is ultimately self-justifying in the mechanisms of the reasoning subject. This was the answer to the problem of infinite regress in the desire to establish a method which would deliver indubitable knowledge.

Descartes method appears, at first sight, to be invincible. Doubt contains its own contradiction. To push doubt to its limits is self-defeating. To doubt is to hesitate between affirmation and denial, presupposing some understanding of both and the difference between them. The process of doubt, therefore, uncovers the unquestionable existence of a subject that is bound to think in a particular way. To deny this would be pure nonsense. The intuited and incontestable axiom of the *cogito* is a sufficient and efficient causality for other types of knowledge.[26]

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[23] See, Olby et al., *Companion to the History of Modern Science*, p. 131.

[24] *Principles of Philosophy*, in Rene Descartes, *The Philosophical Writings of Descartes* (translated by John Cottingham, Robert Stoothoff and Dugald Murdoch), 2 vols. (Cambridge, 1985), pp. 161–162.

[25] Tarnas, *The Passion*, p. 277.

Descartes takes the *cogito* argument as a demonstration of a number of truths: first, that he exists; second, that he exists as a ‘thinking being’ and, third, that he has a criterion whereby he may irrefutably recognise a true belief (the criterion of a ‘clear and distinct perception’). However, as a matter of logical reasoning, there are at least two flaws in Descartes’s method. In the first place, for the inference from the premise, ‘I think’, to the conclusion, ‘I am’, to be valid another premise is necessary, namely, ‘everything that thinks exists’. The statement that the proposition ‘I exist’ is self-verifying is a matter of faith. In the second place, the statement ‘I exist’ is not necessarily true, whenever I assert it; it is a contingent truth, for it could be false.[27] On reflection, Descartes’s attempt, through a normal inferential mechanism of arguing from the evidence of apparently certain facts of introspection to their logically-entailed conclusion, to defeat the infinite regress nature of justifiable knowledge does not seem to be conclusive.

There is another kind of problem, which in a way is more serious, because at one level the *cogito is* a sufficient argument to defeat a complete scepticism. The performance of denying the statement – namely, ‘I do not think, therefore I do not exist’ – defeats it. The attempt to think one’s own non-existence is incongruous. How does one, however, avoid a metaphysical solipsism? How does one establish the reality of an independent material world outside of the mind? An internal psychological state cannot establish the reality of an external existence. Therefore, although the *cogito* may be difficult to refute, it does not overcome doubt about the connection between the thinking subject and a world to which thought corresponds.

Descartes was forced to recognise the cogency of this demonstration. In a sense, he had completely failed to overcome the doubt about the reliability of one’s senses. His further strategy was to postulate the necessity of God as a way of escaping from this dilemma. God guarantees my claims to knowledge about the real world. God is the being who brings together rational faculties and a rationally ordered world. That this God cannot deceive me is evident from the very notion of God. God could only exist if he was a being that contained all perfections. The very fact that I can conceive of such a being is a demonstration of his necessary existence. Nevertheless, Descartes’s tactic is, unfortunately, itself self-contradictory. ‘Either clear and distinct perception is a guarantee of truth, in which case we can know what is true without invoking God; or else it is not, in which case we cannot prove God’s existence.’[28]

To be able to possess indubitable knowledge a person must be able to have direct knowledge of things as they are, not as they may seem to us. If the criterion of truth is internal to ideas, such knowledge is impossible, because we cannot get out of ourselves to establish an absolute point of view. Only God (by definition), if such a being exists, possesses this vantage point. But we cannot demonstrate the necessary existence of such a being from our point of view; at the most, we have to assume it. In order not to end up in a vicious circle, we have to start from a position of faith, not of certainty. Faith, however, cannot logically refute scepticism. It is for these reasons that most students of Descartes's believe that his project, and similar ones of those who followed him, has failed on its own terms.

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[26] ‘The cause is found within the effect. Existence is found within thinking; the ego within existence and thinking; the single ego within the plurality of its own thoughts; and the perfect within the experience of the imperfect’, Buckley, *At the Origins*, p. 88.

[27] Grayling, *Philosophy: A Guide*, p. 445.

[28] Ibid., p. 450.

Buckley argues that Descartes's 'rationalist turn' was a defining moment in Western philosophy. The reality of the sensible universe is a deduction from the truth of the absolute, and the existence of the absolute is a deduction from the rational concept of perfection. So, both the existence of the universe and of God is dependent, in the last analysis on right thinking. Descartes has landed up in an unbridgeable dualism[29] between mind and matter and in a complete idealism that treats the notion of reality as dependent on what is clear and self-evident to the mind.[30] The realm of God's existence and the world of nature are radically disconnected.[31]

From theism to deism

Although Newton wished to make room for the existence of a God without whom the observed world would not be explicable, he was not able to overcome this dualism from the empirical side. The scientific enterprise that gathered force at the end of the seventeenth century became increasingly enamoured of an entirely mechanistic explanation of material reality. According to this view, the properties of physical bodies were regarded as largely passive, as opposed to the active property of the mind. Changes were generally the product of the interactions of one body upon another in an unbreakable chain of causation. However, room was still allowed for the mind as an initiator of movement.[32]

If natural systems were understood as sets of particles moving in void space under the influence of mathematically describable forces acting between the particles' centres, according to the laws of motion that Newton laid down, the question remained about the initial causes of motion. Newton seemed to deny that forces like gravity and magnetism themselves had a material cause, since all matter gravitated and any matter in space would disturb motion. Clearly, belief in initial inertia as a predicate of matter required some force that would set it in motion. Just as the human mind by deciding on a course of action could set it going, so by analogy could the divine mind. As Richard Tarnas says,

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[29] Metaphysical dualism should not be confused with duality: a necessary epistemic distance has to exist between rational reflection and its objects for coherent thinking to take place at all. The distinction will be seen to be crucial as, at a later stage, we pick up on the contemporary propensity to merge subject and object.

[30] According to Bishop Berkeley, 'all scepticism follows from our supposing a difference between *things* and *ideas*…So long as we attribute a real existence to unthinking things, distinct from their being perceived, it is not only impossible for us to know…the nature of any such thing, but even that it exists', quoted in Cooper, *World Philosophies*, p. 247.

[31] 'Metaphysics cannot offer a principle of unity that justifies the duality of spirit and matter, and by making metaphysics deal with one and physics deal with the other it exiles metaphysical inquiry from extra-mental reality…One cannot ask directly about the real as such, and if the metaphysical foundation fails, one cannot turn back to the world for certitude or for the evidence which the Cartesian Universal Mathematics has already yielded up to motion and the laws of nature. The world is now the field of mechanics; it can prove nothing about god's existence in a philosophy that must use god to prove the world', Buckley, *At the Origins*, pp. 98–99.

[32] See, Martin Tamny, 'Atomism and the Mechanical Philosophy', in Olby et al., *Companion to the History of Modern Science,* p. 598.

> By the beginning of the 18th century, the educated person in the West knew that God had created the universe as a complex mechanical system, composed of material particles moving in an infinite neutral space according to a few basic principles, such as inertia and gravity, that could be analysed mathematically. It seemed reasonable to assume that after creation of this intricate and orderly universe, God removed himself from further active involvement or intervention in nature, and allowed it to run on its own according to these perfect, immutable laws.[33]

Thus, came into existence in the human mind the deistic god of the first cause. It was almost as if such a god filled in the gaps of knowledge: just because not everything could be ascribed to mechanical causes, an extra-mechanical reality has to be presumed; nature is not self-contained, is not complete in itself. For Newton, the clock-maker metaphor for God was not sufficient, because it suggests too impersonal a concept, whilst the real world discovered through analysis and experimentation displays evidence of intelligence and choice. Newton's God, at least, was 'a powerful ever-living Agent, who…is…able by his Will to…form and reform the Parts of the Universe'.[34] The alternative hypothesis that nature was the result of some kind of blind metaphysical fate was anathema to Newton.[35]

Deism did not arise wholly as the logical consequence of an overly mechanistic understanding of the natural world. There were other factors, more or less related to the burgeoning interest and confidence in an empirical approach to knowledge. Locke's principle that real knowledge is justifiable certainty of what is claimed and that claims have to be based on demonstrable evidence, undermined the claims made for revelation, or at least implied that such claims must be submitted to reason for adjudication.

The views of David Hume

One of the most fundamental assertions made in defence of revelation, namely that it was substantiated by the occurrence of miracles, was famously refuted by Hume.[36] His argument was simple. Miracles, by their nature, are events that run counter to invariable experience. If uniform experience was not the experience of everyday life, a miracle, as a break in that uniformity, would have no sense. However, experience amounts to certainty, whilst the testimony of a miracle can be no more than a matter of possibility. It is more prudent to believe the certainty. In other words, the assertion of miracles is based not so much on faith as on credulity. The presumption is always against their having happened. The burden of proof rests squarely on those who wish to champion them.

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[33] *The Passion*, pp. 270–271.

[34] Quoted in Buckley, *At the Origins*, p. 143.

[35] 'Atheism is so senseless and odious to mankind that it has never had many professors… Whence arrives this uniformity…but from the counsel and contrivance of an Author', quoted in ibid., pp. 143–144.

[36] In *Essays and Treatises on Several Subjects* (first published in 1768).

Curiously enough Hume's argument is implicitly contradicted by his own reasoning elsewhere in his writings. He has already seriously questioned the notion of natural causation, arguing that what we take to be cause is merely the habit of our minds which, through memory, learns to associate certain events in a way which suggests causation. The only basis for distinguishing between necessary connections which give rise to law-like generalisations from accidental regularities is the disposition of the mind to credit one but not the other.[37] With respect to his argument against miracles, he seems to presuppose a strong theory of natural causation in contradiction to the much weaker view that he has argued elsewhere as a response to rationalism. The weaker view, however, cannot give an adequate account of the possible violation of natural sequences and might be said to be neutral towards the claims of a miracle as being an exceptional disruption of the habits of perception.[38] Given the inference that this makes Hume an idealist, since the belief in the existence of causal necessity is a factor of mental activity rather than being a factor of what pertains in the world outside the mind, it could be said that disbelief in miracles is just as much a matter of the disposition of the mind as belief. Hume's view of causation is simply not robust enough to have any credible notion of its supposed violation.[39]

In an argument that foreshadowed the naturalistic explanation of the universe derived from evolutionary theory, Hume objects to the supposition that mental order gives a better account of the universe than material order. The orderly universe that we find is only in greater need of explication than a chaotic one, because it is what we live in. Order is what we experience and there is nothing else by contrast that makes order either more or less probable. Given the initial event of the universe, the result is the natural order we perceive. We do not need to hypothesise God to make sense of it. Random movements of matter could produce stable entities by a process akin to that of natural selection.[40] Hume ended up as an attenuated deist with a recognition that some non-providential god possibly exists. Perhaps it was his characteristically sceptical method that influenced him to remain an agnostic rather than to take the plunge into atheism.

The split between reason and revelation

Disbelief in revelation was influenced by other considerations. There was the growing confidence in the ability of nature, interpreted through the rational principles of empirically validated methods, to give sufficient explanations of the whole of reality. In this sense, theism shrank by virtue of a Procrustean bed: whatever no longer needed explaining by the hypothesis of God was lopped off. By a similar method, whatever in theistic belief could no longer be warranted by the principles of reason was also removed. Thus, for example, the anonymous author of the *Militaire Philosophe*, rejected theistic belief on the grounds that (a) God cannot punish the innocent, (b) that the idea that humanity is intrinsically corrupt is demeaning and unjustifiably pessimistic, and (c) that miracles imply that God contradicts his own providence by suspending an order which he has himself arranged.[41]

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[37] See, Alexander Rosenberg, 'Hume and the Philosophy of Science', in David F. Norton (ed.), *The Cambridge Companion to Hume* (Cambridge, 1993), pp. 73–74.

[38] See, J.C.A. Gaskin, 'Hume on Religion', in ibid., p. 330.

[39] See, ibid., p. 330.

[40] Ibid., pp. 324–328.

The author of the *Examen de la Religion* rejects revelation for another reason: the multiplicity of belief systems precludes a self-disclosure by a rational god, for such a God would have revealed himself clearly without the possibility of such a diversity of perceptions. The variety of belief engenders confusion and, therefore, points to the hiddenness of God. The only true religion is one that is based on principles universally acknowledged and accessible. To take a critical attitude towards theistic beliefs is to honour God, 'plus on a du respect pour la divinite, plus on doit eviter de s'exposer de prendre les fables des hommes pour la parole de Dieu.'[42]

Deism was a naturalised religion, a kind of lower common denominator that would preserve a minimal theism against the subversion of absolute materialism. Its essence was pragmatism, the refashioning of a religion to uphold certain moral verities against the despisers, but at the same time to undermine the religion of the political elite. Deism was an alternative to the religion of social power and conformity. It was the beginning of a process of intellectual, moral and institutional emancipation. As Warren Wagner says, it represented not so much the disappearance of religion as its relocation. Traditional theism was displaced by systems of belief focused on this world. The centre of ultimate concern was transferred from supernature to the 'real' world of empirically observable nature, history and humanity.[43]

By and large, the majority of the 'intelligentsia' were not yet ready to move to a consistent atheism. Nevertheless, whether deism or atheism, the dichotomy between faith and reason, between revelation and empirical discovery was becoming the plausibility structure of the intellectual world of eighteenth-century Europe. This was a brave new world, heralded as an 'Age of Enlightenment'. The die had been cast. The modern world was born. By paying attention to the explicitly open world of empirical investigation, in contrast to the esoteric and spiritually manipulated world of religion, the ancient dualism between matter and spirit was replaced by a modern dualism between matter and mind.[44] In an attempt to counter the inevitable scepticism springing from the Cartesian subject-object split, an obscure philosopher from East Germany sought to find a way of overcoming this dualism. In fact, he succeeded in placing the coping-stone on the edifice of irreducible subjectivism.

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[41] C.J. Betts, *Early Deism in France: From the so-called 'deistes' of Lyon (1564) to Voltaire's ' Lettres philosophiques' (1734)* (The Hague, 1984), pp. 140–156.

[42] Ibid., p. 161.

[43] *The Secular Mind: Transformations of Faith in Modern Europe* (New York and London, 1982), pp. 3–4.

[44] Tarnas, *The Passion*, p. 286.

The views of Immanuel Kant

Immanuel Kant, 'aroused from his dogmatic slumbers', sought to answer the process of doubt about secure knowledge set forth in the writings of Hume. In his *Critique of Pure Reason* (1781), he sought to find a framework in which the validity of empirical knowledge could be upheld against the sceptics. In the first instance, Kant conceded to Hume the objection that human beings cannot, by pure reason, know how the world is in itself. He accepted the critique of the pretensions of rationalism that suggested that objective knowledge can be attained by the use of reason alone. Knowledge cannot be freed from sensory perception, that is from experiencing the world as it appears to us, and located in an abstract absolute view of things.

It is impossible for humans to know things as they are in themselves, only as they are mediated to us in experience. The only valid knowledge that we can have is of the world as it reaches us through our faculties. The raw material of experience is given through our intuitions. These are then organised by the faculty of reason, using concepts, in order that we might understand the data that we experience. This means that knowledge is obtainable only by a synthesis of sensations and objects and prior organising principles which are categories of the mind. The latter are innate or a priori ideas which have to be presupposed for knowledge to be possible at all. Such are the ideas of space and time and the comprehensibility of the world. However, in answer to the dilemma of both rationalists and sceptics, such concepts can be equally a priori and synthetic, i.e. both presupposed and confirmed by actual experience:

> Some truths are necessary 'because only as…presupposing them is anything possible as *object of experience*.' If this is so, then the sceptics' problem of how *a priori* knowledge could arise from experience disappears: for unless these truths held, there could be no experience.[45]

Kant's response to the Humean challenge, ingenious as it is, fails to overcome the dichotomy between the autonomous mind and a real world. Objects can only be known through the mechanism of an interpreting mind, as phenomena that *appear* to us in a certain way. The implication is that the world is actually constituted by the mind's own categories. The only world available to human consciousness is that already organised in accordance with the mind's own processes. This means that the world cannot be known in a direct sense, only thought about:

> Transcendental idealism may be defined as the thesis that the objects of our cognition are mere appearances…To say they are transcendentally ideal is to say that they do not have in themselves, i.e. independently of our mode of cognition, the constitution which we represent them as having; rather our mode of cognition determines this constitution. Transcendental idealism entails that things cannot be known as they are in themselves… Transcendental idealism expresses the Copernican[46] precept that objects are to be considered as necessarily conforming to our mode of cognition; transcendental realism

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[45] Cooper, *World Philosophies*, p. 298.

[46] In the sense that it creates an epistemological revolution: the most radical split in the whole of Western thought.

> is committed to the pre-Copernican conception of our mode of cognition as conforming to objects.[47]

Kant has come no nearer to solving the problem of bringing together an objective reality and a subjective reflection on experience:

> Kant had rejoined knower to known, not knower to any objective reality…Knower and known were united, as it were, in a solipsistic prison. Man cannot know whether the internal ordering principles possess any ultimate relevance to a real world, or absolute truth outside the mind.[48]

Moreover, things as they are in themselves (noumena), or things seen from an absolute point of view, cannot be known by human minds. Anything which transcends possible experience – the soul, nature, the cosmos or God – can only be a matter of speculation not knowledge. Concepts divorced from empirical conditions are empty:

> For Kant it is not doubtful but *certain* that things themselves cannot become objects for us: knowledge of things in themselves is for us a metaphysical impossibility.[49]

Nevertheless, as is well known, what Kant seemed to have made impossible in his critique of *pure* reason he resurrected in his critique of *practical* reason. The notion of God is necessary if Kant's account of morality is going to be able to withstand the criticism that ultimately it is vacuous. He seeks to demonstrate that morality by definition has to be both categorical and a priori: i.e. it has to be binding on all rational beings and has to assume within itself its own moral qualities. Thus, an act is moral if, and only if, the principle that guides it is implicitly universal: 'act only on that principle thou canst will should become a universal law'.[50] The one universal law from which all imperatives of duty can be deduced is this; 'so act as to treat humanity, whether in thine own person or in the person of another, as an end withal, never as a means only'.

> To have moral worth an act must be done from a sense of duty alone. We must distinguish between acts which accord with what duty requires, and acts done because duty requires. The latter alone have moral worth. We must distinguish between doing what duty requires, and doing because duty requires. Only the latter possesses moral worth.

However, Kant recognised three major problems with any self-consistent account of moral action. First, there is the question of freedom: 'without freedom of the will, no moral law and no moral responsibility are possible…Obligation presupposes the use of freedom.' Second, there is the question of how the categorical imperative and the human will can be brought together. The moral law requires perfection; the human will is incapable of meeting this demand. But it must be possible if the moral law commands it. The only way this can be fulfilled is through 'an infinite progression toward that perfect accordance. Now this endless progress is only possible on the supposition of an endless duration of the existence and personality of the same rational being.' Third, there is the question of the unity between virtue and happiness. In the world of nature, there is no ground for any necessary connection between a virtuous and happy life. This is the *summum bonum* which is both the end and presupposition of the moral law.

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[47] Sebastian Gardiner, *Kant and the Critique of Pure Reason* (London, 1999), pp. 95–96.

[48] Tarnas, *The Passion*, p. 348.

[49] Gardiner, *Kant and the Critique*, p. 98

[50] All quotations from Kant are taken from Audrey Castell, Donald M. Borchert, Arthur Zucker (eds), *An Introduction to Modern Philosophy*, pp. 303–310; they come from his *Lectures on Ethics* (New York, 1930), *Fundamental Principles of the Metaphysic of Morals* (Indianapolis, 1949), *Critique of Practical Reason* (Chicago, 1949).

In order to escape from these profound dilemmas, Kant is forced to assume or postulate that which, according to his theory of knowledge, cannot be part of our knowledge, namely freedom of the human will in a causally mechanistic nature, the immortality of the soul and the existence of God:

> The postulates of immortality, freedom and the existence of God, all proceed from the principle of morality which is itself not a postulate but a law, an imperative…These postulates are not theoretical dogmas, but suppositions practically necessary…Thus respect for the moral law leads, through these postulates, to conceptions which speculation might indeed present as problems but could never solve.

So, in these ways, Kant in both his discourses on pure and practical reason not only does not solve the dualism inherent in the divorce between reason and revelation, he exacerbates it. He cannot escape from the prison of a self-referring subject to make contact with an objectively real world. He appears to have substituted the Cartesian absolute thinking subject with his own absolute experiencing subject, from which he works outward to his theory of a priori categories. However the categories are themselves postulates of the mind which are necessary to make sense of experience; they are not derived from experience. They belong, therefore, more to the designation noumena than that of phenomena:

> Kant's epistemology…rests on some substantial assumptions about the universal and unchanging forms within which humans are able to think and articulate their knowledge… But what happens to this enterprise if the assumptions about these universal and unchanging forms no longer appear secure?…If all Kant can establish is that there have to be forms, concepts and principles which structure experience, but cannot determine which, if any, are universal and unchanging, then his project will not be able to reach a standpoint free of the contingencies which generate Idols of the Cave. His transcendental philosophy cannot, any more than Descartes' method of doubt, claim to pave the way to a universal perspective.[51]

The fundamental distinction between things as they appear to us and things in themselves gives rise to a logical atheism. For if God is, by definition, a being outside the possibility of knowledge, then God becomes no more than a hypothesis, having only a purely instrumental value. It is more honest, surely, to stick with the absolute dichotomy and its consequences, by affirming that the hypothesis is not necessary, than to use the linguistic sign, God, as a postulate to try to overcome a predicament that is the result of the rationalist attempt to build all knowledge outwards from a self-conscious rational subject. As long as there is no unconditional way of asserting the intrinsically absolute correspondence between a real universe and the human perception of it, human beings will be trapped in 'the idols of the cave' (individually accepted mental creations) or 'the idols of the tribe' (collectively accepted mental creations).[52]

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[51] Mary Tiles and Jim Tiles, 'Idols of the Cave, in Linda Martin Alcoff (ed.), *Epistemology: The Big Questions* (Oxford, 1998), pp. 423-424.

Trust in the 'book' of God is discarded, it seems, at the cost of having no substantial cause for believing in the 'book' of nature. In the name of a positivist and naturalist science, science itself is undermined. The scene was set in the middle part of the eighteenth century for a continuing intellectual confusion which has penetrated all disciplines. In the next chapter we will complement our survey of the 'turn to rationalism' with a look at the rise of empiricism, as a theory of knowing, and at its consequences for thought in the West. Together rationalism and empiricism characterise the fundamental presuppositions under-girding the project of modernity – belief in the ability of the human faculty of reasoning alone to come to clear, distinct and certain knowledge of the natural world and of human beings' place in it.

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[52] These ideas derive from Francis Bacon, *Novum Organon* (1620), I. 53.

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Chapter Four

The Turn to Empiricism: Knowledge through Science Alone?

Introduction

The purpose of this chapter is to assess how one strand in the relationship between the worlds of science and of faith has developed. It has been common to speak of a 'rationalist turn' and a 'linguistic turn' in tracing the modern debate about what and how human beings can know. Less common, but nevertheless arguably just as significant, has been the reference to a 'historicist turn', particularly in relation to the sociology of knowledge, the strong version of the sociology of science, and the constructivist interpretation of meaning in post-modernity.[1] By similar reasoning, it would seem legitimate to speak also of an 'empiricist turn', i.e. a tendency to limit the knowing process to what is evident and verifiable to the senses. It is important for the main thesis of this project that the early roots of empiricism coincided with the birth of modern science. As is well documented, it has been seen, in both philosophical discourse and popular imagination, as one of the main grounds for denying that talk about the reality of God, or any meta-empirical reality, can be meaningful.

In this particular presentation, therefore, I will chart some of the main elements of empiricism and evaluate its strengths and weaknesses in relation to both the undertaking of science and the claims to belief in God. Taking seriously the allegation of *evidentialism* that a person is justified in holding a belief if, and only if, the person's evidence supports that belief, I will explore the question of what evidence counts towards a justifiably held belief. My conclusion will be that the empirical method as an instrument for discovering what is true about the world is indispensable, but that, when postulated as the only well-grounded method for acquiring assured knowledge, it becomes self-refuting and, therefore, inadequate. I will further argue that a fuller explanation of scientific methodology has important parallels with a theologically-informed epistemology and that both gain their credibility and warrant from a comparable approach to processes of knowing, such as *reliabilism*[2] and '*inference to the best explanation*'.[3]

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[1] Each of these 'turns' are presented and discussed in, respectively, chapters 3, 6 and 5.

[2] A belief is justified just in case it is based on reasons that are reliable indicators of the truth and produced by reliable cognitive faculties and processes.

[3] A belief is justified in so far as it possesses, for a given set of circumstances, a greater explanatory power than any of its rivals.

The Rise of Empiricism: from Bacon to Hume

In the thought of Francis Bacon the belief that inductive inference was sufficient to gain indubitable knowledge of the external world had a religious motivation, namely that of restoring humanity's proper control of the natural world and, therefore, fulfilling the cultural mandate of Genesis 1.[4] His book, *Novum Organon*, gives the sensation of humankind standing on the threshold of a new era, in which the shackles of antiquity would finally be shaken off. In his inductivist conception of science, he sought to put the examination of causes on a firm footing against the seemingly speculative Aristotelian notion of final causes. In his *New Atlantis,* he saw science as a cumulative enterprise which would have a gradual emancipatory function, burying, *inter alia*, an 'enchanted' view of nature.

Bacon assumed a direct and uncomplicated relationship between the natural world, human perception and human rationality. The scientific method followed the procedure of making and testing generalisations built out of careful observation and experimentation. For the empirical method to function adequately it is necessary to empty the mind of all anticipations and conjectures. Discovery was a routine and automatic process; only patience was needed in the accumulation and classification of the data collected from observation.

Bacon did not dismiss the deductive logic of syllogism, but recognised that such a method of reasoning could only produce the consequences of what is already known; it could not lead to new knowledge. All new knowledge about the world had to come by way of induction from observed instances to general conclusions.[5] He dismissed rationalists as spiders, spinning ideas out of the recesses of their minds. He likened 'empirics' to ants, running around and aimlessly collecting data. The proper model for science is provided by bees, who amass data, store it and then order it purposively.

It has often been pointed out that Bacon completely underestimated the role of theory in drawing out conclusions from the mass of evidence accumulated in the process of ordering the data of the external world.[6] His emphasis on the inductive method was supported by Isaac Newton's *non fingo* principle – 'I feign no hypotheses'. By this he meant that natural philosophy had to reject as outside its scope any hypothesis that induction did not extract from experimentation. In sound physics every proposition should be drawn from phenomena and generalised by induction.[7]

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[4] Bacon believed that an accumulation of knowledge about the natural world would in some measure restore to humanity what had been lost at the Fall; see, Peter Harrison, *The Bible, Protestantism and the Rise of Natural Science* (Cambridge, 1998), pp. 61, 205, 251.

[5] See, Derek Stanesby, *Science, Reason and Religion* (London, 1985), p. 20.

[6] For example, Richardson and Wildman, *Religion and Science*, p. 106.

[7] Newton advocated the method of direct demonstration, in which all conclusions would be tested one by one and accepted only when 'it presented all the certainty that experimental method can confer on an abstract and general proposition; that is to say, each would necessarily be either a law drawn from observation by the sole use of those two intellectual operations called induction and generalization, or else a corollary mathematically deduced from such laws', Curd and Cover, *Philosophy of Science*, p. 266.

Bacon was the forerunner of an empirical tradition, lasting well into the nineteenth century, that subscribed to variants of rules of inductive inference, in which knowledge of the natural world could be uncovered through the right use of the senses. This tradition was further elaborated in the thinking of John Locke. He is considered an empiricist because he denied the concept of innate ideas. The whole material of consciousness is derived from experience. There can be no idea without a preceding impression. He held to a sense-datum theory of knowledge in which images of thought in the mind are caused by material objects. Ideas spring from the operations of the mind on sensations received through the senses. In this sense, Locke is classified as a representational realist. Although the perception of the external world is indirect, mediated by introspective reflection, nevertheless the result agrees with the reality of things as they are.

In spite of his strong empiricist conviction that the perception of objects in the real world is the condition of true knowledge,[8] Locke's epistemological theory betokened an incipient idealism. Experience can only give the materials of knowledge; knowledge itself is derived by making a connection between ideas, and by understanding the reasons for agreement and disagreement between them. In this sense, Locke started from the rationalist assumption that the right place to begin the enquiry into the nature and extent of knowledge has to be the private contents of an individual's consciousness. The empiricist twist is to place reliance on the data that the senses bring to the mental processes. Thus, the habit of deriving general conclusions from experience is the operation of mental inventiveness rather than discovering a pre-determined pattern written into the real existence of things.

Locke's empiricism was, in one way, derived from his ambition to demonstrate a proper distinction between truths that could be demonstrated and mere opinions. He wished to show that beliefs formed from experience have a validity that is lacking if they are derived from other provenances, which claim to be sources of knowledge, such as religious doctrine. Agreement between mental representation and external objects was a necessary hypothesis in order to have grounds for testable explanations of experience. Thus, although human beings are not born with innate ideas, they do possess an intrinsic capacity for acquiring knowledge by reasoning about data received from sense perceptions.[9] Locke believed that he had elaborated a theory of knowledge that would properly ground the scientific methods current in his day.

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[8] 'Gassendi, Hobbes and Locke all categorically asserted the independent authority of the senses as knowledge-producing faculties…Locke announced the senses' immediate authority on questions of existence…; they are "the proper and sole Judges of this thing'", M.R. Ayers, 'The Foundations of Knowledge and the Logic of Substance: The Structure of Locke's General Philosophy', in G.A.J. Rogers, *Locke's Philosophy: Content and Context* (Oxford, 1994), p. 49.

[9] It is a matter of interpretation whether the possession of innate ideas is inimical to a strict empiricist stance. As Lowe says, 'if by "empiricism" we mean the doctrine that all purportedly scientific claims about the nature of the world require to be justified by recourse to experimental or observational evidence…then it is clear that the claim that innate cognitive states may exist may be regarded as a scientifically acceptable one according to the empiricist criterion', *Locke*, op. cit., p. 32.

The inductive method

Before concluding this section with a discussion of Hume's empiricism, it is necessary to say something briefly about the inductive method, championed so forcefully by leading thinkers in the seventeenth century. Induction is generally the view that the laws and theories of science are arrived at by a special sort of argument in which the premises are singular statements of observation and experiment.[10] Classically, the inductive method has been used in the logic of discovery in which, by means of creative inference, a study of evidence leads to the formulation of new theories. Early scientists were supremely confident that correct experimentation on the natural world would yield self-evidently correct results. This could also be demonstrated inductively in the logic of justification by means of which the theories were either confirmed or falsified by further experimentation. However, in current science, a simple inductive method is no longer accepted as a sufficient explanation of how scientists carry on their work. A more popular position in the logic of discovery is the hypothetico-deductive method, with induction being reserved mainly for the logic of justification, applied to the theories only after they have been generated:[11]

> Theories may be produced by any means necessary but their degree of confirmation is a relationship between them and the evidence and is independent of how they were produced.[12]

Hume posed a celebrated problem for the inductive method. He argued that it is impossible to show that inductive arguments lead from true premises to true conclusions with a reasonably high degree of probability. To justify future confidence in induction by appealing to past successes begs the question, for the latter too relies on inductive reasoning.[13] Hume rejected Locke's 'representative realism', the belief that substances existing independently of us cause us to have impressions of the real properties of those objects. On the one hand, Hume acknowledges that we cannot doubt the existence of bodies; on the other hand, he affirms that our only access to these physical objects is through sets of sense impressions. In other words, it is unintelligible to speak of physical objects independently of our sensations of them. At a later date, this view came to be known as *phenomenalism*. In part, it flows from Hume's scepticism about an undue confidence in the reality of causation. He rejected any metaphysical notion of a causative entity which could be assumed without question. The causal nexus of things is never perceived, rather it is deduced from mental perceptions. Thus, the regularity of events in the natural world does not reflect a necessary state of affairs, only habits of the mind: we infer absolute causality from constant conjunctions that we perceive in our mind from the sensations that come from observation:

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[10] J.O. Urmson and Jonathan Ree (eds), *Concise Encyclopedia of Western Philosophy and Philosophers* (London, 1989), p. 151.

[11] Distinguishing between the two methods is complicated by the fact that the language is sometimes used interchangeably in common speech: thus in the work of crime detection, deductive conclusions are often made using inductive methods. (Arthur Conan-Doyle's fictional detective Sherlock Holmes's method of gathering evidence and reasoning from it to logical entailments is an excellent example.)

[12] James Ladyman, *Understanding Philosophy of Science* (London, 2002), p. 90.

[13] Curd and Cover, *Philosophy of Science*, p. 538.

> Either we have no idea at all of force and energy, and these words are altogether insignificant, or they can mean nothing but that determination of the thought, acquired by habit to pass from the cause to its usual effect.[14]

The outcome of Hume's view is that the only basis for distinguishing real law-like (nomological) generalisations from those based on accidental regularities is the evidence the mind adduces for the former but not the latter. Law-like generalisations flow from the quantity and variety of evidence that impinges upon our mental faculties not from the unchangeable reality of the external world. It is generally recognised that Hume's phenomenalism makes the hypothetico-deductive method difficult to understand, for his theory of meaning generates the puzzle of accounting for scientists' need to work to and from theoretical laws that are couched in unobservable notions that transcend experience.[15] For Hume meaningful terms must be defined in terms of sense impressions. A hypothesis composed of such terms cannot, therefore, transcend experience, except inductively. However, an explanatory theory must transcend the phenomena it seeks to explain, otherwise it merely re-describes them. For Hume, nevertheless, if it transcends observations it becomes meaningless. Therefore, all explanatory hypotheses must consist in what Hume called 'obscure and uncertain speculations'.

Hume turned his naturalistic empiricism against the notion of the existence of God. As an explanation of the order of the cosmos, the hypothesis of God was unnecessary and speculative. Given that the order we observe in nature is imposed on us by our mental faculties, rather than existing *in se*, it would have been possible for the natural world to present itself as chaotic. If this had been the case, presumably it would not have required explanation (or, we would not have been here to reflect on it). As it happens, we appear to live in an orderly universe and there is nothing else in existence by contrast with which that order is in any sense probable or improbable. Natural order does not give us any necessary clue as to origins. Random movements of matter could produce the stable entities and sequences that we observe. Thus, Hume finds any kind of teleological argument for theistic belief at best unsubstantiated and at worst otiose.

We will return later to Hume's epistemological assumptions, which have been so decisive in the long influence of empiricism in philosophical thinking. For the moment we make one observation. Hume's naturalism fails to give an adequate basis for distinguishing between true and false counterfactual conditionals.[16] Ultimately, the only satisfactory explanation of why some counterfactuals are demonstrably true and some false comes from the different conditions in the objects themselves, not just in our beliefs about them. It is this reality that provides an adequate foundation for making a distinction between law-governed and accidental sequences. For science to work it is necessary to assume the existence of a causal necessity in the world itself.[17] Later we will explore the reasoning against the teleological argument for theistic belief, when we come to assess the place of evidence in substantiating truth-claims both in science and theology.

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[14] David Hume, *A Treatise of Human Nature (1739–40)*, (Oxford, 1978), 656.7

[15] See, Norton, *The Cambridge Companion to Hume*, p. 80.

[16] Counter-factual conditionals refer to what might be the case if the conditions in the external world or in experiments were different: if p were the case, then q would be the case.

The legacy of empiricism

Hume has had an enormous influence on subsequent thinking concerning which claims about experience can be considered valid. What the philosopher Anthony Flew called ‘Hume’s Fork’, namely the premise that all truth claims had to be either necessary relations between thoughts and, therefore, discoverable by the mere operation of thought (analytical), or matters of fact (synthetic), has been taken up by positivist and analytical philosophy. According to Hume all reasoning is either demonstrable a priori or empirically probable. This has led some philosophers to conclude that, as the former only yields trivial knowledge, it is the latter that should be the sole object of our search for knowledge.

Verificationism: the logic of empiricism

Positivism is the name given to the theory that meaning has to be limited to a description of empirical data. We can do no more than take the universe as we find it and try to explain how it functions. Carnap was the first to postulate the famous ‘verifiability theory of meaning’. The meaning of a statement consists in the sensory or introspective data which establishes it directly and conclusively. The statement is meaningful, if and only if the statement itself, or some logical consequence of it, can be tested by sensory observation. It is the task of philosophy to clarify the meaning of statements. Some statements are scientific, some mathematical and some non-sensical as they stand. Any statement that goes beyond the empirically verifiable has to be either meaningless or a covert statement about empirical reality. Thus, for example, statements about moral values are actually statements about emotional dispositions, such as feelings of comfort, dread, desire or preference. A sentence can only be meaningful, then, if a person knows how to verify the proposition that it purports to express, to state clearly, what observations lead, under what conditions, to an acceptance of the proposition as true or false.

This means that only empirically testable statements can have the status of knowledge. Everything beyond the reach of science cannot even be a possible object of cognition. This is perhaps the ultimate foundationalism, in that it dismisses the analytical truths, beloved of rationalism, as no more than tautologies, certain only by the conventions of language, and seeks to establish justified true belief on the indubitable grounds of empirical confirmation or disconfirmation. Clearly, the notion of a God is surplus to requirements. If Laplace in the eighteenth century abandoned God as an astronomical hypothesis, because it introduced the notion of a *deus ex*

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[17] Ibid., pp. 74–75.

machina, beyond testable science, positivism in the twentieth century abandoned God as a meaningless category. Laplace could still consistently be a theist (or more likely a deist or agnostic), a positivist has to be an atheist.

On confusing epistemology with ontology

This argument takes us back to the central question in epistemic justification of evidentialism, that a person is justified in holding to a belief, if and only if that person's evidence supports that belief. It is a paradox that the formulation of this principle, which was designed to rule out of court the admissibility of any evidence apart from that empirically gained, actually shows such a conclusion to be false. The positivist conclusion concerning what counts for knowledge, derived from the premise that all knowledge is either synthetically inferred or analytically deduced, is neither derived from empirical observation nor from logically certain relations. There is an irresolvable dilemma at the heart of empiricism which takes the form of attempting to derive what is inferentially knowable from the non-inferentially knowable without making general assumptions about the world and how it affects our experience. Thus, empirically derived knowledge of a testable reality is dependent upon the non-empirical, contingent assumption that nature behaves in a wholly predictable fashion, because, as a matter of non-empirical actuality, nature is uniform in its operation.

Thus, if the nature of evidence is reduced to that of the empirically verifiable, scientific work has no rational justification. Likewise, if knowledge is reduced to the category of either the synthetic or the analytical, as understood by Hume, science again becomes impossible. There has to be a satisfactory theory of scientific method which allows for an explanation which is neither synthetically inferred nor analytically deduced. In other words, part of the evidence which allows a person to hold a belief legitimately is the theory which explains how science is possible in the first place.[18]

It may well be that empiricism has committed the fallacy of confusing epistemology with ontology. Michael Polanyi, for example, argues that empiricism (as described) assumes the certainty of the existence of data, as if the collector of the data did not exist.[19] However, there is no way of demonstrating the certainty that anything exists by empirical means. To conclude that the results of observation and experimentation are data is always already to have interposed the human into the equation. Data is actually a word of faith, or theoretical presumption, because the correlation between observer (subject) and thing (object) has to be assumed for the scientific method to be able to operate. The question is then what kind of evidence is needed to support the belief that scientific method is valid. Without this evidence, one ought not to believe in the scientific enterprise.

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[18] See, Roger Trigg, *Philosophy Matters: An Introduction to Philosophy* (Oxford, 2002), pp. 15–57.

[19] *Personal Knowledge: Towards a Post-Critical Philosophy* (London, 1962), pp. 300ff.

In other words, empirical methodology as an inductively inferred procedure actually requires an ontology to ground it. It is necessary to start from a concept of reality and then locate the scientific enterprise within it. If not, empiricism falls by the notorious inductive dilemma. Inductively-induced knowledge, even when predictions prove successful, can only support the principle of induction if the latter is already accepted *ex-hypothesi*. An appeal to previous empirical successes as a guarantee of the regularity of the world and hence a way of justifying induction presupposes regularity, which is the point at issue. Empiricism sells rational thought short.

From empiricism to evidentialism

From the point of view of an authentic account of science, the inductive method is perfectly valid as long as it is balanced by other methods, most notably by the hypothetico-deductive. This latter asserts that the logic of discovery is not relevant to the truth or falsity of a theory; only the logic of justification can confirm or deny whatever the theory states conditionally. A theory is justified and its acceptance rationally warranted only when the theory has been confirmed by the successful outcome of its predictions. This means that, although a theory may not be supported by its observable instances (i.e. inductively), it can be supported by its observable consequences. Thus, this model of reasoning allows for the evidential support of non-observable entities and processes (as in quantum theories, the big bang account of the origin of the universe or the possible diversification of species through natural selection).[20]

What is important here is what counts as evidence. Empiricism is reductionist; it simply does not give an adequate explanation of the success of science.[21] A more adequate view which combines inductive and hypothetico-deductive methods is *inference to the best explanation*. Not only does this procedure explicate scientific practices, it is also, in another order of discourse, a helpful way of formulating a convergence between scientific and theological methodology. Although this claim may seem excessive, given the kind of rupture between science and faith we have been tracing, I will seek to demonstrate in the rest of this chapter, and in a quite tentative way, that the model both satisfies the criteria for evidentialism and helps to heal the fateful breach between scientific rationality and the reasoning of faith. At a later stage in this study, I will have occasion to return more fully to the heuristic potential of this method as a way of uniting the whole field of knowledge.[22]

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[20] Bas van Fraassen, however, proposes an anti-realist alternative, which he calls ‘constructive empiricism’. He draws a distinction between theories built on observable entities and those reliant also on entities which cannot, under present circumstances, be observed. In the former case he is prepared to allow truth language to be used of the theory; in the latter case, however, he will only concede that the theory may be ‘empirically adequate’, see, *The Scientific Image* (Oxford, 1980), pp. 6–21, 23–25, 31–40.

[21] The same could be said of ‘instrumentalist’ and ‘problem-solving’ views of the scientific task, c.f., Michael Banner, *The Justification of Science and the Rationality of Religious Belief* (Oxford, 1990), pp. 26–32.

Inference to the best explanation, which assumes a realist view of science,[23] is a method by which one infers from the fact that a certain hypothesis would explain the evidence to the truth of that hypothesis. In theory, there could be several hypotheses that would explain the evidence, so, in order to make the inference, one has to be able to demonstrate that a given hypothesis better explains the evidence than any alternative. On the elimination of all other possible explanations, a theory may be said to have verisimilitude. In the case of science, what needs to be explained, at one level, is the relationship between hypotheses, predictions and processes of confirmation with respect to the physical world. The best explanation is the one that accounts most adequately for the data of observation, past theories, present successes and apparent anomalies. It is then described in terms of a law which gives the reason for the success of the explanation. At another level, what needs explaining is a natural world that can be explicated in terms of inviolable laws, i.e. the existence of a reality which makes discovery and the accumulation of knowledge certain.[24]

In the case of faith, what needs to be explained is the relationship between its claims and the truth about the world in both its physical and supra-physical dimensions. Naturally, the whole project makes best sense on the fundamental supposition that life needs to be explained and intrinsically can be explained. However, even in the case of those who do not believe that life needs to be made intelligible, or those who believe that any putative purpose is inherently unknowable the question can be asked as to whether such a conclusion is the best theoretical way of dealing with the human experience of curiosity, which is itself the driving power behind scientific investigation. Is it intellectually and emotionally satisfying, for example, to conclude that any theory about the origin of the complexity, orderliness and rational fit of the universe, beyond the chance processes of impersonal random mutations is mere speculation? Does such a position best explain the human intuition that the experience of personhood seems to imply, logically and ontologically, some kind of personal cause, on the grounds that the lesser cannot give rise to the greater by completely fortuitous mechanisms?[25]

In the case of those who believe that satisfactory explanations can be given of the physical world and, at the same time, of those who observe it and order it to preconceived ends there may still be different, and even incompatible, descriptions.

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[22] See, pp. 125–126, 204–205, 207ff., 226–228.

[23] See, Clark Glymour, ‘Explanation and Realism’, in Jarrett Leplin (ed.), *Scientific Realism* (Berkeley, 1984), pp. 173–192; Ladyman, *Understanding Philosophy of Science*, pp. 196ff.

[24] Roy Bhaskar writes, ‘It is necessary to assume for the intelligibility of science that the order discovered in nature exists independently of men in their cognitive activity’, ‘Philosophy and Scientific Realism’, in Margaret Archer et al. (eds), *Critical Realism: Essential Readings* (London, 1998), p. 21.

[25] As questions about the simple existence of the universe, the origin of life and the emergence of consciousness have been among the most controversial areas of dispute between a theistic and non-theistic explanation of experience, we will consider these issues in more detail at a later point in this study: see, pp. 132ff., 205ff.

In such instances, the best explanation is the one that accounts for the totality of experience in the most adequate way, including the alternative explanations.

To state the method is implicitly to raise some serious problems. We will try to deal with the three most serious: the question of the under-determination of evidence; the question of whether it is the task of faith to give explanations, and the question of by what criteria an explanation is deemed to be satisfactory or better than its rivals. Although Pierre Duhem was the first to raise the controversial issue of the under-determination of observation and evidence on the basis that the ambiguity of falsification meant that a theory could be protected from refutation by making changes to auxiliary hypotheses, it was Quine who brought the difficulties to the forefront of the debate about scientific method.[26] Quine's primary purpose in his article was to undermine the analytic-synthetic distinction, coming to the conclusion that there is no such thing as a priori knowledge. As a result, any belief, including those traditionally regarded as analytic could be revised, abandoned, or even retained, in the light of experience. His radical holism led him to believe that 'any theory can be reconciled with any recalcitrant evidence by making suitable adjustments in our other assumptions about nature'.[27]

Quine's objective was to show that empiricism was wrong in asserting that any individual theoretical statement, considered in isolation, can be confirmed or falsified. He wanted to maintain that it was a body of beliefs as a whole that needed justifying and that this was much more complex than empiricists, adhering to a reductionist view of experimentation, seemed to believe. At the same time, Quine has given the impression that he wishes to abandon notions of confirmation, good reason and warranted assertion altogether and re-construe the notion of evidence so that it becomes merely 'the sensory stimulations that *cause us* to have the scientific beliefs that we have'.[28]

There are few who would wish to follow Quine's scepticism about the ability of theoretical and experimental work to choose conclusively between apparently conflicting pieces of evidence. Convincing reasons can be given for preferring one explanation rather than another, thus refuting Quine's egalitarian thesis that every theory is as well supported by the evidence as any of its rivals. If such were the case, there could be no progress in science. The Kuhnian thesis that theory acceptance is primordially a matter of scientists being persuaded to support a view on the basis of shared values, when those values are not intended to bring us closer to the truth or falsity of a theory, also appears to be at variance with the ordinary work of scientists. Scientific exploration does, as a matter of fact, bring us to the reality of how laws operate and mechanisms work. The successful collaboration between engineering and medical sciences, for example, in the construction of sophisticated diagnostic and curative apparatuses would otherwise be inexplicable.

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[26] In his celebrated article, 'Two Dogmas of Empiricism', *Philosophical Review*, 60 (1951), pp. 20–46.

[27] See, Larry Laudan, 'Demystifying Underdetermination', in Curd and Cover, *Philosophy of Science*, p. 328.

[28] Hilary Putnam, 'Why Reason Can't be Naturalised', in Ernest Sosa and Jaegwon Kim (eds), *Epistemology: An Anthology* (Oxford, 2000), p. 322.

An attack on the notion that religious faith is also concerned with explaining reality has come from two different (internal) sources: on the one hand, post-liberal theologians and, on the other, reformed epistemologists. Though they represent different intellectual traditions, both groups are convinced that resort to the arguments of natural theology is a dangerous move for Christian thought to make. For different reasons they have rejected any kind of foundationalism, whether in the form of an appeal to universal reason, to a common religious experience or to theistic proofs. For the first group, faith is about the legitimacy of the internal language which a community uses to express its beliefs and validate its actions. For the second group, belief in God is not a basic belief, in the sense of being self-evident or evident to the senses, nor is it a belief which requires to be grounded on a more basic belief. Plantinga has argued that the Lockean assumption that theistic belief is justified only if it is probable with respect to what is certain, i.e. having a probable evidential relation to other beliefs about which one may be assured, is false, because belief in God is properly basic and there is no epistemic duty to justify it.[29]

Apart from the logical and theological difficulties of both positions, which cannot be entered into in detail here,[30] neither is an argument against the appropriateness of explanation as part of the task of faith; nor does either view give a convincing reason for not taking the requirement of evidentialism seriously. In the first place, arguments to and from natural theology are not exhausted by some perceived need to supply proofs of the existence of God. Rather, 'natural theology is to be understood as a demonstration, from the standpoint of faith, of the consonance between that faith and the structures of the world. In other words, natural theology is not intended to prove the existence of God, but presupposes that existence; it then asks "what should we expect the natural world to be like if it has indeed been created by such a God?"'[31] In a limited way, congruence between the physical and human worlds and theism is evidence for the adequacy of arguments for the latter and the best explanation of the former. In other words, a theistic account of the physical and human worlds is a good candidate for the best explanation of the whole of reality.[32]

The third difficulty concerns the justification and adequacy of criteria for deciding which explanation of the fit between evidence and hypothesis can be considered the best. When dealing with experience of the whole human world, which clearly extends substantially and significantly beyond experience of the mechanisms of the physical world (e.g. the experience of intellectual satisfaction, moral sensibility, beauty, and for many a non-tangible spiritual reality), the nature of the evidence and the kind of explanation that can be given is of a different order compared to physical objects.

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[29] See, Lindbeck, *The Nature of Doctrine* (Philadelphia, 1984); Plantinga, ' Religious Belief, Epistemology of', in Dancy and Sosa, *A Companion to Epistemology*, pp. 438–441; see also, Alister McGrath, *The Foundations of Dialogue in Science and Religion* (Oxford, 1998), pp. 107–108, 153–154.

[30] See, Linda Zagzebski (ed.), *Rational Faith: Catholic Responses to Reformed Epistemology* (Notre Dame, 1993), *passim*.

[31] McGrath, *The Foundations of Dialogue*, pp. 107–108.

[32] This has been argued cogently, against the reductionist strategy of naturalism, by Keith Ward, *God, Chance and Necessity*. We will examine his line of reasoning, when we return later to issues of the nature of the universe, see, p. 134.

Nevertheless, our thesis is that the methodology, if not the nature, of discovery and justification in both cases is equivalent.

There are many rival explanations which seek to account for the human experience of being human. At the least, they must be coherent theories (i.e. without serious internal contradictions), they must be able to minimise the number of anomalies in their accounts, they must be comprehensive (i.e. not leave considerable areas of experience inadequately elucidated), they must be able to answer serious objections and give a convincing explanation of all alternative accounts. In addition, they should have some kind of predictive ability, in the sense that in general terms they can accurately foresee the consequences of certain human activities, or explain why particular aspirations are always frustrated.

Of course, the application of such criteria to particular theories is a highly controversial matter. There are no universally accepted means of convincing all people of the truth of particular interpretations, simply because already existing traditions of belief are deeply embedded in factors that operate at levels other than the purely intellectual (e.g. factors of identity, emotional stability, cultural conformity, academic approval, ideological acceptability). Utilising the method of inference to the best explanation is a matter of persuasion; its principal motivation must be the inherent moral imperative to ascertain the truth about life.

To be considered potentially valid, any theory must have an adequate explanation of at least the following aspects of life:[33] that something exists, rather than nothing existing; that human beings exist as a unique species, in that they ask questions and seek answers that do not occur in the consciousness of any other; that science is successful, in that its outcome in technical application is not fortuitous;[34] that human beings organise their life in community on the basis that some beliefs and actions are true and right and others are false and wrong (e.g. that it is right to save life, that it is wrong to discriminate on the basis of race); that human beings do wrong things, even when they know they are wrong (e.g. commit adultery); that truth is a defining category in the pursuit of knowledge and understanding and that neither scepticism nor relativism is a liveable possibility. The best explanation is the one that most adequately deals with *all* these aspects of life, in other words the one that is best able to fit the pieces of the jigsaw together or, to change the metaphor, to work out the answer to all the clues of the crossword or fit together all the evidence to solve a crime mystery: motive, means, opportunity, clues, witnesses.

It is beyond the scope of this chapter to justify the admissibility of the criteria outlined above; we will return to them again in Part IV. It is worth noting, however, that they apply in the sciences and, if there are good reasons for applying them to other disciplines, then we have gone a long way to vindicating the integration of different kinds of knowledge.[35] In addition, we have shown a way to heal the breach between faith and science. This breach has been, in part, the result of Descartes' apparent severance of the knowing subject from the known object, Locke's division of human perception into demonstrable knowledge and mere opinion, Hume's division of knowledge into the analytic and the synthetic, Kant's rigid demarcation of reality into unknowable essences and knowable appearances and positivism's separation of truth claims into the empirically verifiable and the meaningless.

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[33] Naturally, there are a number of other crucial issues which continue to exercise human imagination. The ones mentioned here are taken as a sample of the most persistent and conclusive ones in the context of deciding on the meaning of existence.

[34] ‘It is not the fact that science occurs that gives the world a structure such that it can be known by men. Rather, it is the fact that the world has such a structure that makes science, whether or not it actually occurs, possible’, Roy Bhaskar, ‘Philosophy and Scientific Realism’, p. 23.

In this exploration of empiricism, I have implicitly proposed that the fundamental problem with empiricism is that, although it deals with the empirical, it has no way of accounting for the empiricist. Ruling out the evidence of human experience that empirical knowledge alone is inadequate, as much for understanding the scientific enterprise itself as for understanding the uses to which it should be put, is an entirely unjustifiable reductionism. Even if we agree that the hypothesis of God is not necessary to explain the motions of the planets, the evidence of our humanity at least points to the possibility that the existence of a personal, infinite divine being is the best explanation of the totality of our experience. However, before we retake such a presumption, and reflect on it more carefully, it is important to see how and why confidence in the rationalist and empiricist-driven modern project has become dissipated. Such an exploration takes us into a different kind of conceptual world, one where, at the least, the claims made for the ability of reason alone to comprehend experience are viewed with great suspicion and distrust.

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[35] Michael Banner, *The Justification of Science*, ends a long discussion of inference to the best explanation as a legitimate method in both science and theology by stating that 'both the scientist and the theologian look at the range of facts and ask an essentially similar question: "what sort of laws and objects, or person, would account for this?"', p. 184. He goes on to say that an essential preliminary to faith for many will be a careful and patient apologetic which helps the enquirer perceive a pattern in experience which points to the existence of God, p. 185.

PART III

The Departure of the Modern World

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Chapter Five

The Turn to Historicism

Introduction

The analysis being undertaken leads on from the major underlying principles of modernity (often referred to as the Enlightenment project)[1] to those associated in a broad sense with post-modernity. As a social and cultural phenomenon post-modernity has been referred to as a kind of late modernity, emphasising a certain continuity with the intellectual history that has proceeded it, but with a significant twist in the tail. To highlight those elements that show a radical break with the past, post-modernity has also been interpreted as anti-modernity. For reasons that I hope will become clear in the course of the next two chapters, it might be better to characterise post-modernity as a particular way of thinking about modernity.

Similar to the case of modernity, it is possible to get a handle on the nature of post-modern reasoning by exploring two radical shifts in human consciousness. If modernity is the expression of the turn to rationalism and to empiricism, post-modernity is the embodiment of two further shifts, to historicism and to language. The meaning and consequences of these cultural transpositions will be examined in this and the following chapter.

Though historicism is the most appropriate concept to use to refer to the kind of reality which Lyotard famously called the post-modern condition, it runs the risk of confusion due to the fact that it has been used in two quite different, and even contradictory, senses. Karl Popper, echoing the title of one of Karl Marx's early writings, *The Poverty of Philosophy* (1847), wrote a major critique of the presuppositions that underlay, in his opinion, the analytical thinking of Marx and his followers, *The Poverty of Historicism*.[2] By historicism Popper meant 'an approach to the social sciences which assumes that *historical prediction* is their principal aim, and which assumes that this aim is attainable by discovering the "rhythms" or "patterns", the "laws" or the "trends" that underlie the evolution of history'.[3]

It is not germane to the discussion of this chapter to enter in detail into Popper's dislike of historicism. Suffice it to say that his main objection, apart from the impossibility of uncovering so-called laws of history,[4] was to the notion that the social sciences provide the necessary tools for mapping out the future course of society as a whole and, thereby, enable politicians and civil servants to anticipate the future by planning for it. This methodology, to borrow from another of Popper's major works,[5] forecloses the 'open' nature of society by pretending that 'society itself' was subject to laws of motion analogous to those of physical bodies. Such a view would give to social studies a status alongside the physical sciences, allowing the general, but deluded, impression that the 'planners' were working with a wholly objective view of historical development.

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[1] Following Immanuel Kant's celebrated essay, 'An Answer to the Question: What Is Enlightenment?', Hans Reiss (ed.), *Kant's Political Writings* (translated by H.B. Nisbet) (Cambridge, 1970), pp. 54–60.

[2] (London, 1960/2).

[3] Ibid., p. 3.

[4] Popper argued that historicism was based on a fundamental confusion between trends and laws. A law is universal in its formulation and application; a trend is a statement about a particular time and place, it is a singular historical affirmation, not a universal account

The temporality of existence

The historicism we wish to discuss here is also, in some ways, a critique of the kind of historical positivism that Popper desired to expose as intellectually and politically untenable. It maintains that human beings and societies are formed by wholly contingent processes operating through time, rather than by any intrinsic, eternal, static principles such as justice or reason.[6] This means that the notion of an absolute reality, unfolding its logic in sequential historical stages, and to which human society has to conform, is a dangerous myth. Reality is not discovered as a univocal existence, which can then be moulded in accord with its intrinsic nature. Rather, it is something created by human imagination in a wide variety of different ways, none of which are necessarily (i.e. apart from particular circumstances) superior or inferior to others.

Historicism, in this sense, emphasises the complete temporality of existence. The difference between the two forms is made clear in the existentialist distinction between 'existence-in-itself', implying the view that human beings live *sub specie aeternae*, i.e. that their being is controlled by an intrinsic given-ness to nature, and 'existence-for-itself', implying that life is an undetermined coming-into-being. Heidegger has expressed this view in the memorable phrase that 'we are what we are *not*…' in the sense of 'what we are no longer or not yet'.[7] What we may yet become is not determined by any kind of natural or historical necessity. Human beings are not essence, substance, unbreakable consciousness, fixed identity or composition. They are undetermined (or underdetermined) in the sense that it has not yet been determined what they may become. This means that the notion of 'man' or 'woman' is simply a historical construct, the product of a specific set of historical circumstances that change. The existential world is one in which each subject must come to terms with this absolute contingency, without the assurance of any fixed reference-point outside of time and place.[8]

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of reality at all times and in all places. Extrapolating from a trend is the weakest form of prediction, c.f. ibid., pp. 106ff.

[5] Karl Popper, *The Open Society and its Enemies*, (London, 1945).

[6] See, Olby, *Companion to the History of Modern Science*, p. 20.

[7] See, Kearney, *Modern Movements in Continental Philosophy*, p. 32.

[8] Roger Scruton, *Modern Philosophy: An Introduction and Survey* (London, 1996), p. 156.

The obligation to choose

Complete temporality is the premise for human freedom. This places on human beings the one absolute demand: they must choose. There are many possibilities; that which gives value to human life is the free determination to choose among them. This will involve overcoming the anguish of having to choose to construct meaning out of an intrinsically meaningless world (or, presumably, living through the constant anguish of absurdity).

The implications of this view of reality are far-reaching. In order to be wholly authentic, choices must be self-generated, not imposed. Individuals have to be as certain as possible that their choices are not induced by the opinions or expectations of others. Inevitably such a stance will lead to a negative attitude towards most possibilities for, as G.M. Tamas says, acquiescing in someone else's desire or submitting to someone else's volition is to lose freedom. Thus, anarchic voluntarism would seem to be the only option, for no moral act can be valid if it is induced by ethical principles established outside one's own individual will. Only those rules apply to which we have voluntarily given assent. Institutions, in so far as they prescribe actions, are inimical to a significant life grounded in self-choice.[9]

Zigmunt Bauman has concluded that the logic of this exposition of choice is like the dragon eating its own tail: choice becomes not so much the *possibility* of choice in terms of the variety of objects that might be appropriated but *choice itself*. With regard to what one chooses to be (or one's self-appointed identity), one is condemned to the consumption of fashion. Identity itself is problematical, for it suggests stability through time, i.e. identification with a role, model or set of values, which might be difficult to revoke if an apparently more attractive alternative were to appear. The difficulty with choice is that it really is choice between options, for not every choice is possible. The likelihood, therefore, is that we will waste opportunities, for not every opportunity can be grasped.[10] The symbiotic relationship between freedom and choice is, therefore, highly ambivalent:

> The impetus of consumption, just like the impulse of freedom, renders its own gratification impossible. We always need more freedom than we have…It is in this openness towards the future, in the running beyond every state of affairs found ready-made or freshly established, in this intertwining of the dream and horror of fulfilment, that the deepest roots of the obstreperous and refractory, self-propelling dynamism of culture lie.[11]

The social construction of knowledge

Historicism encompasses a widely-held contemporary view that all knowledge and truth claims are context-dependent, i.e. they are the product of cultural variants, their frames of reference are relative to particular communities. The view is expressed differently according to distinct disciplines. In history, for example, it appears under the name of genealogy, in the social sciences it is manifest in the sociology of knowledge, in science it is exhibited in the so-called strong programme in the sociology of science, in cultural studies in contextualism, in philosophy in coherentism and pragmatism and in interpretative theory in the hermeneutics of suspicion. In every case, historicism tends to an epistemic relativism, which denies that there can be any universally valid measure of true belief. Truth and knowledge is relative ‘to time, to place, to society, to culture, to historical epoch, to conceptual scheme or framework, or to personal training or conviction’.[12] Relativism is the inevitable outcome of claiming that there is no neutral and objective way of choosing between alternative sets of standards which depend on the different sets of background principles and standards of evaluation existing in different cultures and societies.[13]

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[9] G.M. Tamas, 'A Clarity Interfered With', in T. Burns (ed.), *After History? Francis Fukuyama and His Critics* (London, 1994), pp. 86–90.

[10] *Work, Consumerism and the New Poor* (Buckingham, 1998), pp. 27–31.

[11] Zigmunt Bauman, *Postmodernity and Its Discontents* (Cambridge, 1997), p. 140.

Genealogical theory

Some commentators maintain that beliefs can be explained on the basis of their genesis. They can be explicated by referring to their historical origin. Thus, for example, there is a long line of theorists writing out of various disciplines (such as Feuerbach, Durkheim, Taylor, Frazer, Freud, Marx) who have maintained that religious beliefs arise out of a number of social variables which are their sufficient cause, for example social pressure, fear, ignorance, political struggle, emotional stress, class conflict, the inversion of consciousness and ignorance. In this thinking, they are dislocated from their own self-assessment, given a wholly naturalist explanation and thus assumed to be (socially useful or alienating) fictions.

Interest in genealogy was a particular feature of Nietzsche’s philosophy. ‘The argument of the *Genealogy*,[14] briefly stated, is that what we call “morality” is in fact nothing other than the development of a special set of particularly pragmatic “prejudices”…’.[15] Nietzsche argued that morality arose as a means of conserving a particular set of social relationships. Interestingly enough, in the light of some post-modern writing, Nietzsche contends that morality was given a universal validity in order that the weak might impose a uniform mediocrity on the strong. He called it slave morality, whose virtues are banal and minimalist:

> What characterizes slave morality…is a pathetic state of mind, a singularly ‘reactive’ set of emotions…Morality is the product of a particular temperament, insidious emotion, and a specific set of historical circumstances.[16]

Using a similar methodology, but with different conclusions, Foucault and other commentators in a post-modern tradition have interpreted the possession of knowledge in terms of those considered to be the beneficiaries. Thus, knowledge and truth claims were no longer considered to be based on self-evident and universal axioms but to have arisen out of the play of power in a struggle for political, social or cultural supremacy. However, in this case, it is the powerful who have been able to impose their view of reality and truth on the weak. Indeed, in this version of extreme epistemological scepticism, truth is simply determined by the winners in life.[17] They have been able to persuade the rest, by dissimulation and deceit, that their views are universally valid.[18] Foucault puts the matter most eloquently:

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[12] Dancy and Sosa, *A Companion to Epistemology*, op. cit., p. 429.

[13] Ibid.

[14] *On the Genealogy of Morals* (New York, 1967).

[15] Bernd Magnus and Kathleen M. Higgins (eds), *The Cambridge Companion to Nietzsche* (Cambridge, 1996), p. 205.

[16] Ibid., p. 207.

> It seems to me that what must now be taken into account in the intellectual is not the bearer of universal values. Rather it is the person occupying a specific position – but whose specificity is linked, in a society like ours, to the general functioning of an apparatus of truth. In other words, the intellectual has a three-fold specificity: that of his class position (whether as petty-bourgeois in the service of capitalism or 'organic' intellectual of the proletariat); that of his conditions of life and work, linked to his conditions as an intellectual (his field of research, his place in a laboratory, the political and economic demands to which he submits or against which he rebels, in the university, the hospital, etc.); lastly, the specificity of the politics of truth in our societies…I would like to put forward a few 'propositions' – not firm assertions, but simply suggestions to be further tested and evaluated. 'Truth' is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements. 'Truth' is linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extend it. A regime of truth.[19]

The thinking that lies behind this view is quite simple. Truth is not something to be discovered as a universally valid proposition which cannot rightly be doubted by anyone who is exercising his or her faculties of reasoning adequately; rather it is the outcome of the successful imposition of a set of rules according to which what is true and what is false is determined within a given society. According to this way of thinking, truth is a matter of negotiation among those who draw up the rules. Thus, in order to understand what counts as true or false, it is necessary to engage in historical research by which the political, social or cultural determining factors can be uncovered. As is well known, Foucault himself produced a set of such studies which investigated the history of the imposition of certain knowledge-criteria in given disciplines.[20]

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[17] Bertens, *The Idea of the Postmodern*, p. 8.

[18] Anthony Thiselton, *Interpreting God and the Postmodern Self: On Meaning, Manipulation and Promise* (Edinburgh, 1995), p. xi.

[19] Colin Gordon (ed.), *Power/Knowledge: Selected Interviews and Other Writings 1972–77* (New York, 1977), p. 132.

[20] M. Foucault, *History of Sexuality* (Harmondsworth, 1986/2); *Discipline and Punish* (Harmondsworth, 1979); *Madness and Civilization: A History of Insanity in an Age of Reason* (London, 1989); *The Birth of the Clinic: An Archaeology of Medical Perception* (New York, 1994).

Contextualism

So, knowledge (and also values, social norms and aesthetic styles) is relative to the interplay of dominant forces at particular moments of history. Claims to truth or credibility always have to be situated in relation to specific traditions within specific societies. Human differences are irreducible in the sense that they cannot be resolved by appeal to trans-cultural norms. All beliefs are contested, provisional and revisable.[21] According to Robert Hollinger,[22] the claim to objectivity is no more than a manifestation of ethnocentrism: all people are different, all lifestyles are radically contingent and, therefore, no judgement can be made. It is no longer necessary to find a legitimation for what one believes or does, as cultures are irreducibly pluralist.[23] The problem is simply that human beings cannot escape from their situatedness. They cannot move outside their context in order to check knowledge, truth or belief against an objective reality. Not only beauty, but also goodness and truth, are in the eye of the beholder.

Another form of contextualism is related to epistemic justification. According to this view, the truth-conditions for asserting or denying knowledge vary in certain ways in relation to changing circumstances. What vary are the epistemic standards that must be met in order for a statement to be true. Thus, in the case of a criminal act, an ordinary person might believe that an eye-witness account is true on the basis of the known reliable character of the person telling the story and the fact that the account is generally credible and coherent. However, in a court of law, under close cross-questioning, the standard of the admissibility of evidence may be much more rigorously drawn. Interestingly, contextualism is compatible with both a foundationalist and a coherentist account of true belief:

> The issue of which beliefs are properly basic (i.e. the issue of which beliefs are justified to a degree sufficient for knowledge independent of any support they receive from other beliefs), and/or the issue of how strongly supported a belief in the superstructure must be in order to count as knowledge or justified belief… or how strongly beliefs must cohere with one another in order to count as knowledge…or to count as justified, (may be thought to be) *a contextually variable matter*.[24]

Two observations may be in order at this point. First, contextualism may be based on a methodological confusion between truth-criteria and the conditions necessary for statements to be justifiably believable. Hence, in the case of a criminal judgement, the members of a jury may be justified in pronouncing the accused guilty, because they are justified in their belief that guilt has been proved beyond all reasonable doubt. Yet on appeal the sentence is quashed because, in the light of further evidence or deductive reasoning, the jury's conclusion is found to be unsound. In other words, the decision is being measured against the presumed existence of an invariant, not variant, standard of truth. Second, one might wonder why, if truth is totally situated, it would be contested. If it is contextually relative, presumably there would be no grounds on which to dispute its claims, precisely because the notion of truth requires for its substantiation some absolute stance from which all possible errors, biases, prejudices and predispositions can be judged and eliminated.

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[21] See, Steven Seidman, *Contested Knowledge: Social Theory in the Postmodern Era* (Oxford, 1998/2), p. 316.

[22] *Postmodernism and the Social Sciences* (London, 1994), p. 67.

[23] Zygmunt Bauman, *Intimations of Postmodernism* (London, 1992), p. 102.

[24] Keith De Rose, 'Contextualism: An Explanation and Defense', in Greco and Sosa, *The Blackwell Guide to Epistemology*, p. 190.

Sociology of knowledge

As a discipline, the sociology of knowledge has become associated with a form of contextualism. It is true that as a theoretical method, it aims to illuminate any body of belief accepted by any group of people by reference to social variables. Thus, it will seek to discover and analyse the processes by which beliefs are transmitted, how a consensus is arrived at and maintained, how disputes are handled and settled, and to what use beliefs are put. However, there is an underlying assumption that beliefs are socially constructed in a process of negotiation conducted against the background of particular social and cultural conventions.[25] What interests the discipline is to give an account of the generation and justification of beliefs (e.g. whether the globalising process of 'late' capitalism is beneficial or detrimental to the interests of the poor) in terms of one or another social theory (e.g. functionalism, structuralism, Marxism, feminism, post-colonialism), in order to lay bare the processes by which certain beliefs are justified or rejected. Given that sociology is ideally a descriptive, not normative, scientific discipline, not being in the business of making value judgements, all communities' theories of rationality or truth ought to be treated on a par by the sociologist. It is precisely the view of contextualism that

> it is not necessary (or indeed possible) first to discriminate between true and false theories or world-views, and then to explain the origin and acceptance of true theories along different lines from the false ones. All such developments are equally open to sociological analysis.[26]

So the sociology of knowledge concentrates on the fact of beliefs and the role they play in society. According to this view, truth and error are judgements made in accordance with shifting social norms. We can identify the social background, some of the reasons for the victory of certain beliefs over others, the way they function in different communities and the purpose which they fulfil. We cannot, however, adjudicate between the relative merits of alternative beliefs, for the abolition of the distinction between object and representation and between subject and object means that theories cannot be distinguished from the world.[27]

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[25] See, the argument in *Revolutions and Reconstructions in the Philosophy of Science*, op. cit., pp. 29ff.

[26] Kirk and Vanhoozer, *To Stake a Claim*, p. 46.

[27] See, the critical discussion of this approach to knowledge in Trigg, *Rationality and Science*, p. 153.

Scientific knowledge and historical contingency

A historicist approach to knowledge has been applied to that area that hitherto has seemed to be quite impervious to any notion that it could depend on relative perspectives, namely the natural sciences. In the modern scientific world-view a true grasp of the constitution of reality has been assumed to be totally independent of human choices.[28] The natural world presents itself to human intelligence in an utterly transparent way, once the right tools of investigation are applied. Scientific discovery, confirmed through repeated experimentation which seeks to eliminate all subjective considerations through a universally accessible process, is the outcome of the application of impartial methods:

> **Testability** is supposed to exclude non-scientific explanations that make reference to explanatory factors that cannot be subject to confirmation or disconfirmation by observation, experiment or other empirical data.[29]

In other words, a clear line of demarcation can be drawn between proper scientific explanations and pseudo-science. For Karl Popper the demarcation happens at the point at which a theory is *capable* of being falsified. For Larry Laudan, on the other hand, the boundary between the two explanations is set by universally valid criteria of confirmation/disconfirmation which are able to distinguish between true and false statements about the natural world.[30]

At one end of a spectrum this account of scientific procedures relies on a strong belief in the power of inductive processes to release knowledge of the natural order by following general rules of observation, data collection and proof.[31] This view is categorised as the 'internalist' explanation of the accumulation of scientific knowledge. Science is a progressive discipline which builds systematically on the successes of the past. 'The progress of science is about controlled happenings, independent of the way facts are described relative to different theories.' This means essentially that 'science stands outside historical relativity and is absolutely progressive'.[32] Discovery of the workings of the natural world is a matter of attending to the evidence in a continuous relationship with the work of scientists from the past working in the same field. It is a question of the gradual increase of understanding as building blocks are added until the puzzle that perplexed one generation is resolved by a later one.

Such a view has been criticised as being naïve and false to the way science has produced results in real life. Inductivism has been challenged as an adequate account of scientific method. In its place, some have suggested the method known as hypothetico-deductivism. On this view scientific discoveries are not derived directly from phenomena or generated from previously established results. Rather they result from proposing hypotheses and then testing predictions. ‘Scientific theories are sets of hypotheses, which are tested by logically deriving observable consequences from them. If these consequences are observed, in experiment or other data collection, then the hypotheses which the observations test are tentatively accepted.’[33] This way of looking at science allows it to invoke the existence of entities that are not open to normal observational procedures, for example ‘nucleus’, ‘gene’, ‘molecule’, ‘atom’, ‘electron’, ‘quark’, and ‘quasar’. In one sense, these entities are theoretically conceived as necessary to make sense of data that would otherwise remain inexplicable.

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[28] See, J. Puddefoot, 'The Relationship of Natural Order to Divine Truth and Will', in M. Rae, H. Regan and J. Stenhouse (eds), *Science and Theology: Questions at the Interface* (Edinburgh, 1994), p. 159.

[29] Alex Rosenberg, *Philosophy of Science: A Contemporary Introduction* (London, 2000), p. 29.

[30] See, Curd and Cover, *Philosophy of Science*, pp. 3–10, 48–53, 63–66, 77.

[31] Thomas Nickles, 'Discovery', in Olby et al. *Companion to the History of Modern Science*, p. 149.

[32] Hesse, *Revolutions and Reconstructions*, pp. 25–26.

In terms of the factors that lead to discovery there is no logical reason for suggesting that either inductivism or hypothetico-deductivism is more likely to produce an internalist account of the history of science. Nevertheless, it is easier to see why the latter might be more likely to provoke the alternative externalist description. The externalist view suggests that the sources of discovery are largely exogenous to research; that is to say, they arise out of factors outside of the normal experimental investigation of scientists. They are socially determined, in the sense that the historical context in which the scientist works influences the direction which the research may take. A notion of science that pays more attention to the initiating properties of theory than empirical observation is more likely to lend itself to the externalist version of history. There is more scope for contextual explanations of the genesis of hypotheses, which after all begin life as hunches or intuitions, than is the case with direct data.

In terms of the logic of discovery, there is much to be said for attributing new findings to both endogenous and exogenous determinants. Such an observation is non-controversial. No history of science would be adequate, unless it allowed both internal and external factors decisive roles in the origin of the disclosure of empirical information. However, in recent times, there are a number of historians and philosophers of science who wish to make the whole scientific enterprise much more dependent upon indeterminate social forces. There are a number of arguments.

What is often called the ‘strong theory of the sociology of science’[34] challenges the classical account of science on the basis of two historically ascertained pieces of evidence. First, it is averred that, in many cases of breakthroughs in scientific knowledge, a theory has been *underdetermined* by the evidence gleaned from observation. And yet, nevertheless, the theory has been accepted by the scientific community. Second, in the case where one theoretical paradigm is invoked to explain the inadequacies of another, there is almost always a residue which the new paradigm does not explain. Moreover, there may be aspects of research which the former paradigm appears to be able to deal with better than the new pretender. This observation has led to the view that paradigms are *incommensurable*.[35]

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[33] Curd and Cover, *Philosophy of Science*, p. 69.

[34] See, Hesse, *Revolutions and Reconstructions*, pp. 29–36; Olby et al., *Companion*, pp. 60–70.

The *underdetermination* thesis suggests that in a number of cases it is intrinsically impossible to decide between rival theories on the basis of available data. All actual or possible observational evidence would not be sufficient to determine which theory was correct. Thus, two apparently incompatible theories seem to be able to produce equally valid predictions and technological consequences: ‘both theories fare equally well on all epistemically viable principles covering theory choice’.[36] In response to the objection that the history of science does not seem to show these kinds of irresolvable theoretical disputes, precisely because, sooner or later, one theory will show its superiority in accounting for the data, defenders of the thesis will reply that theories are judged on other criteria apart from observation, namely simplicity, economy and, above all, consistency with other already adopted theories.

Underdetermination is compatible with an anti-realist, instrumentalist concept of science, which postulates that theories are devices for organising our experience of the natural world and enabling us to make satisfactory predictions. However, in this way of thinking theories are not formulated in such a way as to decide between the truth or falsity of the predictions. At a later stage of this study, we will evaluate the credibility of this thesis.[37] For the moment, it is sufficient to note that the thesis allows a radical historicist posture: ‘theory…is fixed by other (non-empirical) facts – non-epistemic ones, like bias, faith, prejudice, the desire for fame, or at least security, and power politics. This radical view (is) that science is a process, like other social processes, and not a matter of objective progress.’[38]

The notion of *incommensurability* is based on similar premises. As put forward by Thomas Kuhn and, in an even more radical form, by Feyerabend, this idea comes in two forms. First there is the affirmation that the terms that are used to frame rival scientific theories cannot be translated into a mutually comprehensible language:

> two men who perceive the same situation differently but nevertheless employ the same vocabulary in its discussion must be using words differently. They speak, that is, from incommensurable viewpoints.[39]

However, Kuhn was somewhat equivocal about the issue of untranslatability, arguing later that there can be shared understandings.[40] Hence, he moves on to a different version of his claim, namely that there is no neutral way of judging between alternative theories. The reason for this is that 'scientific theories or paradigms contain within themselves their own standards for success or criteria of appraisal'.[41]

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[35] These two powerful propositions are associated with the names respectively of Quine and Thomas Kuhn; See Quine, ‘On Empirically Equivalent Systems of the World’, *Erkenntnis*, 9, 1975, pp. 313–328; Larry Laudan, ‘Demystifying Underdetermination’, in C. Wade Savage (ed.), *Scientific Theories (vol. 14)* (Minneapolis, 1990), pp. 267–297; Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago, 1996/3).

[36] W.H. Newton-Smith, ‘Underdetermination of Theory by Data’, in Olby (et al.), *A Companion*, p. 534.

[37] See, pp. 167–168, 204–205.

[38] Curd and Cover, *Philosophy of Science*, p. 132.

[39] Kuhn, *The Structure of Scientific Revolutions* (Chicago, 1970/2), p. 200.

[40] Ibid., p. 202.

Kuhn's revolutionary theory of paradigm shifts appears to make the usual explanation of the success of science questionable. In adopting a paradigm, it has normally been assumed that scientists are looking for accuracy in representing facts, scope in accommodating them, simplicity in accounting for them and fruitfulness in predicting them. These are criteria that are truth-conducive.[42] It has always been assumed that through the classical method of observation, hypothesis-construction, prediction, experimentation, confirmation, modification or falsification, scientists come ever closer to the way the natural world or universe functions. Kuhn, however, argues that consensus in science is not built on the sheer force of the evidence, but on favourable conditions prevailing for the scientific community to agree to a new paradigm:

> Kuhn…dismisses the idea that we can show that our theories are getting closer to some objective, theory-independent truth. Nonetheless, he adds, this does not mean that science lacks objectivity. For objectivity consists, not in the correspondence of our theories to the world, but in the inter-subjective agreement about those theories among members of the scientific community, based on their shared values. Kuhn identifies objectivity and rationality with a special sort of social consensus based on the values that make science what it is.[43]

Kuhn's theory is based on a version of epistemic coherentism, where the plausibility of new paradigms depends in the first instance on their ability to be consistent to the internal rules which govern their functioning, and in the second instance on being able to persuade the defenders of rival paradigms to switch sides, on the basis of having demonstrated a more convincing coherence. In Susan Haack's words, the strategy shifts attention from the normative notion of *warrant* (based on the quality of the evidence for this or that scientific claim) to the descriptive notion of *acceptance* (based on the standing of the claim in the eyes of the relevant community).[44] This leads almost inevitably to the belief that scientific knowledge is socially constructed.

The outcome of the 'sociological turn' in describing the advance of science is the celebration of indeterminacy and the priority of human agency over controlling principles such as systematic proofs, objective laws, replicable findings and real objects.[45] It is almost as if an invariable rationality has to be made unstable for the sake of human independence and self-expression. Giving to scientific method a context-independent, epistemically-privileged, cognitive status appears to mean that the method has priority over the one who uses it. Science then is recast, not in terms of a self-determining, autonomous method, but in terms of the community who exploit it. Hence, as Roger Trigg observes, it is no longer decisive that the same experiment can be repeated in entirely different social settings by people holding quite possibly to discrepant moral values and divergent religious beliefs, and still produce exactly the same results, but that the same social settings be replicated in order for people to come to the same conclusions.[46]

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[41] Muhammad Ali Khalidid, 'Incommensurability', in Olby (et al.), *A Companion*, p. 173. The author of this article maintains that Kuhn then, even later, switched back to the linguistic version of his concept.

[42] Gower, *Scientific Method: A Historical and Philosophical Introduction*, p. 246.

[43] Curd and Cover, *Philosophy of Science*, p. 227.

[44] Haack, *Manifesto of a Passionate Moderate*, p. 92.

[45] Olby (et al.), *Companion to the History*, pp. 66–67.

Behind the belief that knowledge in the natural sciences is, like that of all other kinds of knowledge, constructed according to historically-relative insights, lies the fateful figure of Nietzsche. He believed that science merely interpreted and arranged the world,[47] but was incapable of explaining it, for it could never generate human meaning out of the survey of the empirical data of non-cognitive matter.

This is not yet the place to evaluate, either the evidence for, the reasoning behind or the consequences of the subjectivist strand in the account of science. It is important at this stage simply to recognise the profound transformation in thinking about the world that is represented by a constructivist reading of the history of science. It affects the question of a real world existing independently of human thought, the debate about the possibility of representing this world truly or constructing accurate models to show how it actually functions, the problem of the demarcation of genuine from spurious science, the possibility of distinguishing between cognitive and contextual matters and the criteria for judging what should count as knowledge, explanation and justification. Because of the likely consequences of adopting a historically contingent interpretation of science, the issues are massive. We return to them again in chapter 7.

Perspectivism

Another way of viewing the turn to historicism is through an appreciation of the grip that the subjective has on contemporary consciousness. If the search for an objective foundation for knowledge, independent of time- and place-limiting factors and personal beliefs or prejudices, was the hallmark of the modern world, the abandonment of any notion of a universally acceptable set of criteria for demonstrating the truth of propositions about the world is the trade mark of post-modern belief. All we can affirm is that we see things from our own point of view and the likelihood is that this perspective will be radically discontinuous or incommensurable with that of others. There is no mechanism for transcending our own individual subjectivities.

Just as modernity thought that its appeal to universally valid standards of truth, free from the encumbrance of unsubstantiated beliefs, heralded an emancipatory project, destined to rid the world of superstitions and other oppressive dogmas, so post-modernity is convinced that the turn to radical subjectivism is an immensely liberating force. The claim is that disclaiming all certainty about absolute standpoints enfranchises suppressed opinions, so that they too may add their voice to an open parliamentary debate about what is good in the way of belief. In contrast to the noetic autocracy of the modern project, imposed from above by the enlightened elite, what we have now is an emotive democracy from below. Human intercourse must be measured by the amount of pluralism it allows and the degree of uncertainty that it can tolerate.

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[46] Trigg, *Rationality and Science*, p. 161.

[47] See, Ian Markham, *Truth and the Reality of God: An Essay in Natural Theology* (Edinburgh, 1998), p. 105.

Perspectivism is predicated on the jettisoning of epistemic foundationalism – the belief that it is possible to discover basic axioms about reality that are self-authenticating, not needing other more basic postulates to validate them. Indeed, it is widely alleged that foundationalism is no longer tenable as an account of the way we acquire and defend knowledge.[48] In the place of foundationalism, we are offered today a coherentist (or holist) approach to knowledge, asserting basically that belief is justifiable or warranted as long as it is consistent within its own terms of reference.[49]

What is important about this view is that there simply is no system of belief or method that can arbitrate in epistemological disputes. The distinction between the two positions can be summarised by saying that, for coherentism, beliefs are basic *in* our ways of thinking and acting, they are not the bases *on* which we build them (foundationalism). That is to say, they are not established first, by means of an unassailable method, as a basis from which every other belief is constructed. Rather they are assumed, as a particular stance, and used as a means of justifying further beliefs and actions from within that distinct slant.

It is hard to see how this account of justification can escape from the charge of relativism, for if the beliefs, accepted as part of a coherent web of other beliefs, are the measure of assessment of their validity, they cannot be judged by external evidence, as if they were acting initially as conjectures or hypotheses. Every set of beliefs is monitored from within, according to the criteria thrown up by the tradition it represents. In other words, it is relative to its own internal system and cannot yield superiority to any other system, except by assuming the requirement of some form of adjudicating, foundational belief.

There are many social factors in the contemporary world that make some form of coherentism attractive. Perhaps the most formidable has been multiculturalism, a conviction that the best way of combating explicit and implicit racisms is to encourage a non-normative cultural diversity or difference. This has found one expression in the idea of 'hybridity' in post-colonial theory, namely that suppressed cultures have negotiated with or subtly undermined dominating cultures by subverting their homogeneity or 'purity' by intermingling elements from different cultures.[50] The important notion is that cultural practice is non-definitive, there is no universal cultural discourse that can arbitrate between belief patterns that happen to have developed historically in different ways out of diverse traditions. Each can maintain its own coherent position in relation to others, or can mutate into new positions. This allows a kaleidoscope of cultural patterns which, if one is positive towards the trend, enriches humanity, or, if one is negative, fragments into incoherence and the arbitrary defence of intolerable practices.[51]

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[48] In fact, this is not wholly so, in so far as highly reputable philosophers still argue for a (modified) form of foundationalism, albeit not in its original Cartesian configuration, cf., for example, Laurence Bonjour, *In Defense of Pure Reason: A Rationalist Account of A Priori Justification* (Cambridge and New York, 1998), *passim*. To this we will return at a later stage in the discussion; see, pp. 150ff., 226–227.

[49] 'Knowledge, on this sort of positive coherence theory, is true belief that coheres with the background belief system and corrected versions of that system. In short, knowledge is true belief plus justification resulting from coherence and undefeated by error.' Keith Lehrer, 'Coherentism', in Dancy and Sosa (eds), *A Companion to Epistemology*, p. 69.

[50] See, Bill Ashcroft, Gareth Griffiths and Helen Tiffin, *Key Concepts in Post-Colonial Studies* (London, 1998), pp. 118–121; Bart Moore-Gilbert, *Postcolonial Theory: Contexts,*

It has often been pointed out how thoroughly compatible this perspectivism is with the kind of liberal tolerance characteristic of late capitalist societies. One might say, for example, that expressivism reflects consumption and constructivism mirrors production. Hence, in a globalised society in which production is geared to multi-choice consumption, it is quite natural that belief systems and lifestyles should be constructed according to the expressions of individuals or sub-cultural groups. There is little more to believing than taste or utility. The value of belief is either in its aesthetic accomplishment or its therapeutic effectiveness. If it works for the believer, it should be tolerated by society. Such a stance, of course, allows (even encourages) beliefs to be constructed, promoted and sold on the open market. In this scheme of things, it would be quite invidious to claim that any particular brand is inherently better than any other: suitability and convenience are the main criteria for making choices.

The implications of historicism

Before moving on to the second major strand in the coming of a post-modern world, it is worth teasing out further historicism's core contentions by examining their seemingly logical consequences in the context of justifying ethical action. If one accepts that social values are derived from particular historical conditions in which, after prolonged struggle, some have survived, as presumably the fittest (in the non-moral sense of possessing greater strength or stamina), then one appears to be forced to the conclusion that whatever exists is legitimate. If values are acceptable as long as there is a consensus within a particular community that they can be practised, then ethical standards are determined by the power of persuasion. And, because there is no level playing-field between groups and communities, values will become a matter

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Practices, Politics (London, 1997), pp. 129–130, 195–196.

[51] A number of feminist thinkers have pointed out that, if pressed too hard, multiculturalism is incompatible with the protection of the rights of women, for a doctrine of equal respect for cultures easily masks the reality of unequal power within cultures, see, for example, Terry Lovell, 'Feminist Social Theory', in Bryan Turner, *The Blackwell Companion to Social Theory* (Oxford, 1996), pp. 309–310; Moore-Gilbert, *Postcolonial Theory*, p. 195, and the following detailed case-studies on the cultural oppression of women: Habiba Zaman, *Patriarchy and Purdah: Structural and Systemic Violence against women in Bangladesh* (Uppsala, 1998); Carolyn Nordstrom, *Girls and Warzones: Troubling Questions* (Uppsala, 1997); Amina Mohamoud Warsame, *Queens without Crowns: Somaliland women's changing roles in peace building* (Uppsala, 2002).

of the resources available to be deployed in the work of inducing others to adopt one's point of view.

Indeed, as an example of this principle functioning in practice, Richard Rorty cites 'conversation' as the only possible method for arriving at what might be considered 'good' ways of acting at any particular moment of history. The only constraint on our behaviour is our inability to convince our peers that what we believe or do is permissible.[52] Rorty wishes to create a revolution in the way people ought to think, by challenging almost every rational principle that has hitherto been taken as self-evident in Western intellectual history. He argues that it is high time to abandon what he calls the Platonic legacy of European culture and embrace a consistent pragmatism, whose chief mentor is John Dewey.[53]

Rorty's brand of pragmatism begins from the 'Darwinian' premise that human beings are fundamentally animals who have created and exploited language in order to be able to cope better with the environment in which they find themselves. This use of language is entirely instrumental, in the sense that it is a tool which enables human beings to enjoy more pleasure and less pain. Rorty distances himself completely from the whole logocentric, epistemological tradition that wants to maintain that the primary function of words is to represent truly an objective state of affairs, outside the human mind, will and emotions, to which they correspond.[54] Indeed, he wishes to be known as an anti-dualist who eschews all distinctions between finding and making, discovery and invention, objective and subjective, real and apparent, absolute and relative.

From the 'Darwinian' framework, Rorty takes the proposition that 'man is the measure of all things'. There simply is no other reality beyond the human in the natural world, in specific, contingent circumstances, to which appeal can be made: no universal human nature transcending time and space; no pure practical reason; no will of God. From the anti-dualist presupposition, Rorty concludes that beliefs and actions are correlates of each other:

> Beliefs and desires are not prelinguistic modes of consciousness, which may or may not be expressible in language. Nor are they names of immaterial events. Rather, they are… 'sentential attitudes' – that is to say, dispositions on the part of organisms…to assert or deny certain sentences…On this definition, to ascribe a belief to someone is simply to say that he or she will tend to behave as I behave when I am willing to affirm the truth of a certain sentence.[55]

In short, beliefs are habits of action. To ask whether they are true, or not, in the sense of whether they correspond to some esoteric notion of what is finally real, or whether they are about mere appearances, is to ask the wrong question. The right question is to ask whether they are the best habits of action for gratifying our desires:

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[52] Richard Rorty, 'Pragmatism, Relativism and Irrationalism', in Alcoff , *Epistemology: The Big Questions*, pp. 336–358.

[53] Richard Rorty, 'The Challenge of Relativism', in Jozef Niznik and John T. Sanders (eds), *Debating the State of Philosophy: Habermas, Rorty and Kolakowski* (Westport, 1996), pp. 31ff.

[54] Ibid., p. 38.

[55] Ibid., p. 39.

> To say that a belief is, as far as we know, true is to say that no alternative belief is, as far as we know, a better habit of acting.[56]

Rorty's pragmatism is an extreme form of historicism in that, quite explicitly, he relates beliefs and habits of action to specific contexts. The whole notion of universal validity is profoundly mistaken. Even the idea that there are better arguments for adopting one set of actions rather than another according to universally acceptable rules of rationality has to be dropped, for such rules are a chimera of the imagination of previous generations and today serve no useful purpose. Instead we should speak of 'the force of the better vocabulary, the force of the better language.'[57] But even then, it is not better in some kind of absolutist sense, it is 'the argument that works best for a given audience', 'what is justified to a given audience'.

Here, Rorty's discussion becomes more interesting, because he specifies the audience he has in mind:

> I want to use the term 'rationality' in a way which does not connect it with knowledge and truth but does connect it with the political and moral virtues of rich, tolerant societies and the superior sort of audiences which become possible in such societies.[58]

This statement leads Ernest Gellner to accuse Rorty, ironically, of abandoning all concern about history between, as he says, the Neolithic Revolution and George III and then building his pragmatism on a notion of benign progress as charted in the affluent sectors of the American community who benefited from post-independence society. For Rorty, apparently, there is little in the way of a dark side to the 200 years of the 'American Dream'. As a matter of fact, he agrees with Gellner's description of his relation to America: the ideal of 'a small New England town, with its security, prosperity, tolerance, and individualism'.[59] He does not agree with Gellner's further judgement that his views are wrong, because complacent, and therefore dangerous.

The importance of Rorty's brand of historicism is that it throws into sharp relief some very fundamental ethical issues. The claims he makes are difficult to argue against for, unlike some other historicists, he appears to revel in relativism and not to be in the least perturbed by his counter-intuitive suggestions. He astonishes and amazes by his propositions that beliefs may be true in so far as they are held for useful ends. He holds that (following William James) every human need has a *prima facie* right to be gratified and that (following Dewey) every evil is a rejected good, so that moral choice is always a matter of compromising between competing goods rather than a choice between the absolutely right and absolutely wrong.[60]

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[56] Ibid., p. 40.

[57] Ibid., p. 85. I don't think Rorty would object, if we used the term 'the better rhetoric'.

[58] Ibid.

[59] Ibid., p. 125.

[60] Ibid., p. 44.

Perhaps, the only thing that can be said is that, fortunately for Rorty and for the rest of us, he is not (cannot be) a consistent pragmatist. He invites conversation about what he refers to (borrowing from Derrida) as 'the messianic hope for justice'. By this he seems to mean the best of liberal, tolerant, democratic societies – those which, in Fukuyama's vision, mark the end of dialectics and, therefore, the end of History:[61]

> If you have democratic politics, as well as artistic and literary freedom, you do not need to think much about truth, knowledge and *Wissenschaft*.[62]

Justice is understood as the formulating of laws which would be agreed by reasonable people, i.e. those reasonable enough to join in a cooperative community. They are people like Rorty who believe in 'devising ways of diminishing human suffering and increasing human equality, increasing the ability of all children to start life with an equal chance of happiness'[63] and rooting out prejudices like blood feuds and homophobia. In general, he advocates the 'golden rule' – 'trying to do unto others as we would have them do to us.'

The end product at which Rorty wishes to arrive may be in some ways admirable. However, contrary to his own belief, he does not reach his messianic vision of justice through pragmatism. Quite the reverse! His anti-philosophical philosophy would open up some ludicrous possibilities. For example, his criteria of usefulness, the maximisation of pleasure and the minimising of pain, to judge the adequacy of beliefs, could justify the slave-trade (on which white America thrived economically). If the right question to ask is, 'for what purposes might it be useful to hold that belief?' the slave-owner could reply with all sincerity, for the purpose of allowing me a life of greater luxury and leisure, for this is 'the best available habit of action for gratifying my desire'. And, if Rorty were to respond that you should not gratify your desire 'if it conflicts with another human need', the slave-owner with perfect pragmatist credentials could reply that in 'the Darwinian struggle for existence' in which there is 'no sharp break (that) divides the unjust from the imprudent, the evil from the inexpedient' by good fortune I have managed to survive better than the slave. The latter, in any case, can be persuaded to believe that the (benevolently paternalistic) master-slave relationship is in his interests too for, in a hostile environment, this is the only way he will also survive.

Moreover, it is in the interests of the stability of society and, therefore, its long-term prosperity, that some should govern and others be governed. Ultimately, this will afford the greatest prospect of all being able to flourish. It is, of course, quite inconsistent with 'Darwinian' principles to speak about the slave's intrinsic dignity, or egalitarian ideals.[64] Such sentiments only make sense on the basis, say, of the ahistoricist, anti-pragmatic Christian doctrine of the *imago Dei*, the notion of universal human rights or Kant's categorical imperative that no one should be treated as a means to someone else's ends, but only as an end in themselves.

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[61] Francis Fukuyama, *The End of History and the Last Man* (London, 1992). It should be noted, however, that Fukuyama explicitly rejects both Rorty's deconstruction of philosophy and his pragmatic sentiment as a basis for conventional, liberal values; c.f., 'Reflection on *The End of History* Five Years Later', in Burns, *After History?*, p. 248.

[62] Niznick and Sanders, *Debating the State of Philosophy*, p. 27.

[63] Ibid., p. 44.

Terry Eagleton has argued cogently that the rock on which ethical historicism founders is its inability to face up to fascism:

> Its cultural relativism and moral conventionalism, its scepticism, pragmatism and localism, distaste for ideas of solidarity and disciplined organisation, its lack of any theory of political agency all tell heavily against it.[65]

This criticism is implicitly confirmed by Rorty's affirmation that 'the only sense in which we are constrained by truth is that…we can make no sense of the notion that the view which can survive all objections might be false. But objections – conversational constraints – cannot be anticipated. There is no method for knowing *when* one has reached the truth, or when one is closer to it than before.'[66] Seeing that fascism did survive objections in an industrially-advanced, intellectually sophisticated, European nation, or even worse that the objections were not forthcoming in a sufficiently cogent form to persuade the majority of the population, must mean (on Rorty's declaration) that fascism only became false, when Hitler's regime was defeated by superior force.

One more example should suffice to show the utter incoherence between the kind of society Rorty eulogises about and the anti-dualist, pragmatist stance that he adopts by way of dismissing all notions of the given. It is no surprise that Rorty, having dismissed the correspondence theory of truth, believes that the 'question about coherence is the only question about the belief's truth that we know how to discuss'.[67] Thus, 'persuading somebody to believe something is a matter of justifying it to him or her – showing how it fits in with his or her other beliefs better than the contradictory belief'.[68] Under this principle, there seems no good reason why the (former) Afrikaaner doctrine of racial segregation is not justified. The doctrine fitted very well with other beliefs: namely that the separate development of races and the privileged status of some races over others was ordained by God and that, consequently, it would be an act of disobedience to the divine will to allow miscegenation to take place. Moreover, the Afrikaaner could argue, on pragmatist grounds, that to abolish apartheid would decrease his pleasure, increase his pain and, in all likelihood, given the stability of the apartheid regime, do the same for the black Africans.[69]

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[64] At the most one might say that modern humans have decided to accord other humans a 'sacred' character, because this is the best way of ensuring the replenishment of the gene pool. But, then, their value is not *intrinsic*, in the sense upheld by Ronald Dworkin: 'Human life has an intrinsic, innate value; that human life is sacred just in itself…(and that) abortion is wrong in principle because it disregards and insults the intrinsic value, the sacred character of any stage or form of human life', quoted from *Life's Dominion* (New York, 1993), p. 11 in Richard Brandt, *Facts, Values and Morality* (Cambridge, 1996), p. 117. Indeed, it is not possible, as we shall argue at a later stage, to create an ethic that satisfies the human experience of personhood out of an impersonal, chance process of survival through selection.

[65] Terry Eagleton, *The Illusions of Postmodernism* (Oxford, 1996), p. 134.

[66] 'Pragmatism, Relativism and Irrationalism', p. 341.

[67] Niznick and Sanders, *Debating the State of Philosophy*, p. 63.

[68] Ibid.

In the circumstances, slavery, fascism and apartheid are habits of acting found useful by significant groups of people and, on pragmatic, contextualist grounds perfectly justified. In fact (in objective reality), they are just (absolutely) evil. However, we can only legitimately come to this conclusion by acknowledging a clear distinction between warranted belief and true belief.[70] Unfortunately, the historicist perspective can give approval to habits of action that should be universally condemned. It is simply capricious to say (with Dewey) that every evil is but a lesser good and every rejected belief has some merits, in that it has been found useful for somebody sometime.[71]

If justice is what reasonable people who wish to join in a cooperative society are prepared to accept, and if there is no argument to convince those who refuse this invitation to be more reasonable and if, finally, the only conclusion is to withdraw from them and say, 'sorry we cannot work with you',[72] for the sake of Rorty and the rest of humanity we should be completely justified in saying *et tu Brute*.

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[69] In a situation like the move to democratic government in South Africa in 1992, how would it be possible to measure whether the sum total of human happiness had been increased or diminished? One could think of compelling evidence that would support either case. The moral issue cannot be adjudicated on pragmatic grounds.

[70] It is a matter of demonstration that, in a number of cases, adhering to the truth, both in the short and long term, can have detrimental consequences in terms of the happiness benchmark, see, Stephen Nathanson, *The Ideal of Rationality*, pp. 83–89. For example, confronting a child with the truth of his or her bullying activities or inappropriate friendships may be very painful for parents, leading to a significant breakdown in relationships.

[71] Niznick and Sanders, *Debating the State of Philosophy*, p. 61. This statement could only be true on the basis of a utilitarian belief and, therefore, is clearly a circular argument in which the premises and the conclusion are identical.

[72] Ibid., p. 125.

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Chapter Six

The Turn to Language

Preliminary remarks

The 'linguistic turn' represents a categorical questioning of certain assumptions that underlie 'modernity'. It presents a formidable challenge to the notion that language represents, pictures or denotes objects in an external world with unequivocal accuracy. It also disputes the common 'realist' claim that sentences express true or false statements by virtue of their correspondence with an objective, directly accessible state of affairs, and can therefore be shown to be valid or invalid by appeal to the facts of the matter.

The new perspective on language, to be explored in this chapter, springs from a reaction against the pretensions of empiricism to accept as meaningful only those statements, which are open to actual or potential verification, or possess criteria for their falsification. It proposes a way of breaking the dichotomy between subject and object, which is the legacy of Cartesian dualism, and of the unbridgeable gap between things-in-themselves and things-as-appearances created by Kant. One commentator refers to this move as a 'second Kantian revolution'.[1] In other words, it is a brave attempt to overcome the transcendent and irreducible subject, thus restoring the subject meaningfully to the rest of the natural order.

As a strong reaction to the Enlightenment trust in the explanatory power of reason to encompass the whole meaning of the human world, the post-modern 'linguistic turn' in some respects follows in the wake of, and takes its cue from, the Romantic movement of the eighteenth and nineteenth centuries. Some time before the turn to language became a self-conscious reflective movement in philosophy, language began to take on a different meaning for some thinkers identified with Romanticism. Thus, for example, Herder 'made exalted claims for language, describing it as the faculty which distinguished human beings from beasts, and elaborating Rousseau's notion that man's first language was poetry…– that it was the true voice of feeling'.[2] This is an interesting anticipation of the later Heidegger's appeal to poetry as the power of speaking which in some way manifests 'Being'.

However, it was Dilthey who first began systematically to encourage a new approach to the use of language in the rediscovery of texts. He saw his work as a deliberate response to the positivistic empiricism that claimed that the mode of explanation practised by the natural sciences was the only legitimate model of enquiry.

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[1] Rose Mandel, 'Heidegger and Wittgenstein: a Second Kantian Revolution', in Michael Murray (ed.), *Heidegger and Modern Philosophy* (New Haven, 1978), p. 259.

[2] Maurice Cranston, *The Romantic Movement*, p. 23, commenting on Herder's book, *Origin of Languages* (1772).

He reintroduced the importance of historical consciousness for the understanding of meaning in human affairs, with universal history as the horizon of knowledge. The natural sciences, he believed, provided too narrow a field for understanding the world and had, at the least, to be supplemented by the cultural or social sciences.[3]

Over against the excessive emphasis on the representative power of language to name objects and the subject's disassociation from the world being observed, the new movement has turned its attention to language itself as the measure of intelligibility.[4] Far from there being a neat, one-to-one correspondence between the human use of language as signs and symbols and facts in reality, the latter are always already in some sense constructed by language.[5] In the 'linguistic turn', then, philosophy seeks to solve its perennial problems of truth, rationality, meaning, and the one and the many by examining language itself.[6]

The philosophy of language becomes now the most serious topic for philosophy. It follows the presumption that there is no fixed meaning for the vocabularies we use. From an uncomplicated, assumed use of language to denote objects distinct from human subjectivity language itself now becomes problematical. Many thinkers have satisfied themselves that there is a considerable epistemic rupture between words and things: they are 'no longer simply different; they are now bereft of any correlation whatsoever, be it one of resemblance or representation…words function as a self-referential discourse of a transcendental human subject within itself'.[7] There is now no reality apart from language, for language only refers to itself. Its meaning is internal to itself.

In the course of the twentieth century, among those who saw the task of philosophy as being an investigation of the way language functions, several different proposals arose. Simplifying the issues somewhat, for the sake of being able to achieve an overview of the theme in a limited compass, it is possible to identify two major traditions: the Continental and the Anglo-American. Each one was dominated by one philosopher of immense stature – Heidegger and Wittgenstein respectively. Although contemporaries, there is little evidence that either explored or responded to the thinking of the other. Each was heir to and, in their more significant works on language, reacted against different philosophical interests. Heidegger followed Dilthey's preliminary step into the issue of interpretation and Husserl's phenomenological enquiry into knowledge; Wittgenstein inherited the approach to language and logic, pioneered by Frege and Russell and the so-called 'common sense' philosophy of G.E. Moore.

Later, both the Continental and Anglo-American traditions gave rise to further sets of thinkers. In the German context, Gadamer developed a sophisticated reflection on hermeneutics. In the French context, structuralism and post-structuralism became leading philosophies of language, which led eventually to the radical notions of 'textual anarchism'[8] and feminist linguistics.[9] In Britain and the USA, 'ordinary language' philosophy, largely identified with Oxford, became significant for a time, as did the writings of Davidson, Grice and Quine on other aspects of the use of language.

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[3] See, Paul Ricoeur, 'The Task of Hermeneutics', in Murray, *Heidegger and Modern Philosophy*, pp. 145–150.

[4] See, Norris, *Reclaiming Truth*, op. cit., p. 8.

[5] See, Norris, *Against Relativism*, op. cit., p. 51.

[6] See, Nancey Murphy, *Beyond Liberalism and Fundamentalism: How Modern and Postmodern Philosophy set the Theological Agenda* (Valley Forge, 1996), p. 38.

[7] Kearney, *Modern Movements in European Philosophy*, p. 288.

This chapter will attempt to do justice to these varying expressions of the turn to language. However, because of their abiding influence, not only on philosophy but also other disciplines, more space will be devoted to Heidegger and Wittgenstein than to other thinkers. Alhough, as we have stated, they hardly touched one another directly, they were united in at least two important respects; first, they saw the work of philosophy to be an enquiry into the nature of meaning and the meaning of meaning; secondly, they rejected the hitherto dominant concern with questions of epistemology to take up afresh issues of ontology.

Heidegger: the question of Being and the answer of the Poet

Although Heidegger has been hailed as the philosopher who 'has exercised more influence on the direction of Continental philosophy during this time than any other single figure',[10] his concepts are hard to understand and interpret. In a brief account, like this one, it would be relatively easy to misrepresent his thought. The following description and analysis of what appear to be his major concerns and how he addresses them is the result of my best attempt to penetrate his ideas. If justice is not always done to his thinking, I draw some comfort from the knowledge that others too find him difficult to fathom, and in the awareness that the issues he was tackling are by their very nature enigmatic and uncertain.

Heidegger wished to re-envisage the major concern of philosophy. He believed it was necessary to challenge 'the whole tradition, from Descartes to Husserl, which construes human beings as intellectual "spectators" of a world, their own bodies included, to which they are at most contingently related'.[11] Questioning the priority given to the imagery of seeing is an important aspect of Heidegger's thought, as we shall elucidate later. He links it to the way the scientific enterprise treats the world as an object of the mind. A decisive feature of modernity is the metaphysics of subjectivity, the self-enclosed 'I', in the certainty of its intellectual powers, defining and explaining the meaning of the natural world. The inevitable outcome is technological manipulation of what lies to hand. The otherness of the environment is swallowed up by its immediate usefulness in the promotion of human well-being. Thus, for example, the mountain is not revered as a mountain, but as a deposit of important minerals.[12]

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[8] Ibid., p. 329.

[9] Represented by people like Julia Kristeva and Luce Irigaray.

[10] Murray, *Heidegger and Modern Philosophy*, p. vii.

[11] Cooper, *World Philosophies; An Historical Introduction*, p. 426.

[12] Paul Standish, *Beyond the Self: Wittgenstein, Heidegger and the Limits of Language* (Aldershot, 1992), p. 226.

In place of the knowledge to be gained by scientific investigation, Heidegger proposes to 'work out the question of the meaning of *Being*…concretely'.[13] This is a move from epistemology (thinking) to ontology (giving an account of and preserving existence). Heidegger contrasts the two by a play on words:

> For Heidegger the most essential form of thinking (Denken) is thanking (Danken), that is, an openness to and guardianship of the truth of Being. Western metaphysics, as the history of the forgetfulness of this truth culminates in the current reign of technocratic positivism where thinking degenerates into a system of efficiency, self-assertion, domination and security…In contrast to such technocratic thinking, the *Denken* which Heidegger counsels is a non-objectifying, non-systematic, non-calculative receptivity which enters the play of Being by giving thanks.[14]

Being (*Sein*) is an intricate concept which cannot be understood by means of a simple, single definition. It is the intangible ground or presence of everything existing in reality. It is the presupposition of all being (*seind*), that which is encountered in the ordinary things of life. Heidegger wished to begin his project with the everyday experience of life, not with the already rationally organised account of the world provided by a scientific methodology. Being is, first and foremost, 'being-in-the-world', but it is not lived as self-consciousness (Husserl), but as consciousness of Being, that which 'comprises the a priori structures necessary to explain how it is possible that man can apprehend the Being of things'.[15]

Human beings exist as *Dasein* ('being-there'). They are in the world as they happen to be. They exist in two modes: *existentiell*, the way they engage with the factual nature of the world around them, and *existential*, with a concern for the meaning of their 'thatness'. They are, however, unique beings in the world in that only for them is Being a question:

> Only Dasein can both ask questions about existence and the nature of entities (including itself), and only Dasein must in consequence already have an understanding of its own Being in order even to pose such questions.[16]

What most characterises Being is its time-bound nature (*Zeitlichkeit*). This has two consequences. First, Being is circumscribed by the temporal horizons of existence, remembering and re-enacting the past and proposing the future. Between the past and the future, life is a project or a possibility. As the past is no longer and the future has not yet come, human life is also marked by a lack; we are what we are *not*. Secondly, there is nothing beyond temporal existence. Being is irremediably inseparable from experience, into which it is 'thrown'. There is not an 'outside-the-world'. This emphatic emphasis becomes supremely important in the development of Heidegger's thought:

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[13] *Being and Time* (Oxford, 1962), p. 1.

[14] Kearney, *Modern Movements in European Philosophy*, p.44.

[15] Murray, *Heidegger and Modern Philosophy*, p. 262.

[16] Peter Sedgwick, *Descartes to Derrida: An Introduction to European Philosophy* (Oxford, 2001), p. 114.

> The Being of Dasein is absolutely determined by time. We simply *are* in time, and our existence cannot be separated from this 'primordial' condition. It is no use, in other words, looking for something essential about what makes us the kind of entities we are 'outside' the realm of time.'[17]

It follows from this awareness that Dasein is 'Being-towards-death'. Death is the end of all possibilities. We live in anticipation of death and the nothingness that it signifies. It produces *angst* (anguish/dread), a condition not to be understood either existentially or psychologically,[18] but rather as a state of mind which calls to authentic living. *Angst* is a call to assume my responsibility as a being-towards-death as the one and only opportunity vouchsafed to me by my being-in-the-world. It is to live facing resolutely my ultimate 'nothingness' (*Sein-Nichts*). Heidegger conceived this as a movement from 'beings via anxiety to Nothingness, and thus to being'.[19] Inauthentic existence is to deny this freedom that I have to come to terms with my ontological condition of 'homelessness' (*Unheimlichkeit*). It is to conform to the expectations of the 'They' (*das Man*), to experience life as a series of distractions. Death is a summons to face reality actively, to 'take care of' the question of Being.

Heidegger's quest for the meaning of Being seems to end in an utterly heroic desolation. It should not be surprising, then, that the project undertaken in *Being and Time* was not realised. An intended sequel was never written. Instead, Heidegger developed an approach to language which rather reversed the first phase of his philosophy. This second phase is a turn away (*Kehre*) from a search which ultimately discovers nothing (or, perhaps, an 'absolute Nothing'[20]) to a more passive state of 'Being-ready-for-disclosure'. This is one aspect of the post-modern 'turn to language'. It is significant in all sorts of ways for the confirmation of the main thesis of this book.

Heidegger identified four basic ways of using language, of which the latter is the most significant for the purposes of this analysis: assertion (*Ausage*); interpersonal discourse (*Rede*); idle talk (*Gerede*), and saying (*Sagen*). The first kind of language is characteristic of scientific discourse, the representation and classification of objects 'present-to-hand' (*vorhanden*). This is an abstract and lifeless form of words, which are used as things to describe other things. The second aspect of language enables human beings to share the world together, to appreciate experience as something which is 'ready-to-hand' (*zuhanden*), that is useful for ordinary daily living. The third type of language is disparagingly referred to as chatter, it is the speech of inauthenticity, part of the strategy of escaping from our responsibility to live our lives for ourselves, rather than through others. The final category is language as interpretation of meaning. It is most forcefully present in the language of poetry.

Sagen is the language which discloses the truth of Being as humans let go of their presumed control on an objective world and listen to what is to be heard. There are two major shifts of emphasis in this second phase of Heidegger's thought. In the first place, he moves from language about statements of what appertains in the world to language about Being, where it is to be hoped that Being will come to light through language. In the second place, language is no longer that which corresponds to Being and, therefore, in some sense the discovery of Being; rather, Being comes to light through language or, to put it more directly, Being *shows* itself through the language of poetry. Poetry is given the status of being the revealer of Being:[21]

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[17] Ibid., p. 117.

[18] Murray, *Heidegger and Modern Philosophy*, p. 153.

[19] Stanley Rosen, 'Thinking about Nothing', in ibid., pp. 132–133.

[20] See, ibid., pp. 133–134.

> The essence of art is poetry. The essence of poetry, in turn is the founding of truth.'[22]

By truth (Greek, *aletheia*) Heidegger understands the 'unconcealment' of Being, the bringing of it into the light. The reversal of the role of language is summed up by Ricoeur:

> The passage to the later philosophy of Heidegger…will ignore Dasein and begin immediately with language's power of manifestation…Heidegger inverts our ordinary, and even our linguistic, tendency to make the operation of speaking primary…To understand is to hear. In other words, my first relation to speech is not that I produce it but that I receive it…This priority of hearing marks the fundamental relation of speech to the opening of the world and to the other.'[23]

In a sense, humans stand helpless before the world; no form of enquiry can ever reveal the *mystery* of Being.[24] They can only wait and hope for the *mystery* of disclosure. Paul Standish calls this a 'piety towards Being'. The language being used gives the impression of some kind of transcendent manifestation from beyond Being-in-the-world. However, as we have seen, there is no beyond. We should, then, perhaps close our eyes (as if in prayer), because by looking (scientific observation) we do not *see* (in the sense of understand), keep silent and listen. But what is there to listen to? The answer has to be: only the most creative artistic geniuses of any age.

Heidegger, without casting it in these terms, could not have plumbed more potently and more poignantly the depths of the dilemma caused by the split between the 'word' and 'world' of the Creator. It is not surprising that Peter Sedgwick follows Adorno in interpreting Heidegger's conceptualisation of *Dasein* as individual (or, perhaps, later as collective) consciousness.[25] In the last analysis, given Heidegger's naturalist presupposition, there is nothing more profound that is there. It is right to balance the faculty of seeing (pro-active and aggressive) with the faculty of listening (re-active and reticent) as a balanced approach to an explanation of the whole of experience, but the latter has to be a response not so much to a speaking as to a Speaker; otherwise, we end up in the solipsism of listening to our own kind. It is also, surely, a mystification to pretend that the meaning of perception is any closer to hand if we use capital letters (at least in other than the German language) to express our thought (Being, Language, etc.). Such a use gives an illusion that *something* of greater consequence, gravity and significance lies beyond mere human happening; whereas, in reality, the universe remains stubbornly silent beyond the linguistic intercourse of our own voices.

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[21] Kirk and Vanhoozer, *To Stake a Claim*, pp. 49–50.

[22] Heidegger, 'The Origin of the Work of Art', in *Basic Writings* (San Francisco, 1977), p. 186.

[23] 'The Task of Hermeneutics', p. 155.

[24] Standish, *Beyond the Self*, p. 12.

[25] Sedwick, *Descartes to Derrida*, p. 134. According to Rose Mandel, 'Heidegger and Wittgenstein' , the celebrated turn of Heidegger is a move 'from the analysis of Dasein toward an understanding of how men and things belong together in a unitary world. The questions about Being, time, and man arise again as he tries to articulate *the transcendental source* of this "belonging together,"' p. 270 (my emphasis).

Gadamer: a matter of interpretation

At the end of his life, then, Heidegger comes to accept that the only possible way out for humanity is through a kind of semantic mysticism, in which an impersonal 'What is' is given the semblance of being a personal revelation through the power of poetic language. Language, therefore, may be said to unveil something that is there. This means that language is always already an interpretation. Other philosophers have developed the hermeneutical dimensions of philosophical enquiry. The most well-known is Hans-Georg Gadamer, but also includes others like Paul Ricoeur and Roland Barthes. Those working within a 'feminist' framework of understanding, such as Julia Kristeva and Luce Irigaray, also fall into this category.[26]

Gadamer built on Heidegger's phenomenology of being. Like him, he turned his attention to language as the key to interpreting and, therefore, understanding texts as revealing the nature of the truth of human, historical existence.[27] Also, like Heidegger, he moved away from associating understanding too closely with the use of language in the exact sciences. He, too, recognised that, by privileging scientific terminology as a standard for arriving at meaning, the attempt was being made to free the human subject from the contingent and circumstantial nature of being in the world. The result was the reification of nature, the attempt to stand outside history and isolate the reflecting subject from the vicissitudes of immersion in specific contexts. Thus, he asks, as the main question for philosophy, 'how hermeneutics, once freed from the ontological obstructions of the scientific concept of objectivity, can do justice to the historicity of understanding'.[28]

Gadamer's main contribution to the turn to language comes from his belief that understanding can only be achieved by overcoming the subject-object dichotomy through the merging of the horizons of the interpreter and the text.[29] Interpretation involves the subject as much as it does the object. In the act of understanding a text, the interpreter is also seeking to understand himself or herself. The text is not merely an object to be apprehended, but a subject that cross-questions the reader. Moreover, texts always supply a surplus of meaning that move beyond the bounds of the author's intent. In this sense, language is, to a certain degree, freed from its original context to engage with the life-world of the reader in order to produce ever new meanings:

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[26] Space does not allow an adequate treatment of views under this designation; see, Kearney, *Modern Movements in European Philosophy*, pp. 332–342; Sedgwick, *Descartes to Derrida*, p. 282.

[27] Kearney, *An Introduction to Continental Philosophy*, p. 105.

[28] Hans-Georg Gadamer, 'The Historicity of Understanding as Hermeneutical Principle', in Murray, *Heidegger and Modern Philosophy*, p. 161.

[29] Text is to be understood as a reference to 'all fields of human life and inquiry', Kirk and Vanhoozer, *To Stake a Claim*, p. 10.

> It is this all-encompassing horizon of language and meaning, rather than the author's intentions, which ultimately determines meaning. Language speaks through individual subjects as much as they speak through language.'[30]

The recognition of the contextual nature of the pursuit of knowledge in language and past history led Gadamer to question an objectifying understanding of reason. If the reasoning person is irrevocably conditioned by his or her pre-judgements, conceptual commitments and prior intellectual frameworks, then reason may not be neatly set against tradition or even prejudice. A fresh ontology of knowing will emphasise the community dimension of understanding bounded by authority, custom and convention. It is in the defence of tradition, as a necessary part of the interpreter's pre-understanding, that Gadamer incorporates a critical limit to interpretation. He thus rejects later notions that understanding is 'interpretation all the way down'. The text is always already part of an interpretative tradition that places limits on speculative meanings. Thus, it is possible to misunderstand a text and be corrected.[31]

Gadamer seeks to steer a middle way between a 'scientifically' objective and univocal reading of the text's meaning, in which the interpreter dominates the text through his or her superior knowledge and wisdom, and a 'romantic' reading of past texts, in which they are privileged just because they are old and therefore can restore some of the wisdom lost in the rationalism of the Enlightenment.[32] Engaging with texts is a matter of dialogue or conversation, even dialectics, in which pre-judgements (Gadamer uses the word 'prejudice' to mean a provisional verdict[33]) are recognised, not to be eliminated, but added to the task, in order to enrich understanding:

> If we want to do justice to man's finite, historical mode of being, it is necessary to fundamentally rehabilitate the concept of prejudice and acknowledge the fact that there are legitimate prejudices. Thus we can formulate the fundamental epistemological question for a truly historical hermeneutics as follows: what is the ground of the legitimacy of prejudices?[34]

Meanwhile, the point about conversations is that we do not know in advance what direction they may take. We 'fall' into them and are even led in ways that we may, or may not, appreciate. If we are open to hearing the meaning of the other, something new may emerge which leaves us different persons.[35] Language plays a pivotal role in dialogue:

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[30] Kearney, *An Introduction to Continental Philosophy*, p. 112.

[31] 'The Historicity of Understanding', pp. 163–164.

[32] Ibid., p. 168.

[33] *Truth and Method* (London, 1989/2), p. 270.

[34] Ibid., p. 277.

[35] Ibid., p. 383.

> Language in which something comes to speak is not a possession at the disposal of one or other of the interlocutors. Every conversation presupposes a common language, or better, creates a common language…Hence reaching an understanding on the subject matter of a conversation necessarily means that a common language must first be worked out in the conversation…To reach an understanding in a dialogue is not merely a matter of putting oneself forward and successfully asserting one's own point of view, but being transformed into a communion in which we do not remain what we were.[36]

Gadamer shares Heidegger's concern with listening, because through it we can situate ourselves appropriately in the universal tradition of all writing and, thus, be open to transcendent meaning:

> There is nothing that is not available to hearing through the medium of language…Hearing is an avenue to the whole because it is able to listen to the logos…The language in which hearing shares is not only universal in the sense that everything can be expressed in it. The significance of the hermeneutical experience is rather that, *in contrast to all other experience of the world*, language opens up a completely new dimension, the profound dimension in which tradition comes down to those now living.'[37]

Language seems to have a mystical quality as the ontological origin of the significance of being. Gadamer comes to this point, having analysed different modes of language at great length:

> In all the cases we analysed – in the language of conversation, of poetry, and also of interpretation – the speculative structure of language emerged, not as the reflection of something given but as the coming into language of a totality of meaning…We can now see that…the coming into language of meaning, points to a universal ontological structure, namely to the basic nature of everything toward which understanding can be directed. *Being that can be understood is language*.'[38]

Some have seen Gadamer's hermeneutical concerns as leading towards historicism with its denial of a transcendent critical perspective and its emphasis on a particularist, descriptive and contemplative method rather than a search for universal, abstract and explanatory laws of human life. Thus, he has been criticised for articulating a philosophy which could easily become compliant towards politically reactionary ideas and movements.[39] This may not be fair, in that, as we have seen, Gadamer asserts that tradition can exercise a critical restraint on the creation of meaning and, in any case, there is no critique, wholly presupposition-free (i.e. without *pre-judice*).

Contemporary moves in the Continental approaches to language, in an attempt to overcome the objective-subjective dichotomy, appear to have shifted decisively in the direction of the subjective. Attempts to locate understanding and meaning in the wider communal horizons of tradition and history may help to overcome individualism but gives no necessary escape from subjectivism. This is borne out in the post-structuralist development towards the ‘deconstruction of linguistics’. Roland Barthes is a representative of the view that language has to be liberated from all fixed meanings. He believes that literature is a privileged medium of revolt, ‘because it enables us to experience words not as simple instruments (as the scientific attitude dictates) but as…an infinitely playful performance of signification to be hedonistically savoured in all its pluri-dimensional richness. Literature, in short, reconverts knowledge into desire.’[40]

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[36] Ibid., pp. 378–379.

[37] Ibid., pp. 462–463 (my emphasis).

[38] Ibid., p. 474 (emphasis in the original).

[39] See, Merold Westphal, 'Hermeneutics as Epistemology', in Greco and Sosa, *The Blackwell Guide to Epistemology*, pp. 428–429.

Derrida: différence and différance

Derrida is known for his project of ‘deconstruction’. His apparently iconoclastic view of the interpretation of texts has caused considerable controversy, not least perhaps because his own texts seem to invite multiple construals. What he says he is doing and what he appears to be doing also give the impression of being at odds. He is, in one sense, firmly in the post-phenomenological tradition of Heidegger and Gadamer. Thus, for example, he disputes the priority of fixing the ‘intention’ of the author as a guide to meaning. Like them, he strongly contests the assumed metaphysical tradition of the West, which privileges the metaphysics of presence, i.e. the immediate presence to thought and language of a given reality through representation. This he calls a ‘logocentric’ approach to thinking which privileges the speaking subject (who defines the essence or substance of speech) over the written word (which represents an absence, in that the author is not present to control meaning).

Derrida also reacts against the tradition of structuralism, which took its origins in the semiology of Saussure. He accuses structuralism of an ‘anxiety about language’, because it seeks to find a fixed meaning through an analysis of signs and symbols and recurring forms within language itself. According to Saussure, language possesses a (universal) set of structures that precede conscious thought and speech, being determined neither by thought (subjectivity) nor the external world (objectivity). This account, however, does not consider the polysemy of natural languages: ‘the trait that our words have more than one signification when they are considered outside of their use in a determinate context’.[41]

It is the recognition of the ambivalence both of signification and context that led Derrida to his method (or ‘play’) of deconstruction. He rejects the antithesis between opposite concepts, such as the outside and the inside, the transcendental and the empirical, truth and error, good and evil. For, in the privileging of one side, meaning becomes self-substantiating. It is defined by that which it displaces, and this becomes its determinate signification. A view based on antithesis presupposes a rigidity of sense such that it suppresses possible hidden meanings.

In order to tackle the overwhelming desire in Western metaphysical history to identify the sign and the signified, Derrida invents the neologism, *différance*, intending a play on the French word, *différer*, which means both ‘to differ’ and

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[40] Kearney, *Modern Movements in European Philosophy*, p. 330.

[41] Ricoeur, ‘The Task of Hermeneutics’, p. 142.

'to defer'.[42] He intends to delay or suspend the established meaning of language defined in terms of that which it is not. Language has a metaphorical as well as literal meaning. The ambiguities, unpredictability and undecidability of ordinary language cannot be ignored. Signs are transferable from one context to another. Their designation or use, then, changes:

> Precisely because the meanings of spoken signs are engendered by the differences which emerge among them, the possibility of speech as an immediacy of self-presence is ruled out from the outset. Speech can only presume to presence by repressing the differentiating structures which allow it to function in the first place.'[43]

The strategy that Derrida employs in opposing the metaphysics of presence has caused much discussion and not a little polemic. Strategy is an appropriate word to use of Derrida's intentions, for he sets out with a particular scheme in mind, driven by a distinct purpose. He wishes to show that the dominant tradition in Western philosophy has, as it were, cheated in its approach to language by claiming too much. Philosophers have tended to use language as if its meaning was unequivocal, as if language could be controlled by the immediate intention of the one who utters words and sentences. Meaning is presumed to reside in the interpretation given by the speaker of his or her own sentences, in accordance with objective standards of linguistic reference that can be immediately and unambiguously present to the mind or consciousness.

Derrida's design is to destroy confidence in the ability of the human subject to exploit sign systems by imposing upon them rigid designations and distinctions and then to claim that rationality or intelligibility is circumscribed by pre-existing codes of meaning:

> For Derrida, 'presence' (and its binary opposite, 'absence') is the root idea in Western culture that knowledge begins by just *seeing* the object 'right in front of us', and then comparing 'representations' (i.e. interpretations) of the object to the object actually 'present' to us…Without presence, there can be no representation, and without representation there can be no stability of meaning, that is, no way to decide on the one correct meaning, or interpretation, and therefore no way to determine intersubjectively the final and complete truth about anything, once for all.'[44]

Derrida seeks to subvert this whole tradition by means of two main lines of reasoning. First, he argues that, as a matter of observation, language does not function in such clear-cut categories. It perpetually escapes a finished definition. Its sense is never resolved; rather, as a matter of historical process, it is always open to further negotiation. Language performs most cogently as text, rather than as speech, because in the former case it has an excess of meaning that can be inferred from the written word. The latter is beyond the power of the ‘author’ and, importantly, of any annotation of the text to foreclose its signification, and therefore significance:

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[42] Only when written, can *différance* be distinguished from *différence*, as the pronunciation is exactly the same.

[43] Kearney, *Modern Movements in European Philosophy*, p. 121.

[44] Gene Blocher, 'An Explanation of Postmodernism', in Castell, *An Introduction to Modern Philosophy*, p. 678.

> Cutting breath short, sterilizing or immobilizing spiritual creation in the repetition of the letter, in the commentary or the *exegesis,* confined in a narrowspace, reserved for a minority, it is the principle of death and of difference in the becoming of being.[45]

Here, Derrida privileges the notion of becoming over being. In this he appears to disassociate himself from Heidegger’s quest for Being, in so far as this latter, apparently, still privileges ontology as the locus for existential, philosophical enquiry. He also disengages himself from the primacy of ‘hearing’ over ‘seeing’, for the former seems to confirm once again the ascendancy of the ‘*logos*’ as the disclosure of the heart of the matter, whilst the latter, by looking at the constant ambiguity of the signifier, *sees beyond*, including its immediate absence, to the infinite variety of meaning in language.

Second, Derrida objects to the social and cultural implications of formalised and static meanings. In his critique of the binary opposites, he is motivated by the desire to undermine the putative control which an invariable set of definitions gives to those who wield language in the interests of some ideology or another. The intention is to release the suppressed part of human experience to make its creative contribution to human life – the emotional over against the rational, the bodily in place of the mental, the female principle as a counter-weight to the male – in other words to allow ‘the Other’ to unsettle the ‘essences’ and ‘certainties’ and to rehabilitate that which, in Western philosophy, has been excluded as irrational.

Derrida’s thought is not easy to decipher. Christopher Norris, for one, claims that he has been much misrepresented.[46] He defends him against the accusation that deconstruction is an excuse for an absolute hermeneutical licence, marks the end of the Western tradition of metaphysics and rational enquiry and ends up in a thorough-going epistemological scepticism. It may be a matter of interpretation. Norris certainly adopts a generous construal of his thinking, seeking to situate it within mainstream critical thought, rather than set against it:

> For with Derrida…that challenge (of measuring up to the required standards of philosophical work) takes the form of a constant readiness to question received ideas, among them the constative/performative distinction, the subordinate place of rhetoric (or ‘literary’ style) as a mere adjunct to logic, and the assumption that genuine (rigorous) argument can have nothing to do with such frivolous ‘textualist’ distractions.’[47]

The effect of Norris’s support for Derrida’s project (though not necessarily his conclusions) is to reaffirm that, as a matter of reasoning about reality, language cannot be infinitely deferred and that there is a substantiality about existence which can only be captured correctly by the ‘right’ use of language and concepts. Derrida seems to be aware himself of the real possibility of reading his thought as enjoining a carefree relativism and, therefore, of undermining his commitment to (ultimately) absolute, ethical values:

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[45] Jacques Derrida, *Of Grammatology* (Baltimore, 1974), p. 24.

[46] ‘Of an Apoplectic Tone recently adopted in Philosophy’,in Norris, *Reclaiming Truth*, pp. 222ff.

[47] Ibid., pp. 241–242.

> The value of truth (and all those values associated with it) is never contested or destroyed in my writings…Within interpretative contexts…that are relatively stable, sometimes apparently almost unshakeable, it should be possible to invoke rules of competence, criteria of discussion and of consensus, good faith, lucidity, rigour, criticism and pedagogy.'[48]

It may be that Derrida is not saying much more than that language is a good deal more varied, deeply expressive and constantly undecided than seems to be the case in the rationalist or empiricist traditions. Or, it may be that, seeing the possible logic of his own argument, he draws back from the brink of nihilism and remains, in the felicitous phrase of David West, 'a "transcendental philosopher" with an unhappy conscience', still committed to Western rationality, albeit at an extreme end of self-critical consciousness.[49]

Wittgenstein: from language structure to language games

It is commonly accepted that Wittgenstein's thought on language is to be divided into two separate proposals. The first is contained in the *Tractatus Logico-Philosophicus*.[50] The second is developed in his posthumously published, *Philosophical Investigations*.[51] The standard interpretation of both works views them as belonging to two distinct phases of his thought, the second being intended as a conscious correction of the first. However, this interpretation has been challenged by a number of writers who understand the *Tractatus* to be the preliminary sketch for the more elaborated vision of language that occupied him in his later years.[52] The continuity thesis has been strongly challenged by one of the foremost Wittgensteinian scholars, P.M.S. Hacker.[53] Any attempt to discuss this difference of opinion would be far beyond the scope of this chapter. In one sense, the relationship of the two works to each other is not of prime importance, since the concept of the 'linguistic turn' is generally agreed to be associated with his later writings. How the *Tractatus* is to be understood is partly a matter of discerning the mood in which it was written. Certainly there are some enigmatic statements, and the question may revolve around whether or not Wittgenstein was writing with a certain sense of irony. His closing comments are certainly puzzling:

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[48] Derrida, 'Afterword', in Gerald Graff (ed.), *Limited Inc.* (Evanston, 1988), p. 146.

[49] Kearney, *An Introduction to Continental Philosophy*, p. 187.

[50] (London, 1961). It was first published in German in 1921.

[51] Translated by G.E.M. Anscombe (Oxford, 1967/3)

[52] See, Alice Crary and Rupert Read (eds), *The New Wittgenstein* (London, 2000), pp. 149–349.

[53] 'Was he trying to whistle it?', in ibid., pp. 353–388; see, also, P.M.S. Hacker, *Wittgenstein's Place in Twentieth-Century Analytic Philosophy* (Oxford, 1996), *passim*.

> My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up on it). He must transcend these propositions, and then he will see the world aright.[54]

This has led some to believe that Wittgenstein was already in the process of abandoning what amounts to an external standpoint with regard to language that later led him to see the meaning of language as internal to itself. Thus, the purpose of the *Tractatus* is already the 'therapeutic' one of helping us to recognise the limits of language.[55] Over against this understanding, we have Wittgenstein's own testimony in the Preface (1945) to the *Philosophical Investigations*:

> Four years ago I had occasion to re-read my first book…and to explain its ideas to someone. It suddenly seemed to me that I should publish those old thoughts and the new ones together: that the latter could be seen in the right light only by contrast with and against the background of my old way of thinking.
>
> For since beginning to occupy myself with philosophy again, sixteen years ago, I have been forced to recognise grave mistakes – to a degree which I myself am hardly able to estimate…[56]

Of course, there is much more to be said, not least (in hermeneutical fashion) about whether later commentators understand Wittgenstein better than he understood himself. However, I will follow the conventional view that Wittgenstein is operating with two quite distinct sets of premises in the two phases of his philosophical reflection.

In the *Tractatus*, Witgenstein was attempting to complete what he believed was lacking in the earlier work of Frege and Russell on the language of logic. Frege thought that philosophy had a responsibility to find a language that was delivered from the ambiguities and inherent instability of ordinary or conventional usage. He believed that the only way of accomplishing this was by constructing a logically perfect language which would reveal 'the true structure of thoughts which natural languages obscure'.[57] The outcome of this endeavour is summed up by Russell:

> In a logically perfect language, there will be one word and no more for every simple object, and everything that is not simple will be expressed by a combination of words, by a combination derived, of course, from the words for the simple things that enter in, one word for each simple component. A language of that sort will be completely analytic, and will show at a glance the logical structure of the facts asserted or denied.[58]

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[54] *Tractatus*, 6.54.

[55] Crary and Read, *The New Wittgenstein*, p. 4ff.

[56] Wittgenstein, *Philosophical Investigations*, p. viii.

[57] Hacker, *Wittgenstein's Place*, p.20.

[58] B. Russell, 'The Philosophy of Logical Atomism', in *Collected Papers, Vol. 8* (London, 1986), p. 176.

In the hands of Frege and Russell, the chief task of philosophy came to be the analysis of language. In one form or another linguistic analysis has remained a chief concern in the Anglo-American tradition of philosophy.

What was missing in Frege and Russell, according to Wittgenstein, was an explanation of the nature of logical necessity. He argued that 'logically necessary propositions are a kind of by-product of the ordinary use of propositions to state facts. A factual proposition…is true or false with no third alternative.'[59] His solution to the question of logic is semantic: 'If a formula is logically necessary, we can see that it is. There is no need to prove its status from axioms, because a truth functional analysis will reveal it.'[60] It follows from this that, in order to judge the truth-value of a proposition, we need to know its truth-conditions. A certain state of affairs has to be in place in order for a sentence to be true, and we have to be able to know the relevant state of affairs.[61]

The truth-conditions of a proposition are given in their correspondence to an external set of objects. Language describes or denotes the real world as pictures depict what they represent. The phrases of the *Tractatus* are uncompromising:

> A picture is a model of reality. In a picture objects have the elements of the picture corresponding to them. In a picture the elements of the picture are the representatives of objects…A picture is a fact…*That* is how a picture is attached to reality; it reaches right out to it. It is laid against reality like a measure…There must be something identical in a picture and what it depicts, to enable the one to be a picture of the other at all…A picture represents its subject from a position outside it. (Its standpoint is its representational form). That is why a picture represents its subject correctly or incorrectly…A picture agrees with reality or fails to agree; it is correct or incorrect, true or false…In order to tell whether a picture is true or false we must compare it with reality.[62]

At this stage, Wittgenstein's theory of language appears to be uncomplicated. He accepts a number of givens: a version of transcendental realism; a denoting view of the power of language; a simple connection between words and their meaning, and, in order for concept-words to be in good logical order, a determinacy of sense:

> The explanation involved an elaborate ontology of simple objects, states of affairs and facts, and correlative to it an elaborate account of the analysability of the expressions of every possible language into simple names belonging to different categories, governed by rules of logical syntax – a universal depth grammar of any possible language.[63]

The arguments of the *Tractatus* encouraged the work of the logical positivists of the 'Vienna Circle'. This led to the theory of language which stated that propositions are only meaningful to the extent that they make statements that are explicitly or implicitly verifiable by conformity to experimental data. One of the leading exponents of this view, Rudolf Carnap, used the device to ridicule Heidegger's metaphysics of 'Being'. He faulted Heidegger on two grounds. First, he accused him of a confused use of the verb 'to be': people often confuse its use 'as copula prefixed to a predicate ("I am hungry"), sometimes to designate existence ("I am")…The verbal form feigns a predicate where there is none…(However) it has been known for a long time that existence is not a property.'[64] Second, he states that meaningful metaphysical statements are impossible, because they do not formulate the kind of knowledge which is open to empirical science. Carnap concluded that metaphysical statements do not serve as descriptions of states of affairs, only as expressions of the general attitude of people towards life.

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[59] David Pears, 'Wittgenstein', in Nicholas Bunnin and E.P. Tsui-James, *The Blackwell Companion to Philosophy* (Oxford, 1996), p.687.

[60] Ibid., p. 588.

[61] Siobhan Chapman, *Philosophy for Linguistics: An Introduction* (London, 2000), p. 73.

[62] Wittgenstein, *Tractatus*, op. cit., 2.12–2.14, 2.1511–12, 2.161, 2.173, 2.174, 2.21, 2.223.

[63] Hacker, Wittgenstein's Place, p. 32.

In spite of the apparent cogency of this simplifying account of meaning, Wittgenstein, after a few years in the 'philosophical wilderness', came to repudiate the whole enterprise of trying to find an incontrovertible language through logical analysis.[65] He developed, instead, a wholly different thesis, although it has to be recognised that his proposals in the *Investigations* were self-consciously exploratory and tentative. He came to realise that narrowing the meaningfulness of sentences to those that pictured reality in a way that could be demonstrated by empirical means alone was not tenable. Apart from anything else, the verification thesis is couched in a form which is not accessible to empirically verifiable evidence, and both the foundation and rationale for the empirical method is also beyond the method to confirm. Language is successfully used in a wide variety of ways to communicate meaningful beliefs and ideas. An account has to be given, therefore, of the use of 'ordinary language'. He implicitly likens the picture view of language to the process whereby a child learns to call certain objects by certain names:

> We can also think of the whole process of using words…as one of those games by means of which children learn their native language. I will call these games 'language games'… And the process of naming the stones and of repeating words after someone might also be called language-games…I shall also call the whole, consisting of language and the actions into which it is woven, the 'language-game'.[66]

By 'language-game' Wittgenstein has in mind the practice of human discourse guided by rules which are agreed in the public arena. Indeed, Wittgenstein rejected the idea that language can be private, in the sense that language has its foundations in subjective experience and that (as John Locke believed) its primary purpose is to convey ideas from one private mental state to another. Using various illustrations, such as the sensation of pain, observation of the colour red or the blueness of the sky, the memory of a train timetable and the beetle in a box, Wittgenstein argues that even representing these experiences to oneself implies using a language which is or could be the common property of a group who share the same language. It simply is not possible to have private thoughts prior to their being verbalised in a language which has already been learnt (or has the potential for being learnt) within a community:

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[64] 'Overcoming Metaphysics', in Murray, *Heidegger and Modern Philosophy*, p. 28.

[65] Although for a time he espoused a form of verificationism, unlike the 'Vienna Circle', Wittgenstein did not think of it as a theory of meaning.

[66] Wittgenstein, *Philosophical Investigations*, p. 7.

> Now, what about the language which describes my inner experiences and which only I myself can understand? *How* do I use words to stand for my sensations? – As we ordinarily do? Then are my words for sensations tied up with my natural expressions of sensation? In that case my language is not a ‘private’ one. Someone else might understand it as well as I.[67]

The shift in Wittgenstein’s thinking was a move away from conceiving the meaning of language as an internal relationship between words and things, whose dependability was guaranteed by a pre-existing logical structure inherent in thought, to a view in which the meaning of language was circumscribed by the internal relationships within language itself. This brings us back to the concept of obeying rules. Understanding is more a matter of knowing *how* than knowing that: i.e. knowing how the rules of a particular language-game work. In order for communication to be explicit and comprehensible, one has to know and abide by the rules which govern the use of the language in question.

We use words like moves in a game. The game runs smoothly as long as the rules are obeyed. Thus, ‘following a rule is analogous to obeying an order’.[68] And ‘“obeying a rule” is a practice’.[69] Of course, rules can be changed: for example, the rules of football for offside or passing back to the goalkeeper are decided by the sport’s world governing body; they are not immutable. In this sense, it might be said that the rules of a game are merely a matter of convention: they govern play in a sport or game normally called football or chess, having a particular series of moves on a pitch or board. This is true, but we learn the rules in such a way that playing the game comes automatically. We do not think consciously about the rules, nor subject them to endless interpretations. A good illustration of this would be driving. The rules (or laws) of a particular country stipulate that we drive on the right (or left), that we stop at red lights and pedestrian crossings, that we do not overtake until the road is clear in front, that we give way to cars coming from the left (or the right), that we leave a space between us and the car in front sufficient to allow us to brake safely, and so on. Nor, says Wittgenstein, do we give elaborate justifications for obeying the rules. In the last analysis, ‘if I have exhausted the justifications…then I am inclined to say: “This is simply what I do.”’[70]

Using language, then, is simply to acknowledge that life is participating in customs, traditions and institutions together with other people. We are ‘trained’ from our earliest years to react in particular ways to our environment. We do not choose to use language in a personal, idiosyncratic way; we learn to use it as it is used by our parents, teachers, class-mates, by the media, etc. It comes naturally to us. The same would be true of learning another language. We pay attention to the grammatical rules, the way words are used, the various nuances, equivalences, sayings, aphorisms, metaphors, and so on. If a language is used in a number of different places (for example, Spanish in Latin America), we will learn to use words appropriate to the form of the language as it is spoken locally. This could mean that the same word has a connotation which is acceptable in one location, but unacceptable in another.

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[67] Ibid., p. 256.
[68] Ibid., p. 206.
[69] Ibid., p. 202.
[70] Ibid., p. 217.

Wittgenstein's whole approach to language in this second phase is that meaning is established by use. A theory of language has the task of describing how language is used, by elucidating what part it plays in the various 'life forms' that constitute human modes of existence. Thus, 'a "meaning" is not an abstract object; meaning is a matter of the role an expression plays in human social behaviour. To know the expression's meaning is just to know how to deploy the expression appropriately in conversational settings.'[71]

In order to clarify why it is legitimate to call this notion of language-games and rule-following a 'linguistic turn', it is necessary to explain some of the differences between the two stages in Wittgenstein's thinking. Fundamentally, Wittgenstein moved away from a truth-indicative view of language, in which propositions could be declared true or false by virtue of their conformity to an external reality. He had two major objections to this view. First, to the extent that it confined meaningful language to that of the empirically demonstrable sciences, it was a far too limiting restriction, seeing that language is used in many types of discourse in such a way that significant meaning is conveyed. Indeed, if we restrict meaning to matters in which science is competent to judge, then much of life has to be unaccounted for. It is quite arbitrary, for example, to rule out questions like, why is there a universe, rather than there not being a universe? Or, what is a good life? just because such questions cannot be answered by recourse to empirical methods of investigation. Secondly, the view presupposes an external standpoint from which the truth or error of statements could be judged. However, such a viewpoint is an illusion. It assumes that it is possible to reach beyond the Kantian description of things as they appear to us, within the forms of life and use of language to which we are accustomed, to things as they are in themselves. In other words, it assumes that it is possible to conceive of values given to things as propositions whose correctness can be determined by their being true to the way reality is, and that we can know for certain the truth status of these propositions. Such a view supposes that we can attain to a vantage-point outside of our own immersion in the world:

> If we are simply and normally immersed in our practices, we do not wonder how their relation to the world would look from outside them, and feel the need for a solid foundation discernable from an external point of view…The idea that consideration of the relation between thought and reality requires the notion of an external standpoint is characteristic of a philosophical realism…(which) chafes at the fallibility and inconclusiveness of all our ways of finding out how things are, and purports to confer a sense on 'But is it *really* so?' in which the question does not call for a maximally careful assessment by our lights, but is asked from a perspective transcending the limitations of our cognitive powers. Thus

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[71] William G. Lycan, *Philosophy of Language: A Contemporary Introduction* (London, 2000), p. 89.

> this realism purports to conceive our understanding of what it is for things to be thus and so as independent of our limited abilities to find out whether they are.[72]

One could say that Wittgenstein's whole proposal is much more modest. We have to learn to live without the craving for certainty. This may cause a certain 'vertigo', because language seems to be unstable. We can only say that propositions are 'correct' or 'incorrect' within the grammatical rules of a specific language-game. Thus, for example, ascriptions of moral value to propositions which claim to be valid are not right or wrong, true or false, but action-guiding. To accept the value of the proposition is to give a reason for acting in a certain way. Such a reason would normally include reference to the will and/or desires.[73] Or, in the realm of religion, beliefs describe certain ritual or community-related performances or life-forms. They do not refer to a knowable reality beyond the observable, they point to intentions and actions which spring from certain rules accepted as normative within a particular group. Beliefs are not to be taken as pointing to a content independent of the believer, but perform a role by giving inspiration to a chosen way of life. They make sense as perfectly legitimate grammatical statements within a particular agreed set of premises, and that is how they should be understood.[74]

Wittgenstein's turn to language seems to end up in a thorough-going cognitive relativism. Beliefs are not correlated with facts in a way in which they can be shown either to conform to or conflict with them by reference to criteria independent of the relevant belief system. They employ concepts which have their own grammar and they either make sense or do not within that parameter. It is, therefore, ludicrous to think that religious beliefs can be justified as true or rejected as false by appeal to non-religious evidence. Wittgenstein explicitly states that 'historical proof (the historical proof-game) is irrelevant to [religious] belief'.[75] This means that religious beliefs are not statements about any reality external to the belief-system, but rather express 'something like a passionate commitment to a system of reference'.[76] They are, moreover, immune from being proved right or wrong independently of religious criteria.[77] The inevitable deduction from these premises is that, as long as the grammar is coherent and used consistently by the believers in question, any form of belief is as good as any other. Independent value judgements, such as ‘reasonable’, ‘worthless’, ‘ill-considered’ or ‘admissible’ cannot be made coherently.[78]

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[72] John McDowell, 'Non-Cognitivism and Rule-Following', in Crary and Read, *The New Wittgenstein*, p. 46.

[73] Ibid., pp. 46–47.

[74] As an example, see the critical discussion of the philosophical stance of the 'theologian', D.Z. Phillips, by Roger Trigg, *Rationality and Religion* (Oxford, 1998), pp. 134–144. However, Felicity McCutcheon believes that Phillips (and other neo-Wittgensteinian philosophers of religion) misunderstand and misuse Wittgenstein's thought; see, *Religion within the Limits of Language Alone: Wittgenstein on Philosophy and Religion* (Aldershot, 2001), pp. 110–111.

[75] G.H. von Wright and H. Nyman, *Culture and Value* (Oxford, 1980), p. 32.

[76] Ibid., p. 64.

[77] For Wittgenstein's thinking about religious beliefs, c.f., John Hyman, 'Wittgensteinianism', in Philip L. Quinn and Charles Taliaferro, *A Companion to Philosophy of Religion* (Oxford, 1997), pp. 153–156; McCutcheon, *Religion within the Limits, passim.*

Saul Kripke has argued strongly that Wittgenstein’s proposal for rule-following is a form of scepticism according to which there is no fact of the matter concerning what words mean.[79] All we can say is that words mean what they habitually signify in common usage. If it is objected that it is quite possible that a certain gulf will open up between what a rule stipulates and its application and that, therefore, there must be some independent reality which allows a judgement in the case of misunderstandings or alternative interpretations, the Wittgensteinian answer seems to be that this simply does not happen: there is no gulf, and the whole enterprise of offering a link between words and their meanings is misconceived:[80]

> Meanings of words are neither physical nor psychological entities; nor is anything gained by supposing them to be abstract entities (sense of expressions) which mediate between words and the world. For meanings are not entities of any kind. It would be wrong to *identify* the meaning of an expression with its use.[81]

So audacious does Wittgenstein’s project appear that it is not surprising that it should be said of the *Philosophical Investigations* that it ‘has no ancestors in the history of thought’, that it ‘ploughed up the fields of philosophical thought afresh, that on virtually every subject with which Wittgenstein engaged, he broke new ground’.[82] Large claims have been made for Wittgenstein’s ‘philosophical remarks’, ‘sketches of landscapes’, ‘short paragraphs’.[83] However, the question is to what extent these claims can be sustained. Does Wittgenstein’s philosophy of language stand up to the criticisms that have been brought against it? William Lycan mentions a number of cases where the use theory of language and rule following seems to break down.[84] There is the question of proper names, where the question of automatic obedience to rules does not seem to apply. A description theory of meaning fits the situation much better. Further, the theory does not seem to explain how it is that people can understand long, novel sentences at first hearing without a moment of thought. In so far as the combinations of concepts are novel, our immediate, instinctive understanding of them cannot be due to conventions implicitly internalised, for in the nature of the case no conventions have been applied to them. The meaning of a novel sentence is grasped by understanding the individual words that make it up and working out its sense from that. It is also quite possible to know and use an expression without understanding it.

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[78] This critique of Wittgenstein appears to Felicity McCutcheon to be unfair. She believes that Wittgenstein distinguished carefully between semantics and ontology. Thus, a distinction can be drawn between the meaning and reference of words: ‘by calling a proposition grammatical, Wittgenstein has not removed it from the axis of ontology, simply pointed out its role with regard to meaning’, *Religion within the Limits*, p. 127. However, the distinction may not make much difference. If it is true that certain statements (about God, for example) cannot be verified or falsified and, therefore, we cannot know whether they are true or false, we are dealing with a highly hypothetical realism.

[79] *Wittgenstein on Rules and Private Language* (Oxford, 1982).

[80] See the commentary in David. H. Finkelstein, ‘Wittgenstein on Rules and Platonism’, in Crary and Read, *The New Wittgenstein*, pp. 56–69. ‘Rules cannot be mistaken as they are the criteria for right and wrong in the game’, McCutcheon, *Religion within the Limits*, p. 123.

[81] Hacker, *Wittgenstein’s Place*, p. 125.

[82] Ibid., pp. 100, 135.

[83] Wittgenstein, *Philosophical Investigations*, p. vii.

[84] Lycan, *Philosophy of Language*, pp. 93–98.

Furthermore, it is possible to imagine a community that agrees to use certain words in an unusual, but nevertheless rule-governed, way. An outsider might, on entering that community, decipher the rules, but without being any nearer to understanding the meaning of what was being said. Unless utterances refer to things external to the rules of the game, then the game cannot even get going. If, for example, the rules of football demand that for a goal to be scored the whole of the ball has to cross the goal line, then there must be a way of matching up the rules to an external reality, in order to judge whether the rules have been obeyed or not. In this example, Wittgenstein falls prey to the accusation that in effect he denies that meaning (a goal has been scored) refers (the ball has actually crossed the line). Lycan argues that, 'it is hard to see how the Wittgensteinian can spell out [how language-games are integrated with *other social practices*] (a) in such a way as to explain how the linguistic moves take on propositional content, but (b) without secretly introducing referring'.[85] It does not seem sufficient to defend the use theory by hypothesising that uttering a sentence is the equivalent of making an assertion which one is committed to defending against all objections. In giving reasons for making the assertion, if it purports to be a statement of fact, one has to appeal to evidence (a minute analysis of camera replays of the ball establish that it did cross the line). This is not the same as making moves in a game, but establishing that the moves are in accord with reality.

P.M.S. Hacker mentions a different set of criticisms.[86] First, it is disingenuous of Wittgenstein to believe that philosophy should not be trying to propound theories, seeing that he himself propounded what amounted to a theory of meaning (the meaning of an expression is determined by its use) in opposition to another theory (the truth-conditional meaning of sentences), thereby aligning himself with an anti-realist position. The fact that Wittgenstein's proposals are neither empirical theses nor metaphysical truths does not mean that they are any less theories. For example, in the case of what is asserted about religious language, a clear theory is being advanced about the role that religious beliefs and language plays. Wittgenstein makes a number of statements about a reality (namely what believers are really doing when, for example, they recite the Creed, or state that the historical reliability of the story of Jesus is essential to true belief), whose validity would be disputed. Whether Wittgenstein's theory is correct (is this what is really happening when a person says they believe something), or not, has to be settled by reasoned discussion about the nature of the case.[87] The assertion is a theory whose plausibility can be tested in open debate. It is simply simplistic to imagine that one can merely describe what is happening when language is being used without having some prior framework which one wishes to test. Wittgenstein should be judged by his actual practice, not by his disavowals.

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[85] Ibid., p. 96.

[86] Hacker, *Wittgenstein's Place*, pp. 240–264. It is proper to recognise that Hacker does not think that the criticisms are sufficiently powerful to overturn Wittgenstein's philosophy of language.

[87] Controlled interviews with 'Creed-reciters' might be part of an attempt to discover whether, in their case, religion plays the role Wittgenstein (or D.Z. Phillips) assigns it. They

In the second place, in opposition to Wittgenstein's assumption that 'rules for the use of expressions are not true or false, and are not answerable to reality for their correctness', some people (most notably Saul Kripke and Hilary Putnam) have argued that 'scientific discoveries about the inner constitution of the items belonging to the extension of a "natural kind" term (viz. names of kinds of stuffs or of species) may reveal its real meaning'.[88] The argument is that knowing the use of an expression is not the same as knowing its meaning. In the case of natural kind terms at least scientific investigation can reveal what those terms have always meant. Moreover, a clear distinction can be made between the use of a term in ordinary language and its categorisation in scientific terminology, showing that more than language-games are in play. This follows from the claim that scientific classification yields a meaning that is determined by what is being observed in the natural world, not simply by linguistic convention.

Third, Wittgenstein has been accused (most forcefully by Michael Dummett[89]) of having adopted an extreme form of conventionalism. According to this view a statement is true in virtue of the conventions of meaning. Thus, in the case of even so-called necessary truths, such as the law of the excluded middle, the necessity is not rooted in the nature of reality or thought, but is a direct expression of linguistic convention. The human community has simply *decided* to treat the proposition as indisputable.

Dummett contends that it is part of the meaning of 'true' that if a statement is true it is true in virtue of something that makes it so. Truth is not a matter of volition, of laying down the truth of a statement in virtue of the sense we choose to assign to words. Necessity is not a matter of compulsion *within* a system, whose rules are already chosen and, therefore, need to be followed in order to achieve a necessary result, but the compulsion *of* the system, meaning that there is no other way that thought can operate, whatever we may choose to the contrary.

Although those (like Hacker) who wish to defend Wittgenstein's views against his critics, believe that these objections can be satisfactorily answered, there are real issues here. 'The turn to language' in Wittgenstein's second phase is an attempt to escape from the realist/idealist controversy in relating statements about objects to mental processes, language and the meaning of what is communicated. Wittgenstein's thought is difficult to understand and, as we have seen, there are serious disputes

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might claim that they affirm the Creed, because they believe its propositions to be ontologically true, i.e. conformed to the way God is and God's actions are. Wittgenstein can dispute the rightness of their beliefs, but not the way they claim to interpret the Creed, except by implying bad faith. If he does the former, we are immersed in a debate about the nature of reality, not just a conversation about language.

[88] Ibid., p. 250.

[89] 'Wittgenstein's Philosophy of Mathematics', in G. Pitcher (ed.), *Wittgenstein: The Philosophical Investigations* (New York, 1966)

about how he should be interpreted. The major work of his second phase, about whose worth and impact he himself was doubtful,[90] was published only after his death. He was not, therefore, around to help clarify his meanings.

Can a statement be true?

Discussion in the Anglo-American world of the importance of language in philosophy continued in the second half of the twentieth century, often with direct reference to Wittgenstein. A lively debate has continued about the role of truth in language. Wittgenstein's emphasis on 'ordinary language' and the conventions of speech have both been taken up. The most influential ideas were developed first by John Austin in his analysis of what have become known as 'speech-acts'. His main concern was to investigate the way in which language performs. He sets out from the observation that language can be meaningful, even when it is not describing something or setting out to make a putatively true statement. Language which does not either describe or state facts, nevertheless performs important actions, such as asking questions, issuing commands, making promises, giving warnings. Though these do not claim to be true or false, they could be felicitous or infelicitous, depending on whether they are performed correctly and successfully, or not.

According to this theory, language has to be related closely to the intention of the speaker and the response of the hearer. These are parts of human behaviour, referred to as 'illocutionary acts' – the acts performed *in* saying and hearing something. These acts are distinguished from 'locutionary acts', where the emphasis is on the act *of* saying something. According to John Searle, an analysis of the structure of intentions reveals five basic types: assertives (how things are), directives (getting people to do things), commissives (committing ourselves to doing things), expressives (expressing feelings and attitudes) and declarations (bringing about changes in the world to match utterances).[91]

The significance of this account of language lies in its variation of the more rigorous use theory of Wittgenstein. 'Ordinary language philosophy' does not deny the power of sentences to describe something accurately. However, it does reject the notion that statements or descriptions are the primary purpose of language and, in some sense, the normative use. It urges that truth-conditional accounts of language concentrate too heavily on the semantic content of utterances and not enough on the conditions for and structures of conversation, in which communication is adjudged effective, or defective, according to the ability of speakers and hearers to share meanings.

In other words, meaning is a much wider concept than simply determining conditions for the truth of statements. It involves ordinary human interaction in real life situations. To questions of conceptual categories, logical necessity and the ability to refer successfully is added ‘conversational implicature’, a phrase coined by Paul Grice to distinguish between the literal meaning of a sentence and what may be ‘implicated’ by the speaker (for example in devices such as irony or sarcasm).[92] Basically, the meaning of an utterance will depend on the context in which it is made and therefore rely, to a certain extent, on non-linguistic factors. In order for conversation to be successful, the partners need to co-operate by using conventions that make communication as transparent as possible. Thus, for example, the simple question ‘where are you?’ addressed by one person to another means literally, ‘what is the exact space you are occupying in a specific location?’. However, if the question is asked during a round of golf, it probably means ‘where has your ball landed?’.

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[90] 'I make them (my remarks) public with doubtful feelings. It is not impossible that it should fall to the lot of this work, in its poverty and in the darkness of this time (1945), to bring light into one brain or another – but, of course, it is not likely.' Wittgenstein, *Philosophical Investigations*, p. viii.

[91] John Searle, 'Contemporary Philosophy in the United States', in Dancy and Sosa, *A Companion to Philosophy*, p. 9.

Donald Davidson held that the intentionalist theory of meaning was inadequate because it involved puzzling non-linguistic notions, and seemed therefore to suffer from lack of simplicity. He returned, therefore, to the question of meaning in terms of truth-conditions, building on Alfred Tarski’s so-called ‘semantic’ definition of truth, which itself builds on the ‘classical’ model of truth, according to which all statements are either true or false in respect of their agreeing with reality. Tarski aimed to give a formally correct definition of truth as part of a scientific semantics, which would also fit the common-sense intuition of what it means to say something is true. He proposed, as ‘a material adequacy condition’ for such a definition the formula that ‘X (a declarative sentence) is true if and only if p (the content of the sentence)’: thus, ‘“water quenches” thirst if and only if water quenches thirst.’[93] This has been called a minimalist theory of truth and, because it is based on an exact equivalence, somewhat vacuous.[94]

Davidson wished to propose a theory of truth for a natural language and suggested it could be achieved by using Tarski’s concept of truth to explain meaning. This is a kind of ‘axiomatic’ theory: the specifying of certain principles which can account for the meaning not only of a highly sophisticated language but also of ordinary, everyday language. He came up with the axioms of *reference*, of *satisfaction* and of *connection*. So, the sentence quoted above would be translated in the following way: ‘water’ *refers* to a liquid with the property H_2O, ‘quenches’ is *satisfied* by whatever alleviates thirst and the two are *connected* by the specification that water quenches thirst if whatever water refers to satisfies the alleviating of thirst.

It is interesting to note that several years after the impact of Wittgenstein’s thought had worked its way through the perception of the task of philosophy, many philosophers were returning to correspondence and referring accounts of language. However, it is now widely recognised that the scope of language is far greater than merely stating facts and describing events. And, even in these cases, there is a certain indeterminacy of meaning, in that the intention of a statement does not exhaust its meaning. Nevertheless, tacitly, the Wittgensteinian repudiation of the referring nature of some language, in the interests of overcoming the subject-object split, has proved to be unworkable. The use theory of language is not able to account for all the complexity of the way language actually functions. Wittgenstein tries to cut the Gordian knot, but only at the cost, apparently, of ending up in subjectivism, and some would say solipsism.

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[92] Paul Grice, *Studies in the Way of Words* (Cambridge MA, 1989).

[93] This is intended as an interesting variant on ‘snow is white’!

[94] Tarski was attempting to contribute to a restricted, specified language that would serve more precisely than a full natural language, with all its ambiguities, as a medium for scientific discourse, c.f., Chapman, *Philosophy for Linguists,* p. 87.

Conclusion

In this chapter we have attempted the difficult task of summarising some of the weightiest examples of ‘the turn to language’ in twentieth-century philosophy. We have reviewed the main reasons for a shift of perspective in which language, once largely unproblematic, became the chief focus of the philosophical enterprise. We have traced the discussion through some of the main representatives of continental and Anglo-American philosophical traditions, trying to understand their thinking and evaluate their strengths and weaknesses.

We have attempted to demonstrate that certain strategies regarding language mark a break between two ways of envisaging the world and human beings’ relation to it. We still need to show that, as ways of responding to the dilemmas thrown up by the modern project, they ultimately fail. We will have to provide good evidence for the failure, in order to counter the legitimate suspicion that the arguments are used simply to fit a preconceived theory. The evidence will come from both an analysis of the coherence of the claims made and an examination of their ability to explain adequately and be congruent with ordinary living. This evaluative method follows from our initial (self-evident) assumption that the strength of a theory’s claim is in direct proportion to its ability to be translated into consistent practice.

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PART IV
Imagining Another World

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Chapter Seven

The World in Transit: Between Arrival and Departure (Part 1)

Taking stock of the journey

The second half of this study, following the preceding analysis of modern and post-modern thinking, will consider in the Western context some of the main issues concerning the integration of knowledge. I aim to offer a way out of an impasse caused mainly, as we hope to show, by the kind of theoretical commitments that have dominated Western intellectual discourses since the eighteenth century. I have proposed the thesis that contemporary Western culture is suffering from a self-inflicted, incurable (within the terms of its own mainstream practice) cognitive disorder that has arisen as the result of a determination to separate two essential sources of knowledge – the ‘word’ and ‘world’ of God. The consequence of this split is the loss of a unified account of knowledge. This assessment does not mean that the Western intellectual tradition has abandoned the attempt to search for a unified theory of all that exists. It does, however, suggest that such an attempt will fail, seeing that so far it has looked for answers in unproductive directions.

The thesis supposes that the search for a unified account of knowledge is a worthwhile and attainable project. The reason for this is quite simply that human life is richer and more satisfying when it springs from a coherent, dependable and accurate vision of what it means to be human. Fragmented knowledge threatens to undermine most of the values that are currently held to be of intrinsic benefit to human flourishing. These include the blessings brought by scientific research in fields like medicine, engineering, agriculture and communications, a valid, non-relativist ground for distinguishing between good and evil and right and wrong, a sustainable concept of intrinsic human dignity, justice and rights, an account of human attributes which unifies the rational, emotive, volitional and ‘spiritual’ processes, a reliable way of distinguishing between reality and fantasy and between authenticity and fraud, a procedure for detecting ideologically-motivated accounts of historical, social and cultural processes and last, but not least, a satisfying purpose for existence.

Of course, it is perfectly possible to reject the quest for unified knowledge, either as unreachable or as intrinsically totalitarian in its conception and consequences. There are plenty of people who have made a virtue out of this refusal. They seek to make the most of life on the assumption that it does indeed consist of unrelated bits and pieces, which simply cannot be fitted together. Life, then, becomes a matter of coping with the uncoordinated snippets of information and understanding that we are prepared to accept on the basis of intuition or pragmatic necessity. To hope for anything further is to be deluded. Such an outlook is melancholy and mournful.

More importantly, as we shall seek to demonstrate, it cannot provide a valid premise for either thinking or acting. It is not possible to live, with any degree of hopefulness, inclusive purpose or consistent resolve, on the basis of such a conclusion about the world.

The core argument of this study is, then, that Western culture is currently caught in a predicament, suspended between the existential and intellectual need to find an adequate unified account of knowledge and the lack of the requisite tools to do the job. The predicament is principally due to one major cause: best described, in the immortal words ascribed to Laplace, that God is no longer a necessary hypothesis to explain experience.[1] In the one hundred years leading up to Darwin's theory of the origin of species, the existence, nature and activity of God was gradually abandoned as a requirement for making sense of the manifold aspects of the human encounter with its internal and external worlds.

It has been deemed possible to give a proper account of the whole of life by attending solely to the workings of the human mind (including its reflection on social history) and the environment. Both the inductive and hypothetico-deductive methods of science have been employed to eliminate God from the universe. Hume's arguments against miracles and theistic design, d'Holbach's reasoning from necessity and determinism for a naturalist interpretation of experience and Kant's dismissal of the feasibility of knowing anything directly have been highly influential in subsequent discussions of the likelihood of there being a supra-natural, divine reality. Although possessing a self-confessed faith, Locke's incipient division between knowledge and belief has, at the least, marginalised God from human thinking.

In different ways, Descartes, Locke and Kant recognised some need to postulate the 'existence' of God, if their respective epistemological and moral theories were going to succeed. However, such a token belief amounts to little more than an anthropomorphic projection of God, as a methodological device, to meet certain needs, whether these are cognitive, emotive, cultural, social or religious. Finally, Nietzsche reckoned to have killed God off, not so much because of the rational impossibility of maintaining God's existence as the undesirability of doing so. For him, the notion of God was quite incompatible with human beings taking full responsibility for their own destiny. God was a limiting factor in the attainment of full human potentialities, keeping humans in a state of subservience and dependence.

The full onslaught of Western modes of thinking on the credibility of belief in one supreme Being who creates and sustains all that is has been overwhelming. It has created a general culture in which the material world is irrevocably divorced from the world of meaning, giving rise to hopeless attempts to make sense of the whole by paying attention solely to aspects of the particular. Eject God from the universe and every attempt to replace him by some other kind of unifying force has proved futile.[2] The result is that human beings can no longer make sense of either their environment or themselves. This has now worked itself through the whole of culture in such a way as to have produced a serious crisis of thought and action.

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[1] The original remark (as reported) referred to the origin of the solar system without divine intervention; see, Christopher Southgate (et al. eds), *God, Humanity and the Cosmos* (Edinburgh, 1999), p. 41.

[2] The further post-modern experiment of ridding the universe of the notion itself of a unifying theory of knowledge has also proved bankrupt (see the discussion of chapter 8).

The tragedy is that, whilst understandable on a number of historical grounds, the rejection of God is based on a mistaken epistemology and a misconceived ontology. It may be too early to discern substantial signs of intellectual and moral decline in the West; the evidence is ambiguous, and nothing is gained by exaggerating manifestations of cultural decay. The real point at issue is not tales of anguish and calamity but the truth of the matter. If the theistic claim for the existence of a supreme being beyond material existence is true, and if the further claim that this being's existence and self-communication is necessary to establish any hope of encountering a unified theory of knowledge is also true, then, in the context of a dismissal of these claims, it is logical to expect both a gradual withering of theoretical attempts to explain existence and an increasing intellectual and moral confusion. The West cannot presume to live for ever on a capital that is heavily drawn upon and not replenished. The favourable consequences for Western societies of belief in the God of Christian faith are likely to be increasingly diminishing assets.

The thesis of this study is that a unified account of knowledge is both existentially necessary and cognitively possible. If it is possible, it may be formulated and rationally vindicated, and it would be inadmissible to rule out any alleged account a priori. Knowledge may be specified as 'justified true belief'. This way of defining knowledge does justice to the elements required to substantiate any assertion that functions as a claim to know something. The way in which statements are justified, i.e. established and corroborated, is supremely important to an adequate epistemology.[3] In the light of sceptical views and alternative possibilities, the theory which seeks to defend the indispensable integration of 'word' and 'world' will have to be argued with some cogency. If the attempt of the present thesis to explain the current epistemic crisis is correct, then we need to establish a stronger unity between word and world than existed in the seventeenth century, when the harmony between the two was far less problematic.

I intend to proceed on the assumption that the intellectual development of the West in the last 300 years has not been either natural, determined or irreversible, that an alternative development could have taken place, and that we now need to retake this alternative if there is going to be any chance that thought and life in the West can be renewed. This is a daunting task, but there is an imperative, inspired by Christian faith, to attempt to do it. I will explore the potential of the method known as *inference to the best explanation* as a heuristic tool to demonstrate the elucidatory possibilities inherent in the conjunction of word and world as sources of knowledge.[4]

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[3] As A.C. Grayling points out, 'Epistemology', in Nicholas Bunnin and E.P. Tsui-James, *The Blackwell Companion to Philosophy*, pp. 38ff., this definition is not without its problems, especially in establishing acceptable criteria for justification. Nevertheless, the concept and reality of knowing something is an indispensable part of discourse. In the absence of a more adequate description, this one emphasises the necessary elements of what counts as knowledge.

[4] Peter Lipton, *Inference to the Best Explanation* (London, 2004/2) provides one of the fullest treatments and defences of this approach to explaining phenomena.

The prospective advantage of this method is that it takes account of all sources of knowledge, eliminating none a priori. In particular, as we shall see, it brings together realistically the methods of the sciences, of philosophy and theology.

It works in a way analogous to proceedings in a court of law. The function of the court (in criminal cases) is to establish, beyond reasonable doubt, the truth or falsity of a charge brought against an individual or corporate body of having infringed the law. The main ingredients in clarifying the case and deciding the verdict are motivation, opportunity and various kinds of evidence. These latter will include, where applicable, forensic information, the testimony of witnesses, the coherence of the defendant's story, a cogent explanation of disconnected facts, inductive and deductive reasoning. The method of presentation is adversarial in that there is a prosecutor, whose job is to try to secure a conviction of guilty, and a defending counsel, who attempts to show that the evidence is not reliable enough to counter the presumed innocence of the accused. The process is one of the detailed cross-questioning of witnesses and all the evidence submitted, until a verdict beyond reasonable doubt is arrived at. It is, in many ways, the epitome of critical reasoning to a positive conclusion. The court is precisely seeking to establish the *best explanation* of all the evidence germane to the case. It sifts through a number of possible alternative explanations, showing ultimately which one does most justice to the various pieces of information. Where the judiciary is completely independent of all vested interests, free of intimidation and seeks to judge the case solely on the basis of the merits of the arguments, the procedure is considered to be as fair as it is possible to get. By analogy, inference to the best explanation is an excellent epistemological tool for deciding between alternative theories that seek to demonstrate their power to explain reality.

A number of commentators are suggesting that theories of knowledge are best exemplified in relation to principles of ethical action. I will try to show that epistemic principles can be most fruitfully articulated in response to the questions, 'what should I be?'and, 'how should I act?'. Ethical discourse is a locus for epistemology in that what is most crucial about knowing is knowing what it is right to do. This has to be justified on the basis of some coherent belief, whose evidential value needs testing. Truth is a condition of the consistency between beliefs and actions. No account of reality is adequate, unless it can explain the correspondence between beliefs and actions in a way that allows for the possibility of absolute consonance.

Before embarking seriously on that discussion, due credit should be given to the lasting achievements of the modern project and the insights of what has come to be known as post-modernity. It is no part of the intention of this study to suggest that the past 300 years of intellectual endeavour has been constantly misplaced or made redundant. On the contrary, knowledge has greatly advanced to the immense benefit of human life. To a certain extent, moral values concerning the dignity of individuals (e.g. in relation to certain forms of punishment, to equal opportunities for women and to conditions of employment) have also advanced. At the same time, the former project now manifests serious defects and the latter obvious absurdities.

The achievements and limitations of modernity

In my estimation it is unjustifiable to dismiss the modern project as if, on balance, its consequences were largely negative. Some ostensible post-modern views imply that all trust in reason and belief in historical progress, as the gradual unfolding of an innately perfectible spirit, that have marked modern times have dissipated. There is abroad a mood of suspicion and a critical mind-set that concentrates only on unfulfilled expectations. Then, with an enormous dose of exaggeration, this sceptical way of thinking postulates that Western societies have moved into a new cultural era characterised by an understanding of their trends that, in nearly every particular, contradicts the pretensions of modernity.

Science and the acquiring of justified, true belief

Such a stance on contemporary culture is greatly overstated. Nowhere is this more obvious than in the continuing reliance of every individual and institution on the findings and continuing work of the scientific enterprise. The birth of modern science (as has been demonstrated in chapter 2) has contributed vastly to the origin of modernity. In so far as science continues to function adequately, producing new understandings of the working of the natural world, the modern project is an irreversible part of the fabric of life. It is a curious paradox of some current thinking that, at one and the same time, the claims of science are denigrated and the rationality on which it is based dismissed and, yet, the achievements of science are adhered to and depended on. To give one example, the most complete answer to extreme forms of post-modern incredulity is to entrust oneself, at a speed of about 150 mph. on an airport runway, to the conclusive knowledge achieved by aeronautical engineers. Although there are still discussions and arguments to undertake, an indisputably affirmative answer to the question ‘and will it fly?’ is sufficient to quell a basic disbelief in the reality of, at least some, scientific conclusions.[5]

Over and over again, the scientific method has demonstrated its capacity to reach and chart an irreducible reality in the material world. As Christopher Norris puts it, ‘We should therefore apply the basic principle of inference to the best explanation and conclude that there exist certain laws of nature – those investigated by the science of aerodynamics – whose valid formulation and putting into practice is precisely what explains why aircraft should fly in accordance with just those laws.’[6] The proven track-record of scientific discovery and subsequent technological development is inexplicable on any other grounds than those which confirm that unequivocal knowledge of the real world is established. The success of science in the empirical testing of hypotheses, derived from a general account of gathered data, and in the ability to make positive predictions on the basis of its theories points to an utterly reliable structure to the universe.[7]

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[5] See Norris, *Against Relativism*, pp. 248ff.

[6] Ibid., p. 249.

[7] See Banner, *The Justification of Science*, pp. 34ff.

Scientific discovery, thus, confirms the presupposition on which it is based, namely the uniformity of nature expressible in terms of universally valid laws. Science is an enterprise about the real world of sensations. It seeks to understand this world by searching for order or regularities, showing by experimental processes that certain features are the way they are, independently of human desire. Science is a cumulative discipline that builds on past theory-building and experimentation by confirming or falsifying tentative conclusions and predictions.[8]

Science relies in part on an inductive method. In its simplest form (the context of discovery), scientific enquiry moves from data gathering, to data processing through observation to experimentation to preliminary general conclusions (theories) about the constitution of mechanisms. In a second stage (the context of justification), the theory (or law) is confirmed or rejected by a further set of tests.[9] Science also proceeds by means of a hypothetico-deductive method. In this case, the most important initial procedure (context of discovery) is not the raw gathering of facts but the postulation of a conjecture concerning what might be the case. The theory is not inferred inductively from observations and experiments but is a surmise, which may have a number of causes, (including, strictly speaking, non-empirical ones) produced theoretically in the scientist's mind. Subsequently (in the context of justification), the conjecture is defended by deriving states of affairs capable of being established as true or false by observation. If the observational conclusions turn out to be accurate, the theory is said to be confirmed (or, in the case of Popper's falsification thesis, corroborated), in that it is empirically endorsed.[10]

The elaboration and application of inductive and hypothetico-deductive methods of investigation leading to secure, although always revisable, conclusions about knowledge of the natural world has brought into being a new consciousness of the place of human beings within their environment. A number of important consequences derive from the world of science. In the first place, it appears that human beings now have access to an assured knowledge which is beyond all mere speculation. As we have seen, it is possible to be sceptical about some of the claims made for the scientific method and, at least with regard to the logic of discovery, to suggest that personal, social and political factors have had more influence than pure research programmes. Nevertheless, there are criteria in place which come close to guaranteeing that well-tested experimentation will deliver true judgements about the way natural processes are. The results of research have to do more than persuade colleagues working in the same field to agree with the findings. Knowledge of the natural world is not arrived at simply by the consensus of experts. The initial discoveries may be depicted by means of models, paradigms and theories. These, however, have to be verified against experimental data, often as the result of multiple repetitions of the testing of observation and analysis. In this way, apparent anomalies can be explained and rogue results disregarded.

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[8] See Michael Ruse, 'Creation-Science is not Science', in Curd and Cover, *Philosophy of Science*, pp. 39–40.

[9] See John Losee, *A Historical Introduction to the Philosophy of Science* (Oxford, 2001/4), pp. 133ff.

[10] Peter Achinstein, 'Observation and Theory', in Olby, *A Companion to the Philosophy of Science*, pp. 325ff.

In the second place, scientific work provides a method which can place a critical distance between the conclusions of research and personal interests. There is a world to be discovered which is independent of human interests, desires and aspirations. This world possesses a hard reality which cannot be made to conform to the internal feelings, dispositions and preferences of human subjects. Just as science is dependent on there being a reality outside of human mental processes, so in the course of scientific research and application such an independent actual world is confirmed as existing. This is born out by means of the constraints of the demarcation criteria which distinguish true science from pseudo-science. Thus, research programmes can be divided into progressive and degenerative ones.[11] The latter are increasingly unable to resolve the accumulation of facts that tell against their theories. When the auxiliary hypotheses fail to explain, the main theory is allowed to lapse in favour of another theory which can accommodate the facts successfully. Progressive programmes are those which successfully match theories to recalcitrant evidence.

Contrary to what some philosophers of science have suggested – that science is deemed to be true if the research programme is able to persuade the scientific community that it has overcome enough of the problems to be able to stand – problem-solving itself requires the assumption of a real, external world by which theories are measured. To prefer one explanation over another is not a matter of what the community is prepared to accept, but what does justice to the evidence. Without a firm realist belief in the independence of the world and the possibility of describing it truly, there would be no progress in science. Indeed, science would have no goals qua science.[12]

Another reason for asserting the reality of an external world is the argument referred to as 'no miracles'. Originally put forward by the philosopher, Hilary Putnam, it states that the best explanation for the predictive success of a particular scientific theory is that it is true, i.e. that it corresponds to the real nature of the evidence being tested. The truth of the deductive consequences of a theory would be unsurprising, if the theory were true to the facts of the case. If, on the other hand, the hypothesis were false, it would be a 'miracle' that the observed consequences were found to be correct:

> If these objects (the gravitational field, or the metric structure of space-time) do not really exist at all, then it is a *miracle* that a theory which speaks of gravitational action at a distance successfully predicts phenomena; it is a *miracle* that a theory which speaks of curved space-time successfully predicts phenomena.[13]

This truth explanation has to be distinguished from a typically causal explanation in that its status is logical. The truth of a theory does not literally cause its consequences; it rests on the assumption that a valid argument with true premises must have a true conclusion.

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[11] See Imre Lakatos, 'Science and Pseudoscience', in *Philosophical Papers*, vol. 1 (Cambridge, 1977), pp. 1–7.

[12] See Banner, *The Justification of Science*, pp. 28–32; Hesse, *Revolutions and Reconstructions*, pp. 37–57.

[13] Hilary Putnam, 'What is Realism?', in Leplin, *Scientific Realism*, p. 141.

It has been suggested that the predictive success of a theory can be explained on the basis of empirical adequacy, without having to resort to notions of truth and falsity in absolute terms. Thus, it might be asserted that all the observable consequences of a prediction might be accurate whether or not the explanatory theory is true as a whole. However, such an explanation comes close to a tautology, in that the argument seems to imply that the consequences of the prediction are true because they are true. Empirical adequacy does not exclude the truth explanation; indeed, it is one criterion for judging the truth of one theory and excluding an alternative.[14]

Third, the argument for a realist stance, as the most adequate explanation of the success of science as a progressive discipline in uncovering the nature of material structures and processes, especially including unobservable phenomena, and in utilising nature in technological innovation, is also an argument for the universality of scientific knowledge. Not only are an individual scientist's inclinations and whims irrelevant to his or her scientific research project, the religious views, cultural idiosyncrasies and political ideologies of their environment are also extraneous to the validity, or otherwise, of their investigation. Thus, adequate methods for testing evidence are the same whether practised in Beijing, Brisbane, Bangalore, Bulawayo, Buenos Aires, Berlin or Baltimore. An article published in *Nature* or *New Scientist* is reviewed and assessed by the same criteria in Caracas, Cairo, Calcutta, Canberra, Chicago or Copenhagen.

Such a conclusion seems self-evident. However, it has been disputed. The view that there is only one real world that can be accurately depicted in scientific language, because the latter reflects the way the world is in itself, has been rejected by recourse to a variety of strategies. The most popular is that of cultural relativism that maintains that description is true, not because it is in accordance with the facts of the matter but because it is accepted within a set of norms recognised or endorsed by a particular culture or academic discipline. How one describes objects and their functioning is relative to particular vocabularies, conceptual schemes and rationalities. Scientific vocabulary cannot claim any privileged status. All scientific theories are context-dependent and relative to particular perspectives.[15]

Presumably, the argument for cultural relativism is intended to be a faithful reflection of an existing state of affairs. Some kind of truth claim is being advanced about the effect of cultural diversity on the way the natural world is encountered. The argument intends one to believe that an accurate description of a reality that holds across all human communities cannot be made, for that would contradict the cultural requirement to endorse conceptual pluralism. In other words, the universal claims of the scientific method are seen as the last bastion of intellectual hegemony, designed to impose an imperialistic (Western) mentality on all other beliefs. Apart from the self-referential contradiction of such a notion, it does not begin to explain how it is that, as a matter of fact, irrespective of language and other belief-systems, scientists have come to agree on the universal applicability of inductive and deductive methods of reasoning about experimental data, and on the empirical fruitfulness of inference to the best explanation as a method for distinguishing between valid and invalid theories and reliable and unreliable evidence.

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[14] See, Peter Lipton, 'Inference to the Best Explanation', in Olby, *A Companion to the Philosophy of Science*, pp. 191–192.

[15] For an analysis of this view, see, Susan Haack, 'Reflections on Relativism: From Momentous Tautology to Seductive Contradiction', in *Manifesto*, pp. 151–159.

The possibility of exchange programmes in science, that allows researchers to carry out their investigation in Jakarta, Jerusalem, Johannesburg, Jedda, Juarez or Jacksonville, given adequate facilities, would be inexplicable on a cultural relativist account of science. It would be another instance of Putnam's 'miracle'. To return to the analogy of the courtroom: no defendant would accept that justice could be done, if he or she knew in advance that each member of the jury considered the evidence to be relative to his or her personal set of beliefs. The defendant would want to be assured that the evidence adduced, which could lead either to a conviction or an acquittal, was demonstrated, beyond all reasonable doubt, to be true to the facts. It would be remarkable, if anyone accused of a serious crime, for which the penalty could be many years in prison, was a relativist with regard to truth. For, in such a case, the judge might decide, irrespective of convincing attestation, that the legal system and moral well-being of the community would be best served by an exemplary custodial sentence. Such a decision would rightly be regarded as unjust, just because it did not follow strictly from established facts.

Science has done much to confirm the belief that human beings are set within a given reality, which is accessible to them through a given set of rational procedures, and that they are not at liberty to construct or conjure up a reality of their own. The givenness of the external universe and of the internal mechanisms necessary for discovering its complexities may be irksome for those who see liberty as operating without constraints, but it is there, and there is no way ultimately of avoiding its potent actuality. There are not too many people who would wish to dispense altogether with the research successes of modern science, whatever their theoretical or rhetorical position might be to the contrary.

The modern project has established an approach to the natural world based on a particular form of reasoning that has changed the course of history for the whole planet earth. In essence it relates justified true belief about the subject under investigation to the handling of evidence. Evidence is information that can be subjected to testing under controlled conditions. It is intrinsically capable of yielding a positive or negative result with regard to the truth of a matter. Truth is to be understood as the exact correspondence between a statement of fact and the existence of that fact in the way the statement is made. Something is true because it exists in just the way it is depicted or described.

There seems no other way of actually defining truth, without being guilty of using some form of private meaning. Many times criteria for assessing truth-claims are confused with the definition itself. Thus, the generally accepted qualities of simplicity, frugality, fruitfulness, non-contradiction, problem-solving ability, comprehensiveness are all criteria for assessing the truth-worthiness of particular claims, but they are *not* alternative definitions. Science is predicated on the ability to move from a presumption that some explanation is true to a demonstration that, *ceteris paribus*, it is assured.

This assumption is not negated by the often quoted observation that, as a matter of fact, scientific theories that were considered to be proven in one generation are found to be wrong, or at least inadequate, in another. In fact, the essential revisability of the scientific enterprise is evidence of its ability to distinguish between truth and error, fact and fiction. Unless there is a body of facts, intrinsically accessible by the use of reliable methods, science could not be corrected. Otherwise, changes of theory could be caused by changes of perception, whatever the experimental data seemed to be showing.

The appropriate and inappropriate tasks of science

Now the success of science and the critical methods it employs have created a climate of opinion that concludes that science itself can give an adequate account of the whole of experience. In other words, in principle, all aspects of life are explicable by means of procedures and rules that govern the natural sciences. In an age, craving perhaps an alternative certainty to the one putatively provided by ecclesiastical dogma, a huge expectation has been invested in the ability of science to explain the whole of reality. The effect has tended to drive a wedge between what we can know we know and what we have an opinion about. Existence then becomes divided between two kinds of explanatory knowledge: *how* the mechanisms of the natural order work, and *for what* purposes they should be harnessed. In most spheres of life, however, only to know how instruments work, without knowing for what purpose they have been created in the first place, is to reduce explanation to a level of ultimate meaninglessness.

The methods of science are brilliant in describing mechanisms and drawing utilitarian conclusions from the discoveries. However, once one moves beyond the realm of operating processes and asks the fundamental questions – why should we be interested in knowing how the natural world functions? and, to what ends should we make our knowledge productive? – it becomes clear that the rational processes employed in scientific investigation are not suited for giving answers. Thus, it is one thing to have a good working understanding of the internal combustion engine; it is quite another to use it for the purpose of driving children to school.

The pretence that we can only know the meaning of a sentence that is, in principle, verifiable or falsifiable using the inductive and deductive procedures of natural science, apart from being referentially self-contradictory as a claim, is manifestly absurd in real life. To claim that I know why I have bought a car, i.e. that I have a justified true belief about my reasons, makes perfect sense, even though it cannot be confirmed by empirical experiment. In everyday language we refer to knowledge of this kind without any reason to doubt that there is any metaphysical or epistemological difficulty. In the case of solving a crime, the detective is absolutely justified in concluding his investigation by saying that he knows what the motivation was. It would, indeed, be curious if the only evidence allowable in a court of law was that produced by forensic scientists.

Science has a marvellous track-record in uncovering knowledge of laws that explain why physical, chemical and biological systems are the way they are, but these experimental methods cannot be considered the only path to knowledge. To attempt to do so is to commit a category fallacy by reducing the complexity of experience to unsuitable formulae. One notorious attempt in this direction is that of seeking to explain all aspects of human behaviour by reference to the mechanisms of survival through natural selection:

> Many people see in what is termed neo-Darwinism not only a scientific theory about gene selection, but a view which explains the whole of life. It does so in terms of mindless mechanisms working through biochemistry in a web of cause and effect.[16]

Once embarked on this quest, however, there can be no room for smuggling into the explanatory account any exogenous information. Literally the whole of human experience has to be explicable in terms of self-generating and self-sustaining physical processes: from differences in conceptual abilities to the artistic genius of great composers and painters to altruistic acts on behalf of strangers:

> Neo-Darwinism is not just concerned with how we obtained the capacities we possess. It is far more ambitious and wants to give a global explanation for how human minds work and for why we have the beliefs we normally do.[17]

This is a naturalist account which assumes (a) that the only possible source of knowledge is contained within the material world and can only be adduced by reasoning about data based on using the five senses, and (b) that beliefs and mental processes can be intrinsically explained by reference to the functions of the brain. Such an explanatory project is a heroic attempt to encompass the whole of meaning within a materialist ontological framework. It may be a valiant endeavour to exalt the epistemological virtue of parsimony, on the Laplacian principle that certain hypotheses are unnecessary, but it leads to nonsensical and unworkable conclusions.

Thus, Mary Midgley, in attempting to give an account of the origin of ethics from within the assumptions of a naturalistic evolutionary framework,[18] is forced to produce what might be called a ‘projection theory’ of moral judgement: even though there is no objective, external source or standard of good and evil, we have created such in order that we might live more humanly. We can only live *as if* the standards conformed to a reality independent of our subjective musings. She seems to have fallen for the (deontic) fallacy that it is possible to derive evaluative virtues from descriptive facts in her conclusion that ‘morality as it emerges from this matrix (biological evolution) is what it is’.[19] Michael Ruse is honest, though (necessarily) cynical, in his evaluation of the place of ethics in an evolved world that has just happened without design or purpose:

> Morality remains without foundation…Why does such a thesis…seem so intuitively implausible? Why does it seem…so ridiculous to argue that morality is no more than an

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[16] Roger Trigg, *Philosophy Matters*, p. 76.

[17] Ibid., p. 78.

[18] ‘The Origin of Ethics’, in Peter Singer (ed.), *A Companion to Ethics* (Oxford, 1993), pp. 3–13.

[19] Ibid., p. 12.

> illusion of the genes?…The simple fact is that if we recognised morality to be no more than an epiphenomenon of our biology, we would cease to believe in it and stop acting upon it…What this means is that, even though morality may not be objective in the sense of referring to something 'out there', it is an important part of morality that we think it is.[20]

Keith Ward subjects evolutionary ethics to a logical critique that shows how incoherent is the reasoning that lies behind it. It is an attempt to explain, which simply fails in its own terms:

> He (Ruse) cannot have it both ways. Either I will be genetically programmed to think that there is an objective and binding morality – in which case I must believe that the evolutionary analysis of ethics simply in terms of a non-purposive and randomly generated survival mechanism must be false; or I am able to see the obligations are illusions of the genes and to modify them for the sake of rational goals – in which case the evolutionary analysis is again false, since 'morality' in its non-illusory sense is now seen to be, not a creation of the genes at all, but to be based on the rational construction of intended goals of action. Either way, the 'evolutionary ethics' analysis does not do well. It comes out as false on both possible interpretations.[21]

Anthony O'Hear, on the other hand, admits that, 'Darwinism, if applied to our forms of intellectual, moral and aesthetic life, is indeed a dangerous idea.'[22] And yet with regard to aesthetics, and the same sentiments could be applied to morality, he is forced to admit a conundrum:

> Aesthetic experience seems to produce the harmony between us and the world that would have to point to a religious resolution were it not to be an illusion. But such a resolution is intellectually unsustainable, so aesthetic experience, however powerful, remains subjective and, in its full articulation, illusory.[23]

We use an evolutionary account of the genesis and functioning of morality as an illustration of how some people seek to sweep all explanations of the world into the confines of material, causal operations. However, there are major, intrinsic problems with these kinds of account. For example, the reductionist explanation fails to explain. It is not an adequate paradigm in that, if the conclusion is false – moral and aesthetic experience is clearly not illusory, in that people are self-evidently justified in believing that they encounter instances of right and wrong action and objects of beauty – then the premises are also false. So, as in the normal course of scientific work, if a particular theory no longer gives a sufficient explanation of the data, after due processes of testing of possible alternative theories, it will be replaced by a more satisfactory one. The latter will overcome the deficiencies and incoherencies of previous attempts to explain by positing a new resolution that escapes the limitations of what has been conceived before.[24]

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[20] 'The Significance of Evolution', in ibid., pp. 507–508.

[21] Ward, *God, Chance and Necessity*, p.181.

[22] *Beyond Evolution: Human Nature and the Limits of the Evolutionary Explanation* (Oxford, 1997), p. 214.

[23] Ibid., p. 201.

Then, the arguments are conceptually confused, in that propositions are affirmed that have no foundation in the original premises assumed. Both the statement that nothing exists beyond the material universe and the claim that another unobservable reality exists, which could influence this one, is false, are straight metaphysical allegations, not empirical ones. As such, putative *knowledge* that morality is no more than an epiphenomenon of our biology and that aesthetic appreciation and religious experience are illusions must come from some source other than empirical data.[25] In order to make sense, within the terms of the debate, these statements have somehow to be able to avoid being considered illusions themselves. An illusion is something said to exist that does not exist as described. To use the terminology at all presupposes some benchmark by which the proposition can be judged true or false. In the case of conceptual ideas, like morality and aesthetics, no such benchmark exists within the mechanisms of the material world. Reductionist strategies are quite simply self-refuting.

They are also flawed on the grounds that they are unable to make sense of science itself. Science cannot even get started, unless it makes a number of assumptions that are not demonstrable by the methods of science. Enquiry, for example, is predicated on the premise that a reality, independent of our present range of knowledge and understanding and of our social formation, exists and can be accessed. Otherwise, no new discoveries could be made. Human beings would be reduced to reiterating what they already know or recycling their mental images and conceptual observations. They would be confined within a solipsistic prison without, however, knowing it was a prison, because they would not know whether the walls were real or not.

It is not enough, with Nicholas Rescher, to view reality as a regulative ideal, to which we may aspire, but never reach.[26] Unless we can know reality as it is in itself, there is nothing to aim at and no way of knowing whether we have reached it. Nor is it satisfactory to use the category of transcendent reality as a means of making sense of scientific practices, for this begs the question of whether we are right so to use it. The notion of reality precedes the business of science and has to be justified on grounds that are not empirically assessable.

Moreover, in a dispute about theories in science, rival claimants have to make an appeal to a process of reasoning that is valid a priori, and therefore not contingent on the way in which the world may happen to be. It is evident that rival standpoints in science need justification according to criteria that are universally valid. Each protagonist is bound to reason that the arguments adduced for an alternative theory to their own do not merely fail according to some internal, relative and whimsical set of standards, but that either their premises are false or their inferences invalid absolutely.[27] In other words, they appeal to the truth of the matter and, in so doing, they are implying that there are standards of rational justification as such. Thus, science has to take for granted, not only that there is an external world existing independently of human cognitive and linguistic exercises, but there is also a given rationality without which scientific procedures would be unachievable.

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[24] Alasdair MacIntyre has elaborated this process in relation to what he calls ‘a tradition-constituted enquiry’ to show how ideas, concepts and methods are forced to change under the challenge of better possibilities; See, Kelvin Knight (ed.), *The MacIntyre Reader* (Cambridge, 1998), pp. 165–169.

[25] See, for example, A.C. Grayling’s claims that ‘the occurrence of supernaturalistic beliefs is best explained by the way brains work…; for the mental operations are well understood and wholly adequate for the explanatory task. It is a thesis well supported by empirical research’, *What is the Good?* , pp. 74–76. However, there is no way of avoiding the complementary conclusion that his theory (and, indeed, a naturalist, humanist belief) is, by similar reasoning, best explained by the way brains work. As a matter of fact, in neither case, do we have a proper explanation.

[26] See Trigg, *Rationality and Science*, pp. 38–39.

Finally, a reductionist belief fails to elucidate convincingly the remarkable fact that there is a complete symmetry between human thought processes and the experimental world, between the observer and the observed. Defenders of a naturalistic view of evolution, in keeping with their desire to explain everything on this basis, have come up with a particular theory. The fit between the world and our understanding of it is a matter of a process in which survival has been achieved on the basis of a programming of brains to give comparative advantage. It is natural to think that because we are here today and can comprehend and utilise our environment for our benefit, it is just because the evolutionary process has produced this capability in us. If it had not happened in this way, we would not be here to reflect on the fact that there is a fit:

> There are some who will see a mutuality of minds as being genetically imposed by the shared need to survive in the world as it is. It seems plausible to say that, if our thoughts did not conform to the realities of everyday physical experience, then we should not have continued for so long to be successful in the struggle for existence.[28]

In other words, we know that our knowledge of the world is reliable, just because the same conditions which helped form our understanding still pertain; the proof of this is that we continue to exist.

This appears to be a perfectly plausible argument which derives its effectiveness from its simplicity. There is no need to introduce extraneous, unnecessary hypotheses to account for our relation to the world; everything needed for survival has been supplied through the long process of gene replication and mutation. The explanation has the advantage of simplicity and restraint. However, the question is not about its restraint and modesty, but does it explain? Like all reductionist descriptions, the answer is no, because it overlooks crucial elements of the situation. In the first place, it is far from obvious that self-awareness is a vital part of an organism's strategy for coping effectively with the environment. There are many organisms that have survived successfully without this additional tool. Indeed, it might be argued that consciousness of the kind that human beings possess might be a disadvantage in the struggle for survival or, at the least, that unconscious belief and reflex action does just as good a job. In the second place, evolutionary survival does not explain the depth and complexity of human thought and experience. On an evolutionary premise, human beings seem to be grossly over-elaborated: why, for example, is the appreciation of Handel's *Messiah*, Bach's *B Minor Mass*, the beauty of Michaelangelo's *Pieta* or the subtle combination of colours in a sunset necessary for survival? It clearly is not, in that the majority of people survive without such an appreciation. Moreover, why, on naturalist suppositions, have beliefs harmful to survival, such as the willingness to sacrifice one's life for a noble cause, not only come into existence but actually survived?

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[27] See, Alasdair MacIntyre, 'Moral Relativism, Truth and Justification', in Knight, *The MacIntyre Reader*, p. 204.

[28] John Polkinghorne, *Beyond Science: The Wider Human Context* (Cambridge, 1996), p. 59. Polkinghorne himself disavows this line of reasoning.

> Laying down my life for others cannot be seen as a piece of behaviour that would be under genetic control…Genes encouraging any kind of self-destructive behaviour, or even unselfish behaviour benefiting others, could not be easily transmitted through the generations…This makes it even more mysterious why sets of false beliefs (from a materialist perspective), which may encourage behaviour that is harmful from an evolutionary point of view, can exist and even flourish…The only answer could be that religious belief has survival value, even if its content is unacceptable.[29]

As an explanation, the argument from survival is incoherent, for at one and the same time it suggests that what functions well is right, adaptability is the measure of what is valid, and yet in this case also false. From where does the notion of truth and falsity derive, when survival is the highest good? Natural selection cares only about the 'fittest', not about the 'best' in the struggle for survival. There is no room for sentimentality about finer moral points.

Consistent socio-biologists believe that notions of truth and morality have arisen as a biological strategy. Co-operation or 'altruism' is sometimes necessary to aid survival of the gene pool. However, this is not altruism in the usually accepted ethical sense of serving others because it is right to do so, irrespective of personal consequences. It is 'altruism' 'for one's biological ends, which today translates into co-operation to maximise one's units of heredity (the genes) in the next generation'.[30]

According to the theory, the characteristic moral notion of ought has arisen because our biological make-up has 'tricked' us into believing that we have obligations to others, for such a belief helps us to survive:

> From an evolutionary perspective these thoughts exist because and simply because those of our would-be ancestors who had such thoughts survived and reproduced better than those that did not. In other words, altruism is a human adaptation…We are moral because our genes, as fashioned by natural selection, fill us full of thoughts about being moral.[31]

The whole argument from evolution is based on a colossal fallacy of reasoning. Whether, or not, the neo-Darwinian account of the evolution of species from less to more complex organisms is an accurate description of biological operations is a matter of validating or refuting evidence collected by historical sciences; it has its own procedures.[32] The presumption in favour of the truth of evolution is a philosophical matter. The theory is produced by the human mind and presupposes a belief that we have an ability to understand directly the workings of a real entity external to us in some way. In other words, we have to have faith in the power of human reason to come up with an adequate theory that can then be tested against evidence (although even the concept of evidence is an assumption prior to our using it). We cannot, then, use the very hypothesis we are seeking to confirm or rebut as an explanation for our ability to postulate the theory in the first place:

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[29] Trigg, *Philosophy Matters*, p. 83.

[30] Michael Ruse, 'The Significance of Evolution', p. 503.

[31] Ibid., p. 504.

> We seem to be involved in a massive circle. We are in touch with the world because we have evolved to be. How do we know we have evolved? The theory of evolution tells us so. How would we know the theory offers a true account of the world? The answer is that our minds are attuned to the world and that is the result of evolution. So we go on.[33]

The problem for the reductionist is that he or she is constrained by a non-scientific theory of science, namely empiricism. It makes claims that cannot be substantiated by empirical methods. Science is concerned about physical activities. It seeks to understand mechanisms by appealing to necessary and sufficient causes. It has no particular jurisdiction, within the terms of its own methodology, in the realm of ontology, i.e. it is methodologically impotent to decide what can and cannot exist. The confusion arises partly out of the great reverence that is paid to the ability of science to demonstrate the accuracy and correctness of the theories it puts forward. In a world where many certainties about meaning have been lost, scientific explanation seems to buck the trend to a seeming incommensurable plurality and relativity of beliefs. Scientific explanations can be trusted. It is understandable, therefore, that people come to believe that science is able to give a convincing account not only of physical agencies but also of all belief systems.

What is happening is an apparently unrecognised category shift: physical causes are mistaken for reasons. Thus, science can tell us why we should believe that a particular theory agrees with a number of verification criteria undertaken in controlled experimental conditions. It cannot, however, give us the reason why we would be justified in believing that the conclusions are right. In other words, physical causes are entirely separate from reasons when it comes to trusting the findings of science. Unless human reason is capable of transcending causal influences that determine our reactions, there is no way we can distinguish between a good and bad theory. We simply accept what is proposed because we are programmed to do so. We would be unable to distinguish between causal assertions and correct judgements. Scientific descriptions of processes do not, by themselves, entail their own justification. What makes us believe, and whether we are right to believe, are not the same questions.[34]

This line of argumentation leads to the conclusion that there are dimensions to life that cannot be encompassed within a scientific framework of explanation. Reason is a separate entity however the mind and the brain may be connected. It can be detached from all causal contexts in order to assess the validity of the argument that we are controlled by our genes, our brain cells, our culture, or our pre-linguistic relation to our mother, or any other factor, to believe or to behave in a certain way. We do not simply describe how we come to hold certain views, but we argue that we are right to hold them. A belief can be caused by circumstances which, when fully known, are bad reasons for holding it. This may be true, for example, of the testimony of others. Even when the hitherto exemplary reliability of a friend leads me to trust her assurance that a particular wedding ceremony is due to start at 2 p.m., I may discover that, as a matter of fact, it began at 1.30 p.m. The explanation is that my friend confused two wedding ceremonies to which she was invited in the same month. The cause of my conviction, which led to my arriving half an hour late, was persuasive, but due to human fallibility the reason was flawed.

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[32] We return to the methodological and evidential questions raised by some aspects of the evolutionary hypothesis in chapter 10.

[33] Trigg, *Philosophy Matters*, p. 81.

[34] See, Trigg, *Rationality and Science*, pp. 80–86.

Reason and the acquiring of justified, true belief

An empiricist and naturalist reduction of knowledge – of what can be ascertained though the experimental methods of the natural sciences – is inadequate to explain the whole of experience. There is no way forward for science to achieve a theory of everything. One alternative to empiricism, canvassed within a modernist framework, might be reason itself. Perhaps reason can achieve a unified field of knowledge, such that all experience can be fitted within its parameters. In one sense this is true. Reason is universally applicable to the justification of belief. Thus no belief should be held that is not susceptible to good reasoning based on sufficient evidence. The natural (and correct) response to any claim to know something is, what are your reasons? Does the evidence measure up to the claims being made? Only by a rational assessment of the testimony put forward can one judge whether the belief is sound or not.

This view of the place and function of reason is not contradicted by those who argue that, as a matter of historical survey, reasoning is contextually determined or bound to a particular tradition. It is argued that the rational evaluation of conflicting traditions or contextually determined claims for reason is impossible if this means appealing to a rational method that stands outside all traditions. However, the claim that one cannot stand outside a tradition in order to criticise a tradition is itself either a statement made from within a tradition, and therefore cannot be evaluated vis-à-vis other traditions, or else it is made as a universally-valid statement, in which case it is exempt from tradition or context relatedness.

As a matter of observation there are universal laws of reasoning which form the substratum, even when not recognised or when dismissed, of all thinking processes. Thinking, communication, language are all dependent on these laws. Ian Markham identifies three such principles: a statement of fact about reality is either true or false, it cannot be both true and false at the same time; the critical weighing of evidence does produce true conclusions about the world; people are correct to be persuaded of the truth of a matter when good arguments are provided.[35] Again, we may notice how the processes of a legal trial are dependent upon the functioning of an inherent rationality. If these mechanisms did not function adequately, there could be no justice. Not many people would be content to live in a world in which the administration of justice was based on a context-determined understanding of reason. In such a world, dictators, presumably, would be able to define the working of the law in their own interests. The fact is that they have often done so, but we are swift to condemn them for it (for good reasons).

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[35] Markham, *Truth and the Reality of God,* pp. 58–63.

If the laws of reasoning were simply matters of convention, created and adapted according to changing circumstances, inter-human understanding would have broken down long since, and we would exist in a bewildering sense of confusion. Enlightenment rationality is often condemned for seeking an account of reason that transcends conflicting traditions about it. This, however, is a proper quest. A critique of the use to which Enlightenment people have put reason may be founded on other grounds; but, this is not the right territory. The employment of certain categories of logic can be justified both on a priori[36] and a posteriori grounds. The arguments are complex, and have often been disputed; however, they appear to be self-evidently valid, in so far as all attempts to discredit them depend upon them. They are statements whose contradiction is denied by the premises assumed to overturn them.

It would appear that there is a parallel between the empirical world of material things and the rational world of thought in the sense that in both spheres it is possible to uncover laws of operation that can be demonstrated to exist. Just as there is a givenness about the natural world – it is as it is independently of our conception of it – so there is a givenness about human cognitive processes: they are, because of the way we happen to be. There simply are not a multiple variety of ways in which we can think, a diversity of possibilities that we can choose.

To make these claims on behalf of reason is not to affirm (as has often been mistakenly assumed) that reason can comprehend the whole of life. For example, reason can tell us that certain ways of assessing evidence are invalid and that, if we follow these ways, we will end up with incorrect conclusions. It cannot tell us why we *ought* to believe only on the basis of good evidence, or why irrational beliefs *should not* be entertained. It is limited to a description of which means can achieve which ends. It cannot say why certain ends should be chosen rather than others.

It is often claimed that the chief characteristic of the modern project is a belief in the unlimited powers of autonomous human reason. By autonomous is meant the independence of human rational activities from accepted conventional wisdom, communitarian traditions or an extra-material disclosure of knowledge, so that, beginning again from first principles, reason can build a comprehensive understanding of human experience. This belief is often dismissed as the chief evidence for the Enlightenment's presumptuous confidence in being able to construct a new world out of the ashes of failed traditions, dogmas, prejudices and superstitions. Its motto was *sapere aude*, paraphrased by Kant as 'have courage to use your *own* understanding'.[37] Kant believed that civil freedom to make public use of one's reason in all matters was the hallmark of an *age of enlightenment*. And the cumulative use of public debate and argumentation, in which people exercised their own understanding, instead of depending on the guidance of others, would lead humankind from immaturity to an *enlightened age*.[38]

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[36] See, Laurence Bonjour, *In Defense of Pure Reason*, *passim*.

[37] Immanuel Kant, 'An Answer to the Question: What is Enlightenment', in Cahoon, *From Modernism to Postmodernism*, p. 51.

In part, the Enlightenment intuition was right. It is a mark of adulthood and maturity that one reasons matters out for oneself, only believing what one has thoroughly reflected upon in one's own mind, so that, even if one decides to accept certain traditions or creeds, inherited from the past, it is done as the result of solid deliberation. This is not so much emancipation from false beliefs, as release from the imprisonment of believing unthinkingly on the say-so of someone else. Reason does have powers: it can help us to discern what are good (and bad) grounds for believing something; it can evaluate what are more, or less, adequate means for achieving some chosen end; it can judge between a sound justification for a course of action and a rationalisation; it can assess the worth of different types of information; it can help to clarify the probable consequences of particular decisions.[39] Therefore, some current attempts to discredit the ideals of rationality and objectivity in thought do not measure up to normal human everyday cognitive practices, including those which end up in sceptical conclusions of one sort or another, since there have to be good reasons for being sceptical!

Nevertheless, the powers of reason are limited. By reason alone we cannot decide what are justifiable ends to pursue, nor can we know what 'acting for the best'[40] might entail. Unfortunately, actions that are morally wrong, according to other criteria, may be rationally permissible: as David Hume famously remarked, 'tis not contrary to reason to prefer the destruction of the world to the scratching of my finger'.[41] Nor is he wrong, within the strict terms of the use of reason, in saying 'reason is, and ought only to be, the slave of the passions',[42] if the individual has chosen to live, as consistently as possible, a life of hedonism.

It is, also, disingenuous of Kant to speak of renouncing enlightenment, in the terms in which he has described it, as 'violating and trampling underfoot the sacred rights of mankind'.[43] There is no logical connection between exercising one's own understanding and believing in the existence of the sacred rights of humankind. The latter notion has been introduced like a rabbit out of a hat. It may be in our interests to believe in our own rights. It may be comforting to think that certain rights are enshrined in conventions and laws. It may be altruistic to believe in universal rights, i.e. that the rights I desire for myself are applicable to every human being. It may be pragmatically useful to uphold human rights. But I cannot know, by reasoning about the matter alone, that such rights are an essential part of being human nor that they ought to exist in practice.[44]

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[38] Ibid., pp. 51–57.

[39] See, Schmidtz, *Rational Choice, passim*.

[40] Nathason, *The Ideal of Rationality*, p. 227.

[41] *A Treatise of Human Nature*, p. 416.

[42] Ibid.

[43] 'An Answer to the Question', p. 55.

[44] The epistemological questions to do with the notion of human rights are reviewed in chapter 10.

It is perhaps ironic that, by rational reflection on the issue, one can come to the clear conclusion that reason has many functions, but also is strictly limited. It is unfortunate that, in the debate between those who continue to defend the ideals of ‘the Age of Reason’ and those who think that the claims for reason are no longer realisable, the distinction between achievement and limitation is not made. The problem is not with reason, but with certain expectations of what it might be able to accomplish. It is not surprising that an exaggerated *faith* in reason can lead logically to a form of nihilism, for reason cannot by itself establish whether there is any sufficient cause for valuing anything in life. The examined life, of the sort that a rationalist might advocate, is actually quite consistent with a life of cruelty, indifference and personal unhappiness. Reasoning may lead to the discovery that nothing is of value in life.[45] Reason is not its own justification. There has to be a meta-rational basis for believing that rational thought is competent to fulfil the many claims made for it.

This discussion of the importance and legitimate place of scientific method and rationality has produced a set of arguments for concluding that, as we noted in the first chapter, the modern project has aborted a promising partnership between the word and world of God by perfunctorily and ill-advisedly dismissing the first and over-estimating the potential of the second. We will continue to explore the effects of this dichotomy in later chapters in relation to the grounding of ethical action, seeking to demonstrate how destructive of human life it has proved to be. Before arriving at our projected destination, however, we need to consider the post-modern alternative to the modern project as another possible direction that contemporary thinking might take.

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[45] Nathason, *The Ideal of Rationality*, pp. 21–22.

Chapter Eight

The World in Transit: Between Arrival and Departure (Part 2)

The End of History?

The cultural, social and intellectual movement usually known as post-modernity, and which has been influential roughly since the 1950s, could be depicted as a change from one form of historicism to another.[1] The modern project gave rise to a firm conviction that societies that embraced the principles of enlightenment were on a progressive path towards the emancipation of human beings from all forces that kept them in ignorance and subserviency. The scientific and technological advances of the eighteenth and nineteenth centuries also encouraged the belief that humanity was about to make a great leap forward, that the conjunction of material and intellectual forces were shaping it for a hitherto undreamt of destiny.

In one sense, the concept of history itself was born at this time. The generalised revolt against all that the *ancien régime* represented was matched by an embracing of all that the future might hold, once the inhibiting powers of the past were overcome, or at least neutralised. An early form of historicism was adopted by radical thinkers to emphasise the crucial influence of historical forces on human institutions, mental processes and activities.[2] It was elaborated, for the first time, into a method of philosophy by Hegel.[3] Hegel's insistence that all thought is rooted in specific historical circumstances and, yet, is not thereby necessarily relativised, has encouraged both 'modern' and 'post-modern' historicists to see in his thinking an encouragement for the stance they wish to adopt.

The historicism of the nineteenth century latched on to Hegel's concept of the absolute idea realising itself through a cumulative historical development:

> The temporal succession of ideas in the history of philosophy is the same as the logical succession of moments of the idea…Each system of philosophy in the past stands for one stage or moment in the logical development of the idea, and the order in which these systems follow one another in time is the same as the order in which the moments of the idea follow one another in logic.[4]

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[1] For an understanding of both kinds of historicism see, chapter 5.

[2] For example, Montesquieu, *Spirit of the Laws* (1749) and Herder, *Ideas for a Philosophy of History of Humanity* (1784–1788).

[3] Here I follow the discussion in Frederick Beiser, 'Hegel's Historicism', in Frederick Beiser (ed.), *The Cambridge Companion to Hegel* (Cambridge: 1993), pp. 270ff.

[4] Ibid., p. 277.

Whatever may be the exact interpretation of Hegel's system of thought, he has been taken as meaning that there is a progressive unfolding of an absolute reality within the movement of history itself. What we know and what we can achieve are the result of the attainments of the philosophies, arts and sciences of the past depositing their cumulative wisdom into our present. Philosophy discerns a dialectical process through which historically rooted concepts would, in the course of changing times, come into conflict with opposing concepts and become resolved into an ever higher synthesis, until an absolute system is achieved.[5]

Hegel has been interpreted as being both a transcendental idealist and a materialist, both an absolutist and a relativist, of both committing and repudiating 'the genetic fallacy'.[6] It is not the purpose of this study to enter into a discussion of the various interpretations of Hegel's philosophy. It is sufficient to demonstrate that it has been the inspiration behind a modernist version of historicism which then, later, was repudiated by a post-modernist version. Briefly we can look at two candidates who took the Hegelian method seriously, whilst coming to quite different conclusions with regard to the direction of history: Karl Marx and Francis Fukuyama.

Karl Marx's historicism

Marx believed that he had superseded Hegel's scheme by understanding that the dialectical development of history was the result of the interchange between humanity and nature, not through intellectual labour, but through specific means of production.[7]

> My dialectic method is not only different from the Hegelian, but is its direct opposite. To Hegel the life-process of the human brain, i.e., the process of thinking, which, under the name of 'the Idea', he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of 'the Idea.' With me, on the contrary, the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought.[8]

New modes of production, or the organisation of social labour, were made necessary when the old no longer satisfied the new needs that were being generated. A correct analysis of history revealed certain dynamic principles at work which were projecting history forward towards a final resolution of its contradictions. Here, Marx uses Hegel's famous concept of negation. For Hegel, the dialectical method proceeds by means of eliminating the self-contradiction of two contrary categories by means of negating the original negation. In this way, one part of the categories is preserved, whilst at the same time they are both abolished.[9] For Marx the category is the particular social arrangement within its specific historical moment. Thus,

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[5] Ibid., p. 19.

[6] The belief that an adequate description of the origin of an idea can determine its truth or falsity.

[7] David McLellan, *The Thought of Karl Marx* (Basingstoke, 1995/3), p. 139.

[8] Karl Marx, 'The Afterword to the Second German Edition of *Das Kapital*', in Robert Tucker, *The Marx-Engels Reader* (New York, 1972), p. 197.

> the dialectic includes in its comprehension an affirmative recognition of the existing state of things at the same time also the recognition of the negation of that state, of its inevitable breaking-up; it regards every historically developed social form as in fluid movement, and therefore takes into account its transient nature no less than its momentary existence.[10]

Now in Marx's thought the historical movement of the negation is advancing inexorably towards its final resolution in what he called 'the realm of freedom'. This culmination of history seems to be a creative transposition of the primitive societies, which practised a sharing of all material resources and did not pursue a division of labour, through technological sophistication, into a society where the capitalist exploitation of labour and the harsh necessity of universal manual work become a thing of the past:

> With his developments this realm of physical necessity expands as a result of his wants; but, at the same time, the forces of production which satisfy these wants also increase. Freedom in this field can only consist in socialized man, the associated producers, rationally regulating their interchange with Nature, bringing it under the common control…under conditions most favourable to, and worthy of, their human nature.[11]

Marx appears to think that the intrinsic forces of technological advance, engendered by the new successes in science and by human labour, once reconciled again to their proper object through the negation of the exploitative action of capitalist accumulation, will produce a qualitatively different kind of society. This is the kind of historicist assumption that Karl Popper criticised for seeming to propose an inevitable movement of history based on discoverable laws. The extent to which Marx himself, and to differing degrees his followers and collaborators (including Engels), were historical determinists is much debated.[12] Whereas he clearly makes human beings into the subjects of historical developments, the inescapable outcome of the various stages in the organisation of productive forces seems to be assured as a fact of the future. Marxism distinguishes itself from the variety of utopian socialisms by its claim to have uncovered the laws that govern social history. As such, they should, in principle, allow a certain degree of prediction of the future pattern of events.[13]

Francis Fukuyama's historicism

Francis Fukuyama also owes a great debt to Hegel:

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[9] Michael Forster, 'Hegel's Dialectical Method', in Beiser, *The Cambridge Companion to Hegel*, pp. 145–147.

[10] From *Das Kapital, Vol. I*, quoted in McLellan, *The Thought of Karl Marx*, op. cit., p. 140.

[11] *Das Kapital, Vol. 3*, taken from Tucker, *The Marx-Engels Reader*, p. 320.

[12] See the article, 'Determinism', in Tom Bottomore (ed.), *A Dictionary of Marxist Thought* (Oxford, 1991/2), pp. 139–141.

[13] See, 'Periodization of Capitalism', in ibid., pp. 414–417.

> Fukuyama treats Hegel with the greatest respect, and writes of his own work as following in the footsteps of the master. This is most obvious in his wholehearted embracing of Hegel's belief in the supremacy of ideas – for Fukuyama, the end of history has arrived with the final triumph and undisputed dominance of a set of ideas which can never be improved upon.[14]

His indebtedness to Hegel follows two separate but complementary paths. In the first place, he takes from Hegel the general philosophical idea that History has an end, 'that is history understood as a single, coherent, evolutionary process, when taking into account the experience of all peoples in all times'.[15] The thesis of an end to history is a meta-historical view about the nature of the development of human societies. It rests on the belief that history is both cumulative – i.e. that it constantly takes into itself the former contradictions which have been overcome – and progressive, in the sense that there would come a time when 'mankind had achieved a form of society that satisfied its deepest and most fundamental longings.[16]

The difference between Hegel, Marx and Fukuyama does not consist in their respective philosophies of history. They share the view that history has meaning, direction and purpose. They also believe that the fundamental impulses to this End are the combined forces of scientific advance, technological innovation, economic growth and political freedoms. The difference comes in the content of the state of affairs that herald the End: for Hegel and Fukuyama it is the liberal, democratic state combined with the power of capitalist economics to deliver an unprecedented creation of wealth and, thereby, allow all citizens potentially the possibility of participating in the good life. For Marx, it is the collapse of exploitative capitalism, the reuniting of labour with the ownership of the means of production, and thereby with the fruit of its own work, a rational society based on the identification and satisfying of real human needs and the abolition of the state.

In the second place, Fukuyama borrows from Hegel the distinctive idea that the fundamental motor of historical movement, that which propels it in an upward progressive direction, is the human struggle for recognition. Technological sophistication does not necessarily deliver the freedoms and political stability of modern democracies, for which most peoples long once they have a sight of the benefits they bring.[17] The recognition has to do with the most fundamental human desire of all, the need to be accorded worth as a being with intrinsic dignity and merit, irrespective of the circumstances of birth:

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[14] Howard Williams, David Sullivan and Gwynn Matthews, *Francis Fukuyama and the End of History* (Cardiff, 1997), p. 3.

[15] Francis Fukuyama, *The End of History and the Last Man*, p. xii.

[16] Ibid.

[17] Fukuyama developed his theory in the immediate aftermath of the collapse of the communist regimes of the Soviet Union and Eastern Europe. The collapse of autocratic, unrepresentative and unaccountable governments was largely due, according to his theory, to their inability to compete with the West either ideologically or economically.

> The desire for recognition and the accompanying emotions of anger, shame and pride are parts of the human personality critical to political life. According to Hegel, they are what drive the whole historical process.[18]

According to the Hegelian-Fukuyamian thesis, this recognition was finally achieved in the abolishing of 'the distinction between master and slave by making the former slaves their own masters and by establishing the principles of popular sovereignty and the rule of law'.[19] This transition to a new form of society, by means of the negation of the old, took its first decisive step in the French and American revolutions.

It is not the purpose of this present study to debate at any length the credibility or implausibility of this version of history. Just as there were great expectations that a socialist society might have been able to overcome for all time the internally-generated contradictions of the capitalist mode of production and yet, at least for the foreseeable future, they have proved unfounded, so to predict that a liberal, democratic system (fashioned according to the model of the USA) marks the final synthesis of human development is, to say the least, a somewhat dubious prophecy. It is true that the sensation of freedom from the over-zealous interference of the state is a desirable objective for most people; although, in practice, it is traded for an effective justice for all.[20] Nevertheless, it is highly debatable that freedom of choice in a consumer 'paradise,' the ability to vote in national and local elections, the possibility of amassing wealth, the ideal (but not the reality) of equality of opportunity through universal education, and the toleration of most beliefs and lifestyles amounts to the highest possible achievements of human longing. As one commentator has put it, Fukuyama would be more accurate in depicting his desired state of affairs the end of an *era*, i.e. the close of the experiment in state socialism, certainly not the end of *history*.[21]

A chapter may have closed, but the story goes on and, because Fukuyama has deliberately chosen to interpret the meaning of history from within an immanentist, secular framework, he has no good reason to suppose that the present form of society will continue indefinitely. Fukuyama himself detects the possible internal seeds of its own destruction, in that the hitherto insistence of Western thought, based on the Judeo-Christian doctrine of the *imago Dei*, on the absolute distinction between human beings and other sentient animals may collapse.[22] Such an acknowledgement as well as other indications of fatal, internal contradictions give credence to the view that the negation of the negation may still run and run.

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[18] Fukuyama, *The End of History*, p. xvii.

[19] Ibid.

[20] See, Kirk, *The Meaning of Freedom*, pp. 102–104. After the terrorist attacks in New York and Washington, Bali, Madrid, Istanbul and London, freedom is increasingly being traded also for security.

[21] See, Timothy Fuller, 'The End of Socialism's Historical Theology and its Rebirth in Fukuyama's Thesis', in Burns, *After History?* p. 61.

[22] Fukuyama, *The End of History*, pp. 296–298.

The End of Modernity?

The point at issue is the observation that the modern project has given rise to a form of historicism, of which Marx and Fukuyama are powerful representatives, which is now challenged by another form of historicism, generally known by the term, post-modernity. If socialism and capitalism are two ways of organising economic life socially within the modern project, both of which spring naturally from that paradigm, we have been witnessing another approach to the world that calls into question the ideals on which this project has hitherto worked. It would be wrong, however, to interpret the ‘post’ of post-modernity as if it indicated either a temporal sequence or the ascendancy of one view over another. The distinctive beliefs of the post-modern venture probably do not allow a sense of historical progression nor do they permit a notion that the modern is being transcended by something better. Rather, the post-modern condition is an attempt to give a different gloss on contemporary life from that expressed in the hopes and aspirations of modernity.[23] It marks a contrasting interpretation of Western society since the Enlightenment.

This is not a marginal point to make; it is crucial to understanding the post-modern situation. Some speak and write as if post-modernity were a kind of newly emerging culture that was gradually penetrating and taking over the culture of modernity. However, as Jean-Francois Lyotard articulates the matter,[24] it is a ‘condition’ that repudiates the ‘conditioning’ that contemporary Western people have undergone as the result of the way history is interpreted to endorse the modern project. Thus, it is a kind of rewriting of the claims of modernity from within. At the very least, as Foucault aimed to show in his study of various Western institutions,[25] there is a divergent way of looking at historical processes.

It would be better to describe post-modernity as a kind of mood[26] whose main features are disillusionment and suspicion: disillusionment that the extravagant promises of the modern project have not produced desirable results; suspicion that the idea of progress through history is an ideology that covers up an agenda forged by the beneficiaries of advanced capitalist societies, namely the political elite, government bureaucrats, natural and social scientists, industrialists, financiers, the academic community and the enforcers of law and order. Its main thrust, therefore, is to unmask a different reality from the one so eloquently promoted by socialists and liberals alike.

The fundamental conviction of the post-modern perspective is that the modern account of the recent development of societies in the West does not properly take account of the play of power. The Hegelian historicist, utopian panorama simply does not do justice to the corrupting influence of various forms of social power that are exercised in the bid to implement the grand vision. Therefore, it is wiser to be much more modest about the claims that can be made for the capacity of either the human intellect or the forces of production, or a combination of both, to guide humanity into a qualitatively more satisfying and wholesome future. Post-modernity seeks to prick the bubble of overrated assurances about the ever-improving direction in which the human enterprise is heading.

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[23] See, Williams, *Francis Fukuyama and the End of History*, pp. 163–165.

[24] *The Post Modern Condition*. The ambiguity of the term is expressed by the doubts over whether it should be written as one word, two words or a hyphenated word.

[25] See, chapter 5, note 20.

[26] David Lyon, *Postmodernity*, pp. 4, 6, describes it as a cultural experience, and ‘the exhaustion of modernity’.

'Incredulity towards meta-narratives'

One of the many problems, in Lyotard's estimation, of the modern project has been the attempt to find one overarching, rational explanation for the development of human life. As we have seen, two of the most elaborate and complete attempts have been made by the Marxist account of human social life divided into stages according to the current economic means of production and Fukuyama's interpretation of history as a successive struggle by the weak to wrest recognition from the strong. Marx believed he had discovered the fundamental clue to explaining the past divisions within society and opened up the way to a conflict-free future by uncovering the dialectic of history – the class struggle. Once the economic contradictions of capitalism were negated, in the final death throes of private property arrangements, history would usher in a qualitatively different society: one in which all needs would be met as everyone contributed to the common good according to their abilities. Fukuyama believes that history will demonstrate that all along there has only been one destination and one journey, that which leads up to liberal democracy: as more and more people make 'the slow journey into town', history itself will vindicate its own rationality.[27]

Marxism and liberalism are two of the clearest examples of a meta-narrative. However, they are but examples of many attempts to harness a rational method to different aspects of human life, in order to produce a complete explanation of a given set of phenomena. The Freudian and post-Freudian analysis of psychological disorders would be another, in so far as they claim to give a comprehensive description of the mechanisms of mental and psychic trauma.[28] Durkheim's explication of the origins of religious belief and practice in social cohesion and psychological integration is yet another.[29]

So, the post-modern objection to the meta-narratives of modernity centres on the latter's bid to propose all-inclusive descriptions of experience, which drive them to be exclusive of other ways of looking at life. They spring from the hubris of human reason which believes it can discover a final explanatory theory for everything. Post-modernity is a repudiation of all attempts to arrive at the final (Hegelian) synthesis of history by exhaustively analysing all its component parts, with the intention of exposing fundamental social, economic, psychological or biological laws which can then be harnessed to plan a more fruitful future for humanity. Lyotard rhetorically sums up the mood in his celebrated call to ‘wage a war on totality’.[30]

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[27] *The End of History*, pp. 338–339, where Fukuyama uses the metaphor of a convoy of wagons heading through a pass in a mountain range into the final destination (the last frontier?). He stakes all on the belief that the rational forces of capitalist economics and the liberal guarantee of constitutional rights will triumph over the irrational impulses of nationalism, racism, religious fanaticism and war, producing one homogeneous, world-wide culture.

[28] See, Anthony Elliott, 'Psychoanalysis and Social Theory', in Bryan Turner, *The Blackwell Companion to Social Theory*, pp. 171–192.

[29] *The Elementary Forms of the Religious Life*.

The impossibility of foundationalism

The drive towards meta-narratives has its origins in the desire to possess clear and precise descriptions of every human activity, using the scientific methodology so successfully employed with regard to the natural world, and to counter all forms of scepticism about the ability to arrive at true knowledge. In the Enlightenment view of things, knowledge was intended to be the great emancipator, the way of liberating humanity from the darkness of ignorance, prejudice and superstition. By the light of reason, employing the tested empirical methods of science and the manifest truths of the intellect, one would be able to forge a new society, built on the virtues of equality and respect for the freedom and rights of all (meaning, at the time, *all* those (males) able to own property).

Scepticism, it was believed, could only be defeated by discovering a set of foundational beliefs that could not be doubted or refuted. From the time of Rene Descartes onwards, many philosophers and scientists looked for a means of possessing an absolute assuredness about certain convictions, of a kind that no amount of incredulity could shake. Such convictions would have to be universally self-evident and intrinsically incapable of being doubted. To disbelieve them would mean either embracing irrationalism or remaining invincibly ignorant. Descartes, notoriously, sought to found such indisputable beliefs on the thinking subject that simply could not deny its own existence without being self-contradictory. Other attempts to defeat scepticism were proposed using the conclusive demonstrations of scientific experimentation, said to lead to the conclusion that, in principle, the entire workings of nature (and by derivation human nature) could be successfully deciphered, once the individual parts had been taken apart to reveal the way they function.

However, successive attacks against forms of foundationalism were made using the argument that one could only attain to absolute certainty by stepping outside the human condition altogether and seeing things from ‘God’s-eye point of view’,[31] The demand for absoluteness seems to be an impossible attainment, given that human beings are not absolute but constrained by fallibility and their relative situation. Both Descartes and Kant, for different reasons, introduced ‘God’ into their philosophical debate as a regulative ideal: to guarantee either the existence of reality (God would not allow us to be deceived) or the existence of a moral imperative, the soul and immortality (necessary for humans to be able to fulfil their moral duty). However, this line of reasoning is deemed to be flawed for two reasons. First, even if God were to exist, we could not know as God knows. There is an epistemic gap of vast proportions between what God and what humans could be expected to know. Second, one cannot conjure up the existence of God on the basis that God is necessary for some hypothesis to be true, for this assumes what is open to question.

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[30] Sim, *Postmodern Thought*, p. 20.

[31] See, Kirk and Vanhoozer, *To Stake a Claim*, pp. 20–27; Trigg, *Rationality and Science*, pp. 102–115.

Post-modern thought is marked by the conviction that all claims to knowledge are dependent on prior theories and that such theories are, in turn, dependent on contingent historical factors. Even the most exact sciences, with the possible exception of mathematics, are always open to correction. From time to time, as Thomas Kuhn and others have argued, science advances only by accepting a fundamental ‘paradigm shift’, amounting to a radical departure from previously accepted norms. The important point in Kuhn’s theory, as far as the post-modern critique is concerned, is that the paradigm replacement does not happen as the result of its greater conformity to an independent standard of evaluation. A paradigm is a constellation of beliefs, values and techniques shared by a given scientific community. The *gestalt*-shift occurs when the community is persuaded by the strength of presentation of an alternative paradigm.[32] The implication is that changing views about the adequacy of scientific explanations may be dependent to a large degree on the social factors implicit in people changing their opinions. In this sense, knowledge, even that related to scientific activity, is the result of the interpretation of data from a historically particular perspective. It depends on the particular intellectual tradition to which we adhere, not on some kind of tradition-free, absolute point of reference. In the last analysis, the only access we have to reality is through our culture and time-bound chosen descriptions.[33]

The threats of technological rationalism

A new interpretation of the history of the post-Enlightenment West comes to the conclusion that the potentially liberating force of reason has turned out to be oppressive and destructive. If Descartes believed that *cogito ergo sum* was an irrefutable truism, Enlightenment man has acted as if the concept *vinco ergo sum* (I conquer, therefore I am) was the new road to paradise. Modern man has sought to conquer nature (in the name of utility), other people’s territories and cultures (in the name of civilisation), markets (in the name of economic liberalisation and growth) and space (in the name of military superiority). All of these have been justified rationally by the benefits they will bring to all humanity. However, the resulting exploitation, destruction and obliteration of non-technical values have been either rationalised or explained away.

The main objection to technological rationalism lies in the assumption that the technocrats know what is right and best for the rest of humanity. Foucault, for example, has explored the history of so-called deviancy and come to the conclusion that a social or political consensus, in matters like mental illness or sexual behaviour, is little more than the imposition by the powerful of their views upon the weak. He represents the post-modern tendency to repudiate clear and absolute distinctions, such as those between sanity and insanity, and to recognise and encourage difference, i.e. the right of all people to dissent from the current views of the majority.

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[32] See, Losee, *A Historical Introduction to the Philosophy of Science*, pp. 199–202.

[33] Middleton and Walsh, *Truth is Stranger,* p. 32.

At its most constructive, the post-modern agenda aims to rediscover an emancipatory tradition, born in the era of modernity but soon forgotten in the uncritical embracing of economic, social and technological goals deemed to be unequivocally rational. It sets itself against the drive towards the imposition of an ever greater order on society, an order which cannot tolerate a multiplicity of discourses, particularly those which seek to speak on behalf of those disadvantaged or excluded from the putative benefits of the rational society.[34] The reality of conquest is that there are winners and losers, subjugators and vanquished. Post-modern thinkers call into question the supposition of the winners that the benefits outweigh the costs to the losers.

Post-modernity does not create a crisis for modernity; it claims to uncover one that is already present within the project itself. According to Christian Parker,[35] the crisis has to do directly with instrumental rationality. The advance of reason is not being progressively unfolded as a self-realisation, but has been trapped by the immanence of its own logic, turning its attention to the ethos of accumulation, consumption and profit. The possible realm of freedom, imagined as the result of the liberating effect of the scientific control of nature for human ends, has become subservient to particular means. Modernity has had to abandon its own ideal of constructing the good society in favour of stimulating wants and then selling products to satisfy them:

> Science can no longer afford to be the disinterested quest for truth about nature, since its economic survival is bound up with the production of new technologies: science cannot simply desire to know, *it must perform*. Thus ‘techno-science’ is the principal vehicle for the evolution of capitalism.[36]

Genuine liberty has been reduced to choice, and high ideals have been reduced to the consumption of trivia and the banality of popular culture in the West.[37] The consequences have been nefarious for the environment (exploited in some cases beyond the possibility of replenishment) and for those (the majority of the human race) who do not possess significant buying-power.

The abandonment of all truth-claims

The post-modern understanding is predicated on a powerful mistrust of all assertions about the possession of truth. There are several dimensions to this powerful suspicion that claims to truth mask hidden, ideologically-driven programmes.

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[34] See, West, *An Introduction to Continental Philosophy*, pp. 209–215.

[35] *Popular Religion and Modernization in Latin America* (Maryknoll, 1996), pp. 248–260.

[36] Iain Hamilton-Grant, ‘Postmodernism and Science and Technology’, in Sim, *Postmodern Thought*, pp. 75–76.

[37] What Galbraith in a renowned aphorism called ‘the bland leading the bland’, *The Affluent Society* (Boston, 1984/4), p. 4. This could equally well be transcribed as ‘the brand leading the brand’.

a) The desire to control

The post-modern consciousness includes a deep methodological scepticism that sees claims to truth as covert claims to power. In the real world, those who claim to know the truth, whether in scientific, moral or religious terms, have always wished to use their contentions as a means of supervising, regulating and restricting others. Far from 'the truth' making people free, it has everywhere had the opposite effect. It has given licence to institutions of authority to legislate what beliefs, public discourses and activities can be approved. Truth then tends to become what is publicly acceptable in any given society, and by acceptable is meant what legislators can impose and get away with.

The result is that abnormal, unorthodox or bizarre views may not be expressed, and even less acted on, until and unless they tally with what political life has decided are tenable in given particular circumstances. This means that, for example, society has conferred certain rights on homosexual or lesbian consenting couples, on couples seeking treatment for infertility, a women choosing either to proceed to the end of a pregnancy or to abort prematurely and on broadcasters in matters of taste and decency. Conversely, contemporary societies have denied rights to those who wish to discriminate against certain classes of people in job applications or who wish to protest, by destroying property, against the supply of military hardware to oppressive regimes or against experimentation with genetically-modified crops. The point at issue is *not* whether the government is right or wrong to set the limits of what may be tolerated, but that it is arbitrary in doing so. Truth, thus, becomes what can be successfully legislated for, i.e. it is decided by an exercise of power.[38] The merits or demerits of individual issues cannot be settled any other way, as there are no external, independent standards of right or wrong behaviour.

b) The commitment to pluralism and relativism

The main reason why claims to truth have to be arbitrary is that knowledge and understanding are always relative to a particular tradition. There is no possibility of being able to transcend the many traditions of interpretation by establishing some privileged perception of the meaning of life and what is right and good. All such strategies can be challenged in the knowledge that a universally valid norm to measure all possible deviations does not exist. Thus, human discourse has to content itself with only describing what is counted as normal behaviour at any particular time and place; it has no tools for measuring what is normative. Moral philosophy, at the most, is able to show how historically certain moral positions reflect certain life-patterns or belief-systems; it cannot engage in an argument about regulative ideals. It is a descriptive, not normative, discipline.

There is also a more pragmatic reason for discounting the value of truth assertions: seeking to reach a definitive conclusion about correct beliefs and actions inevitably leads to conflict and inhuman policies. Ultimately, a free society is one which allows the maximum liberty to individual conscience to decide on moral convictions and lifestyles. Tolerance and openness to changing patterns of behaviour must be the supreme values of contemporary society. The language of ‘good’, ‘better’, ‘best’ is discriminatory, repressive and undemocratic, for it assumes a superior vantage-point from which one may distinguish between rival opinions:

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[38] The process used – negotiated democracy – may seem on the surface perfectly proper. However, changes in the law are seldom made solely on the basis of the merits of the case; rather, the superior power of some vested-interests over others usually decides the outcome.

> Post-modernism…means cutting ourselves adrift from solid and stable boundary markers of what is right and wrong, good and bad, correct and incorrect, true and false, real and illusory and sailing off into the unknown without benefit of map or compass. But it also means an emphasis on the legitimacy of the individual’s ‘reading’ or interpretation of an object or event, however it may deviate from the opinion of the ‘experts’, and to the liberation of the marginalized thought of women, minorities and disenfranchised groups…[39]

c) Reality and the use of language

Part of the reason for rejecting foundationalism is due to a crisis of representation in describing reality. It is said that no longer can we be sure that our language accurately depicts an external world. The claim that our mental images of reality exactly correspond with that reality is an unsafe assumption. The chickens hatched by Kant’s transcendental idealism, the unbridgeable chasm he believed existed between reality in itself and the human perception of it, have come home to roost. Whereas it appears that scientists generally assume a correspondence theory of truth, namely that scientific theories describe an external world in such a way that the propositions match the reality, this theory is now being seriously called into question. It is alleged that the idea of correspondence is redundant in that no sense can be made of it, unless there is a guaranteed, independent access to the two domains that are said to correspond.[40] The most that scientists can claim is that theories may offer a provisionally warranted and fertile way of looking at certain data, until a more productive explanation comes along that seems to be persuasive enough to convince the scientific community of the usefulness of what is proposed.[41]

Another aspect of the realism-anti-realism debate is the notion that the world is a given. For a realist this is an important presupposition in developing adequate criteria for the justification of what we can take to be true. For an anti-realist ‘the myth of the given has finally been dispelled’.[42] For justification to be substantiated it is sufficient to show that beliefs cohere amongst themselves within a web of related beliefs. We do not need to do more than show that our version of reality is constructed out of a use of language that agrees with the particular rules and regulations set out beforehand. Meaning is a creature of hermeneutics: when interpreting texts (and nature and history, along with literature, are textual forms), the ‘reader’ may decide the meaning; there is no particular restriction on its significance. Reality is a matter of linguistic negotiation. There are no right or wrong ways of believing. Human beings create their own world out of their imagination.[43]

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[39] Gene Blocher, ‘An Explanation of Postmodernism’, in Castell, *An Introduction to Modern Philosophy*, p. 678.

[40] See, Hilary Putnam, *Reason, Truth and History* (Cambridge, 1981), p. 74.

[41] See, the discussion in Ernan McMullin, ‘The Case for Scientific Realism’, in Leplin, *Scientific Realism*, pp. 8–40.

[42] See, Roderick Chisholm, ‘The Myth of the Given’, in Alcoff, *Epistemology: The Big Questions*, pp. 169–170.

Realism, moreover, is dependent on a fundamental split between a subject who observes from an unattached, external vantage-point and an object which is observed. The subject is a self-contained entity that can approach the object as if it were a remote, disconnected substance always already available for inspection. By means of rational thought, experiment and analysis the object can be known as a thing. Post-modernists would argue that, over against the so-called objectivity of reason (which is an allegedly masculine principle), society must now re-capture the subjectivity of inter-personal relationships (an allegedly feminine essence). To attempt to maintain a rigid distinction between subject and object is, in practice, an impossible aspiration, for the subject is never self-sufficing and the object is never self-existent. The object already is part of the subject’s self-understanding prior to being encountered. To be fully understood it has to be ‘indwelt’[44] by the subject in a non-instrumentalist correlation. This avoids the manipulation of the object as a useful thing ready to hand and helps to treat it as in some sense a subject in its own right. It allows its ‘otherness’ to be secured in the possession of its own integrity independently of being an object to someone else.

The death of ‘god’

The proclamation by the madman, in Nietzsche’s *Gay Science*,[45] that ‘modern civilisation’ (‘you and I’) ‘have killed’ God, ‘all of us are his murderers’, is strikingly *post*-modern. It is not so much a claim that theism is intellectually indefensible, because it is either an unnecessary or impossible thesis (according to the rationalist canons of modernity), as an acknowledgement that any divine being impedes the full liberty of human aspirations. The legacy we have inherited from Nietzsche is that God is not just improbable but incredible. The ‘death’ of God does not arise from the normal atheistic refusal of theistic proofs; rather it is the consequence of the shattering of all illusions and the disappearance of all fixed points.

If modernity brought the ‘disenchantment of the world’, Nietzsche has brought its elimination in the form conceived by the Hebrew-Hellenistic synthesis. His thought brings about the ‘birth of tragedy’ within the self-confidence of scientific humanism. There is, in the short tale of the madman, an intended contrast between those standing in the market place, ‘who did not believe in God’, and who suggested that God had lost his way or gone on a voyage, and the madman who realised the enormity of the deed of getting rid of God. The former – the humanist atheists of the Enlightenment – just laughed and mocked; the absence of God was, for them, a trivial matter. But the madman was distraught and, to assuage his 'guilt', proclaimed a solemn *requiem aeternam deo.*

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[43] See, Christopher Norris, ‘Anti-Realism and Constructive Empiricism: Is There a (real) Difference?’, in *Against Relativism*, pp. 167ff.

[44] The word is used by Michael Polanyi, *Personal Knowledge*, to describe the kind of commitment that is necessary in the act and art of knowing. His view of tacit and personal knowing is not to be identified with a post-modern consciousness.

[45] Friedrich Nietzsche, *The Gay Science,* Part III, 125.

Nietzsche's concept of deicide is complex and subtle. It is intimately linked to his declaration of the coming of the *Ubermensch,* the 'will-to-power' and the 'eternal recurrence'. There are many interpretations. One of the most significant, perhaps, is that the death of 'god' actually spells the death of man. Following on from the 'assassination' of God comes the death of self. In his *Twilight of the Idols,* Nietzsche affirms that 'We have done away with the true world: what world is left over? The apparent one, maybe?…But no! Along with the true world, we have done away with the apparent!' Ian Markam comments, 'Nietzsche understood completely that everything is at stake once one understands that theism is false.'[46] The death of God implies the metamorphosis of all values and the loss of the centre of being. In the dialectical march of history (or, as Nietzsche would affirm, its eternal recurrence), the Apollonian principle of 'order, static beauty and clear boundaries', in the 'globalised' world economic and political order, is in tension (or conflict) with the Dionysian principle of 'frenzy, excess and the collapse of boundaries'.[47]

The *Ubermensch* can be described as the 'last man'[48] in the modern sense of one who believes he is able to discover the path of bliss through uncovering and exploiting the reality of the world. Nietzsche represents an immense break with the modern project. The death of God is simultaneously the death of morality and the attempt to exalt aesthetics as the most supreme good for humanity. Henceforth, human beings are invited to throw of the shackles of conventions and reach out for a universe of their own creation.

However, his 'brave new world' is full of tragedy. As has been rightly said, Nietzsche, unlike many atheists, saw the full horror and immense sadness of this act of assassination, for it implied the 'super-human' task of recreating all values,

> Is not the greatness of this deed too great for us? Must we ourselves not become gods simply to appear worthy of it? There has never been a greater deed; and whoever is born

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[46] *Truth and the Reality of God*, p. 115.

[47] See, Magnus and Higgins, *The Cambridge Companion to Nietzsche*, p.22. Zygmunt Bauman in *Work, Consumerism and the New Poor*, p. 31, in his comment that consumers are guided by aesthetic interests rather than ethical norms, echoes Nietzsche.

[48] Francis Fukuyama deliberately chooses this phrase to describe the reality of humanity 'after history'. However, in total contrast to Nietzsche, his 'last man' does not exalt *megalothymia* (the desire to be great) but *isothymia* (the desire to be equal); see, *After History*, op. cit., pp. 188–190, 304–312. Fukuyama's reference to Nietzsche is a major gloss, since the latter despises 'the last man' as the antithesis of the *Ubermensch*. In the Prologue to *Thus Spoke Zarathustra* (translated by R.J. Hollingdale) (Harmondsworth, 1973) Zarathustra says, 'the earth has become small, and on it hops the last man who makes everything small…' The meaning of the *Ubermensch* is seen in contrast to the '*last man*, the human type whose sole desire is personal comfort, happiness', Magnus and Higgins, *The Cambridge Companion to Nietzsche*, p. 40.

> after us – for the sake of this deed he will belong to a higher history than all history hitherto.

This was something that Nietzsche was afraid humanity would prove incapable of doing:

> ‘I have come too early’ (the madman) said then; ‘my time is not yet. This tremendous event is still on its way, still wandering; it has not yet reached the ears of men.’[49]

And, even if they set about the task, the absolute relativism of perspectives would make the task never-ending.

Nietzsche and those who wittingly or unwittingly have followed him have declared all historical projects built on the belief in truth surpassed. There is no comfort to be had by a belief in a supposed progressive unfolding of a rational spirit in the achievements of human endeavour. Nietzsche’s account of the death of ‘god’ is nihilistic in that it announces the end of contemporary ‘renaissance’ man, without any clear project as to what will follow. If the eternal recurrence is Nietzsche’s final answer to the myth of progress, it is deeply pessimistic.

The inherent deficiencies of the post-modern outlook

We have already raised doubts about whether the post-modern condition exists as an actual coherent set of beliefs. It is now possible to show that the very idea of a post-modern culture is essentially improbable, due to its self-contradictory nature. Of course, those who adhere to the idiosyncracies of post-modern thought may not be particularly disturbed by the idea that it is inconsistent. There is a certain irreverent celebration of the apparently absurd and illogical. The argument, however, is that the so-called, rational discourse of modernity is simply an ethno-centric, time-related ploy to gain a position of advantage in the continuing struggle for survival. It privileges the kind of vantage-point on life that secures its own advantage:

> Philosophy is the discourse that, at least traditionally, privileges logic over rhetoric, the intelligible over the sensible, the literal over the figurative, and metanarratives over narratives. Such privileging, however, is itself a rhetorical move, not something that mirrors the natural order of things. Philosophy is only able to maintain these hierarchies by means of strategies and exclusions.[50]

With the rejection of the notion of ‘binaries’ or opposites – true/false, good/bad, real/illusory, correct/incorrect – human beings are free to choose their own notion of what is central and what marginal to life and thought:

> Where previously the evaluatively laden binaries constrained and limited thought and language to a supposed presence (that is, objective truth to which thought and language had to conform), the rejection of presence frees thought and language to ‘play’, as Derrida

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[49] *The Gay Science*, op. cit.

[50] Kirk and Vanhoozer, *To Stake a Claim*, p. 50.

> calls it, with the 'reading' or interpretation of the 'text', that is, to freely interpret the object or event without being restricted by considerations or correctness or truth.[51]

Nevertheless, its own critical stance towards the modern project is dependent on assumptions that are, in turn, called in question by its own critique. For example, in order to dismiss claims to truth and absolutes as historically conditioned, imperialist and oppressive, one has to assume that which one wishes to deny. If the proposition that we can no longer use the notions of true and false about a statement is not itself a statement about what is true, what kind of affirmation is it? Is it just a rhetorical device to have a bit of intellectual fun? The problem is that the advocates of post-modern perspectives seem to be deadly serious and passionate in their jettisoning of the modern philosophical tradition. How should we understand this? Do we take the language as a piece of playful enjoyment? One suspects that post-modern thinkers would not devote so much time and energy to convincing the world of the evils of the modern project, if they really believed that what they said was quite inconsequential. Why, then, would they want to be 'guided in our articulations only by the desire to persuade, to gain a receptive following?'[52] It would seem, *prima facie*, that they actually wish to be judged by the norms of the rationality they claim to despise: namely, that there are fundamental distinctions to be made between what is a right and wrong way to perceive human convictions.

Moreover, the condemnation of unjust and oppressive systems depends on an unarticulated normative framework of its own. The language of imperialism and oppression implies a state of affairs that is wrong, not merely from a limited, time-bound and fleeting perspective, but in a final sense: i.e. that the enforced subjugation of one set of people by another against their will can never be justified in any circumstances. The denunciation of universal systems, in the interests of the emancipation of the local and the different, implicitly assumes the universal right of all to be treated according to their own wishes. The defence of the interests of the 'Other' presupposes that the 'Other' has an intrinsic right to entire respect. From this follows the requirement that the tolerance that delights in distinctiveness cannot be tolerated for those who would suppress 'Otherness'. A post-modern stance, like any perspective on human life, is bound to limit tolerance in order to remain true to itself. Otherwise, it can be simply dismissed as one more local and temporal perspective, bound to a culturally relative angle, a kind of eccentric knee-jerk reaction to the march of history. Therefore, in practice, in order to have integrity, it poses no radical break with an ethic of absoluteness, whatever it may claim to the contrary:

> Knowing that universals inevitably violate the rights of the particular, we yet want a universal rule to protect the particular from the possibly universalising aspirations of other particulars.[53]

To be consistent to its own critique, it requires both an ethic of 'responsibility to act' and an ethic of 'responsibility to otherness'. A determined commitment to the deconstruction of values threatens to undermine, or at least enervate, this sense of responsibility.

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[51] 'An Explanation of Postmodernism', p. 678.

[52] Ibid., p. 681.

[53] Bertens, *The Idea of the Postmodern*, p. 242.

This analysis and assessment of post-modernity is postulated on the belief that consistency of belief and between belief and action is important.[54] It is important principally because anarchic thinking, the free-play of language and concepts, ultimately degrades human worth by undermining any possibility that there might be sufficient grounds for taking human issues seriously. ‘Difference’ leads almost inevitably to indifference. If the most we can do (according to Gene Blocker) is try to eliminate biases, so that at least we can distinguish between propaganda and history, we have not given any good reason why propaganda is unacceptable. For example, if the Nazi rewriting of history, to try to make the Jewish people the scapegoats for the misfortunes of the German people, is manifestly propaganda, on what post-modern grounds can this be condemned as illegitimate? If the notions of truth and falsity, correctness and incorrectness, are unfortunate hangovers from the imperious assumptions of traditional philosophy, then the only ground for rejecting the Nazi doctrine would seem to be social convention. This is the conclusion (though specific instances of propaganda are not discussed) to which Blocker comes at the end of his presentation of postmodernism:

> Even if our knowledge is biased by our interests, we can still learn what an object is like relative to our interests…; even if our knowledge, beliefs and meanings are based on changing social conventions, these conventions change slowly enough to allow establishing acceptable and workable rules operating within a given time span…; even if there are not brute facts, there are relatively more *socially acceptable beliefs* in any given situation which function as and can be regarded as ‘facts’relative to that context.[55]

If social convention were all that stands between the Jewish people and the ‘final solution’, then the future of humanity would be bleak indeed. Post-modernity seems to be further handicapped in this debate by its seeming admission that we can no longer assume a common humanity as we confront the irreducible plurality of cultures and histories.[56] The assumption of a common, shared humanity seems to be one of the principles underlying the idea of *universal* human rights. If this is undermined, then on what basis can the entitlements of, say, the Jewish people be guaranteed? If all discourse is little more than an arena of struggle, ‘crisscrossed by relations of power (order and subordination) and solidarity (cohesion and antagonism)’,[57] why should not the strongest make up the rules? The belief, fortunately almost universal, that power does *not* justify freedom of action cannot be defended on post-modern grounds.

The mistake that post-modernity makes is to assume that its brand of radical scepticism is the only alternative to the inadequacies of the modern project. For, of course, consistency, coherence and order are in themselves no guarantee of truth. A belief may be warranted, in that a person or group of people are justified in holding it, having exercised properly their cognitive faculties, and yet be false. Looking at it from the perspective of the cultural and social history of the West over the last 350 years, there does not seem to be any other option. This, however, is precisely the crisis that Western culture is facing. It is a predicament of its own making, because it has excluded *ex hypothesi* the one thesis that has sufficient intellectual resources to measure up to the dilemma. The final chapters will attempt to give a convincing demonstration of this submission.

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[54] See, J. Andrew Kirk, ‘Christian Mission and the Epistemological Crisis of the West’, in Kirk and Vanhoozer, *To Stake a Claim*, pp. 166–167.

[55] ‘An Explanation of Postmodernism’, p. 682 (my emphasis).

[56] See, Seidman, *Contested Knowledge*, pp. 315–316.

[57] San Juan , *Beyond Postcolonial Theory*, p. 133.

Another instance of the performative contradiction into which post-modern thought is drawn by its stance is its dismissal of the possibility of encountering truly objective reality. Involved in this argument is the implicit assumption that the claim to objectivity is false, that there is no final way of being able to distinguish between a real object and our perception of it, that interpretations always come in between us and the object to such a degree that the object is always distorted; we never encounter it as it is in itself. In other words, there is a crisis of representation, of being able to be sure that our language makes an effective contact with a real world that is independent of our propositions about it. However, by the token of this argument, we could not know how close or distant our depictions of the objective world were for such a claim would need to be able to use the language of error; but, such language is precisely ruled out, as it infers a superior grasp of reality, exactly the point under dispute.

Likewise, post-modern consciousness attacks the kind of rationality that has come to the fore as a consequence of the scientific spirit – logical, consistent, self-critical of its own premises, susceptible to evidence and demonstration. However, the only way to pursue a negative analysis of rationality is by using the same techniques of reason as those being dismissed. If the rejection of meta-narratives is intended to cover all claims to possess a warrantable, all-embracing, true perspective, it suffers the same fate, as it is itself a claim enjoying the status of global validity. To the contrary, it has no grounds for objecting to the possibility that one, or another, meta-narrative might be right.

In so far as the contemporary self is but the passive product of language, history, culture and society, it cannot maintain a properly dissentient stance against history, culture and society, for such a stance is, according to the theory, already a mere product of the transient, ephemeral and mutable forces that happen to exist. David Hawkes has identified the problem exactly: if the independent consciousness of the individual subject is disputed, and if the self is produced by the interaction of signifying systems which allocate to it a particular identity commensurate with its particular context, if, in short, the subject is an illusory unity, the notion of false consciousness becomes redundant.[58]

It is not surprising then that, for example, few feminists will consistently embrace a post-modern outlook. Feminism is a commitment to both an ideological critique, which presupposes a meaningful distinction between a true and false consciousness, and to an emancipating project. From the perspective of women seeking to reverse gender discrimination on the basis that the two halves of the human race are equal in dignity and respect, and therefore should be treated in a wholly equivalent way, post-modern rhetoric has to be seen as deeply conservative politically. Post-modernity, if consistent to its own principles, is incapable of distinguishing valid from invalid claims about the right and the good or of properly using the language of prejudice, inequity, bigotry or unfair discrimination. The most it can do is promote a conservative agenda of consensus-based attitudes, which equates 'good in the way of belief' with pragmatic liberalism.[59]

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[58] See, Hawkes, *Ideology* (London, 1996), pp. 4–5.

In contrast, the task of unmasking certain consensus values as a smokescreen for oppressive sectional interests is, in fact, part of keeping faith with enlightened, critical-emancipatory thought. Hence, post-modernity, under the illusion of presenting itself as the debunker of power-strategies that mask as truth claims, can itself hide an oppressive epistemology. Thus, for example, the claim to possess the prerogative to reject the original intention of a text in the name of hermeneutic freedom, in that it deprecates the significance of the author's composition, is nothing but an unacceptable violence against her integrity. It is difficult to see how this 'strategy' is consistent with allowing the 'Other' to speak her thoughts with total candour.

Post-modernity, as a cultural theory, has shown itself to be remarkably weak in its interpretation of history. As an account of the way in which knowledge is acquired, it has no convincing explanation of either scientific methodology or of progress in science. The tendency to find reasons for scientific 'success' in social, political or cultural factors rather than in the experimental method which subjects data to confirmation or falsification is inadequate.[60] It suggests that the cumulative growth of science is a lottery which, by good luck, has from time to time been able to give sufficiently satisfactory explanations to allow for technological progress:

> The basic strategy is to shift attention from the normative notion of *warrant* (of how good evidence is for this or that scientific claim) onto the descriptive notion of *acceptance* (the standing of a claim in the eyes of the relevant community).[61]

Post-modernity is equally undiscerning when it comes to the all-pervading power of late capitalism to shape the contemporary world. David Harvey argues that, because postmodernism

> emphasises the fragmentary, the ephemeral, and the chaotic…while expressing a deep scepticism as to any particular prescriptions as to how the eternal and immutable should be conceived of, … it signals nothing more than a logical extension of the power of the market over the whole range of cultural production.[62]

To launch a theory that post-modernity is the natural partner of a capitalism that knows how to market effectively the local, particular and different might appear to succumb to a kind of 'economism'. Nevertheless, it would be true to say that post-modernity easily accommodates the capitalist world-system, for in the last analysis its view of truth, absolutes, identity, the good and the right is oriented to consumer-choice in the realm of ideas, lifestyles, habits, perspectives and opinions. It is sheer historical gullibility to imagine that, by championing the legitimacy of the views of every individual and group, the marginalised will be liberated. In the context of globalisation, the cultural customs, traditional arts and crafts and religious beliefs of the weak may be, at one and the same time, and from different perspectives, highly valued and commercially exploited.[63] At the same time, the economic beliefs of the powerful will also go unchallenged.

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[59] As we have already noted in the case of Richard Rorty, see, pp. 89–93.

[60] See, Susan Haack, 'Puzzling Out Science', in *Manifesto*, pp. 90–103.

[61] Ibid., p. 92.

[62] *The Condition of Postmodernity*, pp. 116, 62.

The celebration of difference, and 'the consensus-theory of truth,[64] may be said to coincide exactly with the global manufacture of multiple false-consciousnesses. A crisis of representation coincides exactly with the rise of the fabrication and consumption of images, propelled by an unparalleled growth in the economy of the West after 1945, as a result of which societies shifted away from industrial production towards consumption-based economies. The dynamic of late capitalism is the challenge to sell anything by any means. It operates by promoting dissatisfaction with what one already has and is, kindling desire for something different (*novel* and *innovative*), increasing choices, infinitely extending credit to shorten the time of waiting and ensuring that gratification is never achieved. In other words, capitalism has perfected the power of persuasion. Likewise, as Roger Trigg has argued, with post-modernity all that we are left with is rhetoric as a mere exercise in the power of persuasion.[65] If the conclusion did not seem too cynical, or too dogmatically Marxist, one might be tempted to argue that the post-modern condition is the epiphenomenon of the most recent shift in the capitalist mode of production, and little more.[66]

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[63] Multiculturalism, as a theory which has achieved widespread academic approval, just happens to fit beautifully the principles of the commodification and commercialisation of all facets of life. Hence, the wide variety of cultural forms and human belief systems can all be highly valued, *just as long as* they can be exploited for economic profit.

[64] Norris, *Reclaiming Truth*, p. 188.

[65] Trigg, *Rationality and Science*, pp. 163–165.

[66] Frederic Jameson has provocatively called postmodernism, 'the cultural logic of late capitalism', see *Postmodernism, Or, The Cultural Logic of Late Capitalism* (Durham, 1991), chapter 1.

Chapter Nine

Regaining a Lost Opportunity: The Preconditions

The journey so far

The central thesis of this study is that the epistemological divorce between the word and world of God, as sources of knowledge for understanding the nature and meaning of human reality in the universe, has brought about an intellectual, cultural and existential crisis in Western society. In an attempt to establish this contention, I have followed a descriptive, analytical and critical process.

In the first place, I have traced some of the main reasons which account for the initial separation of reason and revelation as complementary sources of information about the human experience of life and, subsequently, the tendency to set them up as competing, antipathetic and inimical accounts. The story is lengthy and, in broad outline, well-known. As a general description of an historical process and of its consequences, the report is not particularly controversial. The effects of the split have been rehearsed many times. Contemporary thinking has come to accept that empirical knowledge and personal belief enjoy distinct epistemic standings. In so far as certain cultures have embraced a ‘modern’ outlook, there exists a generally acknowledged dividing line between public, universally acknowledged, incontestable knowledge, on the one hand, and private, contextually-determined and disputable notions, on the other. In common speech, belief is a matter of opinion, defined as a way of thinking open to question and up to the individual.

In the second place, I have examined the main causes of this breach between the two putative sources of knowledge and understanding. One may summarise them under the following headings: (a) a desire to ground knowledge on an incontrovertible foundation – either the indisputable workings of consciousness reflecting upon itself or the existence of self-evident axioms of thought or the solidity of the inductive method as a way of ascertaining data about the natural world; (b) an aspiration to deliver the means of obtaining knowledge from the interference of religious teachings; (c) a hope that reason could function as an all-inclusive means of securing a true understanding of experience; (d) a perception that alleged revelation was one of the main causes of ignorance, oppressive power, injustice, discrimination and superstition. I have also attempted to explain the background, significance and cogency of these factors.

In the third place, I have evaluated critically the strengths and weaknesses of both the grounds and motives for making reason, through the application of precise, scientific methods, the touchstone for judging between knowledge and opinion. I have endeavoured to discriminate between the justifiable and unjustifiable assumptions and claims made for the scope of human reason in assessing what is either certain, probable, possible, implausible or incredible.

Conceptually, the most fruitful way of pursuing this descriptive, analytical and critical survey has been through an examination of the two movements, modernity and post-modernity, which have so come to dominate the philosophical, social and cultural discourses of Western societies since the eighteenth century. The interpretative benefit of this way of proceeding is that these two terms are generally recognised, fairly easily explained and offer a comprehensive account of the movement of a distinctive culture over a definable period of time. The interaction between these two modes of addressing the human condition is a suitable way of describing the cultural situation of the West at the beginning of the twenty-first century. The current state of affairs is fluid. One cannot describe the actual historical conjunction as predominantly either modern or post-modern or, a matter perhaps of greater significance, as a transition from one to the other. Part of the contemporary predicament is that aspects of modernity are at one and the same time adhered to and repudiated. Meanwhile, post-modernity appears to be more a mood of unease and restlessness with what has been than a firm agenda of what might take shape in the future.

In terms of our main thesis, rationality and scientific achievement alone do not seem to have produced either a longed-for epistemological certainty or a conclusive meaning for human existence. As a result, the West has seen in recent years the birth of new ‘spiritualities’, which are trying hard to offer means of ‘re-enchanting’ the world. They are evidence of a serious crisis in human self-awareness. However, they fail to provide a solution to the predicament, for they are symptoms of, rather than cures for, the self-same split between the sacred and secular worlds, which we have been charting throughout this study. In general terms, it would be fair to suggest that the contemporary movements in spirituality, including those which have some resonance within mainstream religious traditions, fail to engage successfully with those fundamental issues of rationality, truth and reality which continue to challenge Western thought. They have opted for one side of the split, rather than trying to heal it.

Having charted the terrain, in order to gain one’s bearings, the final task is to seek a way forward out of the current impasse. The conjunction of events in today’s world calls for a fresh, creative, alternative set of proposals. The challenge is to discern the valid elements of the modern project, heed the legitimate warnings of the post-modern response, but at the same time, by healing the historically anomalous fracture between rationality and belief in God, to restore to this present generation a unitary knowledge which will reconnect it to the fundamental truths about life.

Recognising and interpreting the issues

A reappraisal of epistemology

At the root of the present intellectual malaise in the West is a faulty approach to epistemology. For too long, and without a serious contemplation of its damaging consequences, the heirs of the modern project have believed that the only assured knowledge can be acquired by reasoning from the basis of a disciplined observation of the natural and human worlds. Following this conviction, it has also been assumed that everything pertaining to human life can be discovered and decided by the same processes. In other words, it has become characteristic of a certain intellectual tradition to claim that the only knowledge that human beings are bound to believe is that located by means of empirical research and the legitimate experimental conclusions that can be derived from it. By the same token, everything else that human beings believe – about love, generosity, beauty, justice, rights, civilisation, freedom, equality, suffering, humility, forgiveness, and much more – cannot be known, only conceived of. There is a very real possibility that these notions are only imaginary; or, at the most, they are notions largely relative to particular historical and cultural situations. And yet, it seems evident that, unless one makes some ontological assumptions about the nature of human life, by reasoning about ordinary experience, it is simply impossible to make sense of the kind of virtues listed above. Indeed, even to refer to them as virtues is illegitimate on the basis of a rationalist or empiricist epistemology.

Interestingly, even the scientific method of conjecture, experimentation and confirmation or refutation, does not carry its own warrant. There are no first principles that one can be certain of simply by thinking about them. Science is dependent on the a priori acceptance of axioms that are taken to be reliable. Prior to investigating the natural world by means of scientific methods, the scientist has to believe that her research is about something more than the imaginings of mental processes inside her own head.[1] She has to be convinced that the phenomenon she observes and the data she processes is perceived in the same way by other minds. Science is a cultural activity in the sense that it is deemed by a human community to be a worthwhile exercise and is carried out by groups of people mutually accountable to one another. The amount of time and resources expended on research and its practical implementation is justified, if at all, on the basis of human values which cannot be deduced from the scientific enterprise itself. Science is dependent on convictions about the relation between the observer and the observed, such as the belief that we perceive things as they truly are. These are unobtainable empirically; for science to get started, they have to be presupposed.

Unfortunately, the Western intellectual system in the period of modernity has tried to proceed on the basis of a simplistic account of what can be known. Knowledge includes not only an accurate account and understanding of physical processes but also the theoretical reality that makes this knowledge possible. If we do not know the latter, we cannot know that we know the former. Thus, if we move beyond the data of the physical world to those components of experience, like consciousness, memory, imagination, feelings of joy and sorrow, beauty, contentment and anxiety, of which we are aware, we must be able to know they exist, because to deny them would render our apprehensions unintelligible. In other words, we must be right to assume that we can know all those matters which it would be self-referentially absurd to deny.

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[1] See, Trigg, *Rationality and Science*, pp. 197–198.

Post-modernity has a reputation for compounding the confusion engendered by the tendency of modernity to reduce the scope of what is said to be knowable. A number of representatives of the kind of thinking we have sketched in the chapters on historicism and language have come to the heroic conclusion that justified true belief is unattainable, because the notion of truth is itself misconstrued.[2] Their reflection on the inescapably contextually-relative and linguistically-constructed nature of experience, when pressed to its clear conclusion, ends up in solipsism. In an order of existence, where confidence in representation and correspondence has broken down, there is no way of telling whether a person's beliefs, held within her head, reflect any reality external to the neuro-physiological functioning of the brain cells. How that person interprets her experience is legitimate within her own inner world, as long as she can justify it to herself. There is no objective standard of measurement, no way of determining for sure whether a statement of belief actually denotes anything.

There are two unavoidable problems with the drift of contemporary epistemology: first, it is self-referentially inconsistent; second, in order to go about our normal business in the world, it has to be discarded. Nevertheless, in spite of the logical flaws and experiential dissonance incurred by either a consistently rationalist, or perspectivist, approach to what may be known, there are substantial issues at stake, which have to be addressed.

Justification, belief and reason

Although in normal human relations it is not commonplace to hold people continually to account for the views they espouse – to challenge every claim made would become excessively pedantic – we do, nevertheless, expect people in important matters to be able to explain the reasons for their beliefs. It is part of rational behaviour that we have coherent grounds for the way we act in life. It is necessary in most cases to be able to distinguish between the *justification* of a belief, i.e. that the belief is well-grounded, either in reputable facts or a coherent world-view (or preferably both), and *rationalisation*. In the latter case, a person allows a spurious defence of what they might like to be the case – some desire or wish – to take the place of a principled argument. For example, in the case of a person heavily in debt often he or she will rationalise further borrowing on the grounds that further spending alleviates the pain of the debt-burden. As in the case of other obsessions, the justification becomes the rationalisation that this particular purchase will fortify the determination to make it the last. This kind of reasoning we normally categorise as self-deluded. Given the urgency of the problem of debt, it is neither intelligible nor appropriate, to incur yet more:

> Rationality…is the ability to respond appropriately to (perceived) normative aspects of the world…when no failure of attention, emotional upset, mood, memory, will, etc., interferes.[3]

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[2] This belief is powerfully articulated in Derrida's programme of the deconstruction of language and texts, see chapter 6.

[3] Joseph Raz, *Engaging Reason: On the Theory of Value and Action* (Oxford, 1999), p. 77.

To be able to defend a belief or action successfully entails (a) having good evidence for it, (b) that it is warranted and (c) that we have displayed epistemic virtues in arriving at our position. *Good evidence* is secured as the result of detailed investigation or the reliable testimony of others. It must be able to resist attempts to discredit it. A matter is *warranted* when there are excellent grounds for holding it to be true, no actual or potential cause for thinking that it could be false and it is self-referentially consistent. *Epistemic virtues* refer to the means we use to justify our stance, in particular by paying due attention to criticisms of our views and pondering alternative outlooks.

The possibility of justifying our beliefs and actions does not mean that they are either true or right. A person may be fully justified in holding to a particular position, having carefully surveyed the evidence, concluded that there are no substantial or conclusive reasons for thinking it is not warranted and exercised due critical faculties, and yet for him to be mistaken. The misapprehension may not be culpable, for all due precautions have been taken, and yet the stance taken is wrong. The question of truth raises the stakes, as it were, to a higher degree of exigency. Before we turn to this major concern, it is important to note that justification requires belief as well as reason if it is going to be able to establish the validity of a claim to knowledge. The very notion of epistemic virtue, for example, assumes that virtue is something to be admired and desired. It presupposes a belief in the virtue of virtue.

Truth

As it appears to be self-evident that one cannot know any fact or statement of belief unless one is assured of its truth-value, then apprehension of the truth becomes the most fundamental issue in epistemology. However, as we have seen, the very notion of truth has come under attack from two principal quarters. First, the definition of truth as conformity to what is has been disputed by different kinds of anti-realism. According to this latter view, verification of the truth of a statement about the real world is not possible, since the real world is not directly accessible to us. Contact with anything deemed in some way to be independent of us has to be mediated by linguistically-shaped thought-processes that are always already shaped by currently accepted theories and procedures.[4] There are a number of variations of this position. A game-theory approach states that truth is a matter of linguistic or discursive convention within a community. What counts for truth can only be arrived at by a process of negotiation between two or more different representations of reality.[5] Kuhn's theory of paradigm shifts in science affirms that scientific conclusions are underdetermined by data and that, therefore, their 'truth' status can be little more than their general acceptability within the scientific community. The choice to believe in their reliability is determined to a large extent by prevailing paradigms, rather than by strictly evaluated evidence which represents an objective state of affairs:

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[4] According to Avery Fouts, 'Modernity and Postmodernity: A False Dichotomy', in *International Philosophical Quarterly*, 45/3, 179, September 2005, pp. 377–394, the negation of realism in the Cartesian split is the nub of the epistemological problem inherited by current thought.

[5] See, Norris, *Reclaiming Truth*, pp. 35–39.

> Objectivity consists, not in the correspondence of our theories to the world, but in the inter-subjective agreement about those theories among members of the scientific community based on their shared values. Kuhn identifies objectivity and rationality with a special sort of consensus, a consensus based on the values that make science what it is.[6]

A strong thesis in the sociology of science argues that the measure of true belief and rationality is determined by particular historical circumstances.[7] Criteria for the justification of scientific explanations are inescapably tied to the conditions of their discovery:

> What counts as scientific 'truth' – so the authors maintain[8] – is determined *neither* by the way things stand in reality, *nor* by any special merit – any 'inherent' truth-related virtue – in those theories or procedures that happen to gain widespread communal assent. Rather, it is a product of the reception history (or the cultural pressures making for acceptance or rejection) to which all truth-claims are constantly exposed and which thus provide the ultimate court of appeal in matters of scientific 'fact'.[9]

Second, truth is said to be linked to structures of power in society. '"Knowledge" and "truth" are compliments paid to successful discourse, as Rorty and others have suggested'.[10] By this is meant that truth is measured in terms of the views of that sector of society that has managed to have them accepted. Derrida is sceptical about the way that binary divisions in the history of philosophy have been set up and used, according to which, among other opposites, truth has been privileged over error. The problem with this way of thinking, he argues, is that it exalts a hierarchical and discriminatory model for knowledge which excludes difference and 'the other'. Thus truth becomes a repressive reality, a notion also explored at some depth by Michel Foucault in his critique of the historical development of social institutions. Truth becomes equated with the consensus of the experts, but without their being aware that their thought is always already expressive of some prior political or ideological commitment.[11]

The strong critique of the classical concept of truth, with its emphasis on correspondence, the logic of antithesis and the excluded middle, a representative account of language and a direct realism, has given rise to a number of alternative theories.[12] In differing degrees each one presupposes an internal perspective from which criteria for truth can be elaborated. In reality, they are more about clarifying the standards for measuring truth-claims than about the definition of truth itself. Thus, a *pragmatic* version highlights utility as the primary criterion: beliefs that bring about desirable results are said to be truth-indicative. The *performative* theory, which maintains that truth-claims are veiled devices for asserting assent or dissent to propositions, is merely a way of describing a mechanism. Jurgen Habermas's *consensus* theory, which proposes that a truth-claim is an affirmation of validity whose legitimacy can be tested in an 'ideal speech situation' (i.e. one in which all communication is completely free from ambivalence and misrepresentation) is a way of stipulating the conditions necessary for a claim to truth to be justified.[13]

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[6] Curd and Cover, *Philosophy of Science*, p. 227.

[7] See, Hesse, *Revolutions and Reconstructions in the Philosophy of Science*, pp. 31–33.

[8] Shapin and Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle and the experimental life* (Princeton, 1985).

[9] Norris, *Against Relativism*, p. 271.

[10] Magnus and Higgins, *The Cambridge Companion to Nietzsche*, p. 6.

[11] See, Alan D. Schrift, ' Nietzsche's French Legacy', in Magnus and Higgins, *The Cambridge Companion to Nietzsche*, pp. 338–340.

[12] They are set out in Kirk and Vanhoozer, *To Stake a Claim*, pp. 30–34.

Understood as *means* for distinguishing between truth and error, some of these theories have merit. However, the correspondence theory is the only one that deals with the nature of truth as such. Hence, as we have amply recorded in the course of treating the characteristics of post-modernity, it is the one that is most attacked by those who wish to redefine the notion of truth in quite different categories.[14] However, redefinition is not really an option. To equate truth, let's say, with 'efficiency of results',[15] 'the sanction of statements'[16] or 'agreement within a perfect democratic process' is always to beg the question. There has to be a standard for comparison: efficiency is measured against some further criteria; what is sanctioned asks the further question, 'on what grounds?'; agreement presupposes some content that can be debated and disputed.

It is a strange irony of a post-modern stance that the apparently radical idea of ridding thought of the notion of correspondence actually encourages the determination of 'truth' by means of arbitrary power and authority. Unless there is an independent point of reference, truth equates with subjective reckonings and issues are settled by either superior force or persuasive power. Such a way of regarding truth is counter-intuitive: whether, or not, a person actually committed a crime is not decided by the eloquence of prosecutor or defence counsel, nor ultimately by the decision of the jury (even when unanimous), for it can misinterpret the evidence. Truth is not determined by government decree or by ideological commitment. Such views of truth take us into the worlds of *1984* and *Animal Farm.*[17]

The common view of truth is that it pertains to an order of existence which lies outside of subjective desire and ideological manipulation, able to challenge all thought and ideas. In other words, truth-claims are provisional, because they can always be challenged by a fuller appreciation of what is the case. To the contrary, truth-claims would always be 'true', for there would be no proper grounds for considering them to be false. In practice, no one believes that it is intrinsically impossible to separate truth from error.

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[13] Jurgen Habermas, *The Philosophical Discourse of Modernity* (Cambridge, 1987).

[14] See, David Cooper, 'Modern European Philosophy', in Bunnin and Tsui-James, *The Blackwell Companion to Philosophy*, pp. 713–714.

[15] Heidegger, *Basic Writings* (London, 1978), pp. 376ff.

[16] Foucault, *Power/Knowledge*, p. 93.

[17] Two novels written by George Orwell to depict the horrors of a society in which beliefs deemed to be true are determined by those in control of the political process.

Moreover, the contemporary penchant for dismissing the correspondence view of truth involves a blatant performative contradiction. The view that truth can no longer be defined in terms of conformity to what is the case, independently of what human beings may think is the case or would prefer was the case, is itself a statement about the facts of the matter. Otherwise, it could be legitimately interpreted as the attempt by certain thinkers to gain supremacy over the meaning of truth. Foucault's strategy, then, could be deconstructed as yet another (albeit supremely subtle) ploy in the game of redefining the rules of language and discourse in the interests of his own power-games. The effect would be devastating to his entire critique. Its force is dependent on the classical conception of truth. Later, we will transfer this line of reasoning to the moral notions of right and wrong.

Rationality

One of the main characteristics of the modern project is the postulate that assured knowledge can be acquired through reflective thought processes working either out of logical inferences or empirical data. It is accepted as unproblematic that the operation of reason is an innate part of the constitution of the human person. Indeed, the capacity to reason in particular ways defines, to a large extent, what it means to be human. Reason is a given faculty which extends equally to every member of *homo sapiens*.

Moreover, reason is channelled in particular ways, so that what lies outside it, or contradicts it, is deemed unreasonable or irrational. Irrespective of culture, philosophical or religious beliefs, human beings are constrained to think along certain lines. There seem to be regulative laws which undergird thinking, such that, if they are broken, thinking ends up in absurdity and any possibility of inter-personal communication collapses. One such is the principle of the excluded middle, which states that every proposition is either true or false, there is no indeterminate median point between truth and falsity. Another is the allied law of non-contradiction, which states that if one proposition is true then its contradiction is false; A and non-A cannot both be true simultaneously. These laws are formulated as the result of observing the mechanism of thinking. They have to be presupposed for thinking to be possible at all.

It also seems to be a facet of reasoning that the human mind strives to be consistent. Where we recognise that our pattern of thinking is disjointed, in that one piece of our reasoning seems not to cohere with another – for example, where conclusions are reached which are not compatible with the premises of an argument – we will probably seek to correct the anomaly. It seems to be a self-evident virtue that we seek to follow, to the best of our ability, principles of logical inference. In the case of deductive logic, the inference is conclusive if it follows validly from true propositions, as in the case of a syllogism. In the case of inductive logic, the inference is sound if it follows naturally from a piece of evidence. The conclusion may not be decisive, but it must attempt to agree with the evidence. Thus, for example, if anyone justifies taking cocaine on the basis that it promotes well-being, when all experimental evidence demonstrates that it is a highly toxic substance, injurious to health, he or she is regarded as irrational. If any person refuses to abide by the norms of logic, we are tempted to say of them that they will not 'listen to reason'. If the attitude is persisted in, conversation comes to an end, for communication requires an agreement about sound principles of reasoning.

The cogency of consistency, as an indispensable component of reasoning, can be illustrated by reference to two examples of its contravention: performative contradictions and logical fallacies. The former is applied to the kind of reasoning which is obliged to use a particular argument in order to refute the same class of argument. A cogent example would be the argument that truth is relative to particular contexts: a statement which only makes sense, if it exempts itself from its own affirmation. The latter may take a number of forms. There is the fallacy of *significance*, often committed by using statistics to demonstrate the correctness of a point of view which may be no more than a prejudice. There is the fallacy of *ignorance*, where a statement is said to be true because there is no apparent evidence to refute it. There is the *genetic* fallacy, where the truth or falsity of a proposition is made to depend upon its origin. Similar fallacies arise when appeal is made to *authority* or the *personal integrity* of an individual to settle a controversy. Often used in the context of moral philosophy, the *deontic* fallacy seeks to deduce moral principles from statements of fact, an illegitimate procedure, since premises of one logical type (descriptive judgements) cannot give rise to premises of another type (namely, prescriptions) Whilst the similar *naturalistic* fallacy confuses natural properties, like musical accomplishment, with moral properties, like virtue. We may admire a brilliant pianist, but we only commend her in moral terms if she labours to develop her talents for the enjoyment of others. In all these cases, it seems self-evident that normative rational procedures have, in one way or another, gone astray.

Finally, we might mention the universal obligation to support claims by adducing compelling evidence. If we claim to have seen fairies or aliens from outer space at the bottom of our garden, in the light of the fact that the existence of fairies and extra-terrestrial beings (except in stories) has never been demonstrated, and there are good inferential reasons for doubting that they do, it is incumbent on us to bring corroboration of their existence. An authentic photograph might do; but, much more decisive would be the fairy or the alien itself. If we claim to have discovered a drug that infallibly reverses the spread of cancerous cells in the body, the medical profession and general public will want to scrutinise the evidence: What kind of tests have been carried out? On what sample of population? Have all the results been equally convincing? Over what period of time has there been remission? Are there other factors which might account for the evidence? It would not be reasonable to accept claims, unless they can be supported by evidence that can survive stringent criticism and doubt.

Reality

Rationality is an integral part of coming to know whether anything is such or so. In the last analysis, the ability to know is dependent on having reliable access to a world independent of human sentiments. It is curious how much this apparent truism has been resisted in contemporary thought, for the negative consequences of denial would seem to be obvious. That we are in contact with an objective, physical existence separate from our (universally collective) thinking about it seems an obvious, common-sense, conclusion. Who does not believe, on crossing a busy road, that cars, lorries and buses have an existence distinct from anything we may believe about them or the language with which we describe them? If we did not, several weeks in hospital recovering from fractured bones might convince us.

It is reasonable to claim to know those things about which in ordinary everyday living we have no doubt that we know: in the case of the example above, that an elongated piece of metal occupies a particular volume in space and, if it collides with us at speed, will do our bodies, which also occupy volume and mass in space, a serious amount of damage. This example can be further illustrated by the physical results which occur when we mistakenly believe that a bus, travelling at 30 mph, was only doing 5 mph. The critical point is not what we believed about the speed of the vehicle, but what was the actual (true) speed.

A common-sense view of knowledge[18] is attractive because it appears to be irresistible in the sense that scepticism is refuted by the way we are bound to behave. Of course, to take the rather simple example given above, we are at liberty to discount the common-sense view about metal objects travelling at speed. However, when we step into the road, ignoring the traffic, and end up in hospital, friends, family, medical staff and, not least, the driver of the car that hit us will be absolutely justified in knowing that we were self-deluded in our belief, in that we were refusing to live in the *real* world.

A common-sense epistemology is powerful in that it appears to integrate belief and action. In many circumstances we do not risk the practical consequences of inadequate knowledge or ignorance. Or, to put the matter the other way round, when we take certain actions, we are demonstrating a reasonable certainty that we know particular facts. We commit ourselves to flying, because we know that the laws of aerodynamics are demonstrated. This is a basic conviction that we can take for granted. We are less sure, of course, that a particular airline is maintaining the aircraft in pristine working condition. So, there are degrees of confidence in the things of which we may be reasonably assured. The common-sense view is based on the argument that ordinary experience shows that we are justified in holding certain beliefs about our environment, on the grounds that the refusal to believe them would bring inevitable consequences about which we could not but help being convinced. In the example of the road accident, it would be beyond the bounds of all credibility to hold that my six-week sojourn in hospital was a bad dream (in the literal, not metaphorical sense), or that my broken legs, pelvis and shoulder blades were due to a fall on my recent ascent of Everest.

Nevertheless, the common-sense view is not without its own epistemological complications. There are two parts to the view: first, that we know that there is an external world existing independently of my belief about it; second, that we know that we can know this world. The first part affirms the universal experience that we are committed reflexively to the existence of an environment that possesses properties that do not change according to the way we think about them. The second part assumes that our perceptions are totally trustworthy, that there is a true correspondence between our senses and an independent set of physical entities. The first makes an ontological statement about existence; the second is an epistemological declaration about human access to this external reality.

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[18] This is not to be equated with naive realism, which tends to identify sense impressions always and everywhere with the object in question. Sense impressions can deceive. However, we only know this by reference to corrective procedures which more accurately reflect the real world. See below.

When analysed in this way, it would seem that the most that can be claimed is that we are right to have a general presumption about the way the world is and our relationship to it, not that we can demonstrate our knowledge conclusively. In the view of G.E. Moore, the doughtiest defender of common-sense philosophy in the twentieth century, scepticism about reality can be refuted by conceptual reflection on its own internal contradiction. Thus, a sceptic can only argue for his conclusion that assured knowledge about any particular is unavailable to human intelligence on the basis that he has assured knowledge of this premise; to say that *p* is true, but I cannot know *p*, is self-evidently absurd. Scepticism could only be true, if we acknowledge another truth of which we may not be sceptical. Scepticism as a philosophical position is self-refuting; as a methodology for analysing our claims to knowledge it provides a useful tool. Thus, we can distinguish between a *naïve* realism that posits a simple, and invariant, correspondence between an objective reality and my true belief about it and an *examined* realism that holds that our unreflecting confidence in the unfailing efficiency of our perceptive faculties to deliver unambiguous knowledge about the external world may be misplaced.[19]

The epistemological problems concerning reality are not ended by this apparently judicious compromise between scepticism and naïve realism. First, there is a strong philosophical tradition that maintains that there is no assured way of connecting what may be the case independently of all human thought and the way we represent it to ourselves. In Kant’s famous formulation we cannot, intrinsically, know things in themselves; we can only know them as they appear to us through the categories of the mind, the only instrument available to reach them. To claim to know a reality is to make a linguistic affirmation, using the conventions of a particular vocabulary and grammar. There is no reality accessible to us independently of language and the mind.

Second, there are a number of philosophers who believe that a critical realist stance gives away too much to idealism, in the sense that the former seems to accept that reality is little more than a regulative ideal that we approach diffidently and fallibly, but can never be certain we reach. Third, there is a debate within the philosophy of science between realists and anti-realists about the status of non-observable entities. Realists claim that it is legitimate to posit the existence of entities or processes inaccessible to the senses, if the inference to their existence is necessary for the superior explanatory success of a theory over all rivals. Anti-realists say that there is no warrant for making claims about unobservable entities in terms of the way the world is. At the most, their postulation has instrumental value in enabling the best sense (for the moment) to be made of empirical data. However, no ontological reality can be granted to these presumed bodies. As explanatory theories may change, so conjectures about the hypothetical reality said to account for the theories may require changes as well.[20]

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[19] I have deliberately not used the adjective, *critical*, of realism, as in the hands of some thinkers it appears to denote a serious epistemological gap between reality (admitted to exist independently of thought) and human access to experiencing it as it is. I wish to defend a position that equates my perception of reality with reality, per se, but always allowing for error on my part. To know that I could be wrong assumes that a true knowledge of reality is possible. Without this assumption it would be difficult ever to gainsay my infallibility.

Ethical discourse and the unity of knowledge

Each of the epistemological issues outlined above is a veritable battlefield between different interpretations. Is there any hope at all of resolving some, or most, of the disputes? Is it not a forlorn aspiration, or an unwarranted conceit, to believe that we can have justified true answers to some of the most intricate questions that have ever puzzled human minds? If these issues remain at the level of intellectual reflection, it may be almost impossible to find convincing solutions to the controversies.

Nevertheless, whilst questions about justifying belief may be postponed until greater clarity dawns, the same cannot be said about practical matters. What shall we collectively do as a society, or how shall I act as an individual, are pressing questions that often have to be decided one way or another. I maintain that issues of right and wrong cannot be postponed, but nor are they resolvable on the basis of a fundamental cognitive split between presumed empirical certitudes and private opinions. Moreover, we do, as a matter of fact, act on the basis that we are confident we know truth from error. In many aspects of life, it appears that we have no alternative. When we come to crucial matters of behaviour and action, the epistemological issues rehearsed above can be seen in a different light.

Beliefs and moral actions

The philosopher Santayana held to the (self-evident) conviction that no beliefs or reasoning should be incorporated into good philosophical theory that could not be acted on in practice. It is a clear weakness of theory, if in some respect it has to be contradicted by the way we behave. Put another way, our beliefs can be deduced from our actions in the sense that the latter are implicitly based on affirmations about what it is legitimate or illegitimate to do. If the two do not seem to match then we are under the pressure of coherence to change either our beliefs or our actions. This is what Santayana means by rigorous honesty in philosophy.[21]

Another way of relating belief and moral action is through the empirical observation of people's moral attitudes to the way other people behave or the moral values they esteem. It is a (near) universal trait of human behaviour to indulge in moral praise and blame of other people's actions, particularly when directed towards us. Thus, save in very exceptional circumstances, we would deem it wrong for people to help themselves to our possessions without our permission. Such an attitude elicits the justifiable conclusion that we believe stealing is wrong. It is plausible to reason from a person's express moral reaction to a particular event to that person's moral belief. Of course, this kind of observation only refers to a certain link between attitude (or action) and moral values. It says nothing about the consistency of the link or the justification for the moral belief.

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[20] See, Jarrett Leplin, 'Realism and Instrumentalism', in W.H. Newton-Smith (ed.), *A Companion to the Philosophy of Science* (Oxford, 2000), pp. 393–396.

[21] Dancy and Sosa, *A Companion to Epistemology*, p. 455. To endorse Santayana's observation on this point does not imply a wholesale acceptance of his naturalistic, pragmatic approach to epistemology.

The decisive point to be made by relating knowing and doing is that beliefs have to be justifiable in terms of moral action otherwise there is a fundamental weakness in the former's account of experience. As David Hume, and later George Santayana, both recognised, systematic epistemological scepticism is defeated by the absolute necessity of making moral judgements.[22] The priority that David Gauthier affirms is surely right, when he says that 'the main philosophical question that has occupied me has been "Why ought I to be moral? What reasons do I have for being moral?"'[23] He is not bothered by the question, 'is there such a thing as morality?' In the light of universal experience, it is a pseudo-question. One can ask sensible questions about the nature, origin, basis and function of morality; to question its ontological factualness is to embrace illusion.

The major question is, then, how do I justify my moral attitudes and actions? This is a fundamental issue of epistemology, for it asks the question, 'how do I *know* what is good and right', seeing that I assume in my attitudes and actions that I do? There is a crucial issue about foundations: are there basic, general truths about the moral life from which particular moral prescriptions can be derived? In other words, is there a way of averting an infinite regress in the process of grounding moral values? If we postulate a teleological basis for morality, how do we know what are intrinsically good ends to pursue?[24]

Strawson, for example, asks the pertinent question about how we justify punishment.[25] It is not enough that society apportions blame to a person. The reason for doing so may be instrumentalist, namely that it is a socially desirable way of regulating behaviour. However, we recognise instinctively that punishment must be deserved and that it must be proportionate to the crime – exemplary punishments may be intrinsically unfair. Hence, we link punishment to a notion of justice. We justify it according to a principle, or axiom, that transcends expediency. Strawson makes the intuitive point that condemnation and punishment, seen purely in terms of efficacy in regulating behaviour, offend against the humanity of the offender.[26] But, from where do moral scruples about human beings come?

Moreover, as he further argues, society needs some kind of objective vantage-point from which to decide what is appropriate punishment, in order to eliminate reactive moral outrage, which if left unchecked easily issues in the lynch-mob. But, then, why is unreflective vengeance or retaliation generally considered to be incompatible with the highest moral ideals? In the asking of these sorts of questions, we are probing for some kind of fundamentally reliable way of distinguishing between what is justified, true action and what is based on error.

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[22] On the tension in Hume's thinking, see David Norton, *David Hume: Common-Sense Moralist, Sceptical Metaphysician* (Princeton, 1984/2).

[23] Pyle, *Key Philosophers in Conversation*¸ p. 129.

[24] See, Nathason, *The Ideal of Rationality*, p. 125.

[25] P.F. Strawson, *Freedom and Resentment and Other Essays* (London, 1974), p. 3.

[26] Ibid., p. 21.

The modern project and moral actions

We have discussed at some length the arrival of modernity as a particular view of how knowledge is achieved. We considered both rationalism and empiricism as the quintessence of the modern project – the belief that rational processes reflecting on the natural world accessible through scientific procedures of investigation are sufficient to clarify all that we can know about the world and ourselves, including our behaviour. However, we do not need to resort to the post-modern critique of modernity to see that neither rationalism nor empiricism can properly ground moral conviction.

The problem with empiricism as a guide to moral action is that we are dealing here with two distinct kinds of language, indicative and imperative, in which the latter is not deducible from the former. On reflection it appears impossible to see how the description of a state of affairs can give rise to a moral judgement:

> Apparently no propositions known on the basis of sense experience seem to entail the truth of any moral judgement, for instance that cruelty to children causes them pain does not entail that it is wrong. Needed surgery, after all, may cause them pain yet not be wrong. When we judge something to be wrong we apparently go beyond the evidence of senses, and indeed beyond scientific evidence…We cannot know that cruelty to children is wrong just on the basis of the fact that it causes brutality; this fact would (deductively) ground that knowledge for us only if we already knew that brutality is wrong.[27]

Due to the impressive experimental success of the natural sciences, the idea that ethical norms can somehow be read off experimental data is very tempting for a modern person. Thus, attempts have been made, for example, to infer moral attributes from an analysis of human nature:

> It is the nature of Man that will provide a rock-solid, and sufficient foundation for the universally binding ethical code.[28]

However, a problem immediately ensues: the nature of ‘Man’ is deeply flawed. Capable of incredibly noble deeds, human beings are also inclined to acts of great cruelty, both physical and mental. If, therefore, one simply investigates the behaviour of human beings one is confronted with a completely ambiguous picture. Supposing, then, one ignores the cruelty and concentrates on human beings’ potential to learn to leave behind their darker side through the ‘enlightenment’ brought about by education, one has already begun to move away from a purely empirical basis for moral action. First, one has assumed a distinction between nobility and cruelty, even though both are part of the observable reality of human nature. Second, one has assumed that the distinction can be given an evaluative basis, in that nobility is commendable and cruelty is to be condemned. Third, one has assumed that it is completely self-evident to all (properly) educated people that one should choose nobility over cruelty. These assumptions clearly take the discussion of the grounding of the right and the good beyond empirical description.

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[27] Audi, *Epistemology: A Contemporary Introduction*, p. 261.

[28] See, Zygmunt Bauman, *Postmodern Ethics* (Oxford 1993), p. 26. Bauman dissents from this view. He uses it as an illustration of the pretensions of modernity.

The use of reason alone fares no better. Although many attempts have been made, no satisfactory way has been discovered to bridge the gap between means and ends. Reason is an extremely effective tool for illuminating suitable means for achieving particular ends; however it cannot prescribe the ends for which humans ought to strive. Means/ends theorists have argued that it is right to do whatever one desires, as long as those desires are not irrational: it would be irrational to desire for oneself death, disablement, pain, the loss of freedom, opportunity or pleasure.[29] It is, of course, irrational to propose a set of goals for one's life and then act to thwart the achievement of them. However, one could be highly consistent in matching means to ends without being in the least moral. In the case of following desire as a motive for action, some reason has to be given for considering it good and right to pursue one's own desires. Moreover, there have existed many moral codes that have exalted as a supreme good the suppression of personal desires in the interests of satisfying the needs of others. Generally speaking it has been considered more virtuous to spend time with an elderly person who enjoys little human company than to spend the same amount of time at a party with one's friends. The latter choice may be more desirable, in that it adds to pleasure and diminishes discomfort, it is quite rational and certainly not immoral, and yet the former is the right thing to do.

The problem with making reason into the chief method of deciding what is the right moral choice is that it assumes that all human beings are fundamentally benevolent. Thus, a consistent rationalist will suppose that any human being will desire what is good, once she has fully grasped the facts of a situation. In other words, moral failure can be attributed largely to ignorance. This is the thinking behind all proposals to effect a change in moral behaviour through education. However, this kind of thinking implicitly commits the deontic fallacy of presuming that a person will immediately perceive the right way to act once they have a correct grasp of the facts:

> Sometimes we fail morally not so much because we lack sufficient reason to be moral as because we lack sufficient strength to be moral…Consider how weak we can be in situations where we are afraid or embarrassed to tell the truth.[30]

The point at issue here is that our weakness can be morally justified by finding good (moral) reasons why, in a particular situation, it was better not to tell the whole truth: for example, for fear of damaging another person's self-esteem or of causing them to get into trouble. Thus, the moral exigency of telling the truth, or of not deliberately misleading people into believing something false, becomes dissipated through the use of reason. Of course, it may be right in certain circumstances to withhold the truth – for example, to protect people's security – and reasoning about the situation will help us to decide when such a course of action is appropriate. However, it is important to note that we feel automatically compelled to justify not making the full truth known. This is because we recognise that telling the truth comes to us as an unmediated absolute. Its source of moral compunction is not to be found in calculating reason. We can give good reasons for telling the truth, but reason cannot tell us why telling the truth is good, rather than merely advantageous.

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[29] See, Nathason, *The Ideal of Rationality*, p. 125.

[30] Schmidtz, *Rational Choice and Moral Agency*, p. 263.

To argue that neither rationalism nor empiricism can ground moral judgements is not to conclude that either the description of situations or the use of reason, as an instrument in calculating appropriate courses of action, are dispensable. A true judgement on the facts of a state of affairs and proper reasoning about moral principles and alternative ways of acting are necessary parts of moral thinking and acting. But, they are not sufficient to decide how a good, right and just solution could be fulfilled in any given circumstance. Thus, Bauman concludes his study of ethical discourse in our contemporary age with the affirmation that

> If the successive chapters of this book suggest anything, it is that moral issues cannot be 'resolved', nor the moral life of humanity guaranteed, by the calculating and legislative effects of reason. Morality is not safe in the hands of reason…Reason cannot help the moral self without depriving the self of what makes the self moral: that unfounded, non-rational, un-arguable, no-excuses-given and non-calculable urge to stretch towards the other,…to live for, whatever may happen.[31]

This quote takes us into a consideration of possible post-modern alternatives to empiricism and rationalism as the providers of sources for moral action.

Post-modernity and moral activity

Almost by definition, given the characteristics of post-modern thinking that we have expounded, there cannot be any transcendent source for illuminating moral perception. It is in the nature of post-modernity to be strongly ambivalent towards the classical notion of truth as correspondence, to the idea of an objective reality independent of human thought, to the reliability of human reasoning processes and their universal applicability across all cultures and contingent historical circumstances and to all-encompassing explanations of the human condition. Therefore, *ab initio*, any appeal to a universal human nature, to implicit, self-evident moral axioms, or to a rightly-guided and self-correcting human reason, is ruled out. Post-modern thinking lays claim to the apparently self-evident witness of history that all beliefs, truth-claims, appeals to incontestable rational processes and demonstrable empirical data are actually aspects of fallible subjective forces that have shaped and determined the way we view things.

It follows almost inevitably that post-modernity would be committed to forms of pluralism and relativism in ethical thinking. In order to avoid the arrogance of pretending to a grasp of truth and the danger of attempting to impose our views, because they represent the yardstick of advanced moral consciousness, we should allow the probability that moral opinions other than our own can be equally well justified. Cross-cultural differences concerning moral precepts make any final judgement about right and wrong, good and evil, unsafe. There simply is no independent, absolute vantage-point from which we could judge one moral claim to be superior to another. Post-modern thinking is characterised by the almost imperceptible slide from the description of an actuality into the defence of that actuality. It endorses a state of affairs. Alasdair MacIntyre sums up the line of reasoning:

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[31] *Postmodern Ethics*, p. 247.

> There exist a number of culturally-embodied systems of thought and action, each with its own standards of practical reasoning and evaluation. Some of these are such that not only do their adherents arrive at evaluative and normative conclusions which are incompatible with those of the adherents of some other such systems, but their standards of reasoning are such that from the standpoint of each contending party the reasoning of the other must be judged unsound…Relativists usually proceed one stage in the argument beyond this and characteristically two stages…The first stage is that of supposing that somehow or other those conclusions about the multiplicity of concrete modes of reasoning and modes of justification for evaluative and normative conclusions provide grounds for putting in question and altering one's view of justification of one's own reasoning and conclusions. The second is that of supposing that the same considerations should lead to a rejection of the claims of any substantive conception of truth.[32]

Here, the existence of a plurality of systems of thought and action is taken as sufficient ground for concluding that no one is in any better position than any one else in deciding between competing moral claims. As Bauman says, 'superior morality is always the morality of the superior',[33] implying that normativity is a concept dreamt up by the victors, just so as to confirm them in their victory.

However, Bauman is quite equivocal about the benefits of this pluralism and relativism in ethical discourse. On the one hand, it seems to be liberating, in that it signals a move from the vanquished to allow their conceptual goods to be sold on the open market in equality of conditions to everyone else's. Nothing is taken for granted. Every assertion is contestable. Superior power and/or rhetoric are historical accidents that cannot justify the claim to universally valid moral codes. Somehow, we have to learn to live together with our conflicting, incommensurable moral dictums. On the other hand, this 'multicultural' approach to moral values, leads inexorably to what Bauman calls 'the sectarian fury of neotribal self-assertion'. Apparently, real human life abhors the vacuum created by a retreat from having to give convincing reasons for choosing between moral options. If there is no firm ground from which it is possible to argue for one moral belief rather than another, then quite arbitrary grounds will be suggested and applied and there will be no way of discriminating.

Not only is the argument for relativism in moral reasoning self-defeating, as we have already pointed out, it is unsustainable in practice. Only one example of a moral judgement, which would not be disputed on the grounds of cultural diversity or historical perspective, is enough to refute relativism. It would be interesting to hear the relativist's defence of the right of an occupying power to torture prisoners of war, or of Muslims to stone a woman to death for adultery on the grounds of a particular interpretation of their beliefs, or the right of tribal peoples to circumcise young females, because this is an inherited custom with which no one from outside should interfere, or the right of manufacturers to employ young children in their factories for fourteen hours a day. At the point of certain acts, relativists cease in practice to argue their case. They suddenly discover a universally valid ethical principle – the inviolability of the individual human being – which allows them to occupy the moral high ground.

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[32] Pyle, *Key Philosophers*, p. 81.

[33] Bauman, *Postmodern Ethics*, p. 228.

Implicit, universally valid virtue

In reality, all morally sensitive people recognise a fundamental contradiction within the human experience – the capacity for deeds of selfless altruism and great heroism and the ability to be consumed by intense hatred towards others and to act with callousness against them. Whenever we catch ourselves attributing praise and blame unreservedly to particular beliefs and actions, we are well on the way to denying the wholly contextual nature of moral judgements.[34] We also deny implicitly that our present human experience of conflict and contradiction is normal. We signal that the situation could and should change, that human beings do not have to be so capricious and erratic. In other words, we hold out some vision of an exemplary and estimable way of living.

There is much to be said for taking seriously the way we actually tend to set about considering ethical issues and demonstrating the assumptions on which our reasoning is based. At least this could be a productive way of breaking the deadlock between rival, and apparently, incompatible moral theories. In practice, it is not too difficult to observe that most people believe that there are certain aspects of human life that have intrinsic value, i.e. that, independently of consequences, to some degree goodness itself resides within moral beliefs and actions. They are unconditional, not means to other ends. The rightness of keeping promises, for example, is not dependent on whether keeping them will have good results, let alone on whether keeping them is in the promiser's best interests. To be genuinely moral one has to do the right thing precisely because it is right.[35] Rightness cannot be grounded in anything else. Actual moral behaviour implies a moral realism that affirms that, built into the essence of being human, are absolute moral obligations and prohibitions based on non-negotiable notions of good and evil, right and wrong.[36]

One of the most fundamental, intrinsic, moral principles is the upholding of human life:

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[34] If praise and blame merely indicated an outward expression of a personal, inner attitude, there would be little point in indulging in such antics. In such a context, an observer would be justified in concluding that we were giving vent to either feelings of pleasure or frustration, not making a value judgement on the basis of a presumed moral norm.

[35] See, the argument developed by Schmidtz, *Rational Choice*, pp. 126–139.

[36] See, Scruton, *Modern Philosophy: An Introduction and Survey*, p. 279.

> We must concede that some moral principles are basic in the sense of not being defensible by inference from other moral principles; thus there are some moral aversions that are justified – like not needlessly injuring other persons – and are *not* dependent on some other moral principles…The pro-lifer's principle *could* be one of these.[37]
>
> Human life has an intrinsic, innate value, that human life is sacred just in itself…(and that) abortion is wrong in principle because it disregards and insults the intrinsic value, the sacred character of any stage or form of human life.[38]

The concept of the right to life, which means more than mere existence, but incorporates minimal conditions for a positive quality of life, is uppermost in all conventions on human rights. Its self-evident nature is acknowledged in the consideration that the right to life is not an entitlement, much less a privilege, granted by society or the state. On the contrary, an appeal to this right is often made against the explicit policies of a particular state, whether economic – for example, fiscal practices that cause high unemployment and therefore increase destitution – or legal – for example, the forced expropriation of property without due compensation. In other words, most people recognise that there are values that invariably should take precedent over others. To put it another way, there are no circumstances in which the state or society may violate the principle of the sacredness of human life to achieve some other end.[39]

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[37] Richard Brandt, *Facts, Values and Morality*, p. 114.

[38] Ronald Dworkin, *Life's Dominion*, p. 11. It has to be admitted that not everyone by any means sees abortion as a violation of the intrinsic sacredness of human life. However, the principle remains, in that the debate about the moral legitimacy of abortion centres on the question of whether and when the foetus can be said to be genuinely human. See, the discussion in Basil Mitchell, *Morality: Religious and Secular* (Oxford, 1980), pp. 122ff.

[39] We do not have the space to discuss adequately the vexed question of capital punishment. If our argument about the absolute value of human life is correct, capital punishment is probably never justified in any circumstance. If there is any argument for it, it would be justifiable only in the case of a premeditated murder, where the perpetrator deliberately flouts the principle of sacredness. The death penalty, then, would be administered on the basis of a just reward, indicating a recognition of the supremely serious violation of the hallowed nature of human existence. This would eliminate the exemplary character of punishment in this case (i.e. using punishment as a deterrent). It would also exclude the death penalty being used for other crimes, such as treason. Further, the sacredness of human life is confirmed by the clear legal distinction that is drawn between murder and manslaughter. There is also the vexed question of the use of lethal force in a situation of conflict ('just war', 'just rebellion'). Here there may have to be an inevitable suspension of the right to life in extreme circumstances in order to avoid an escalation of violence against the integrity of human beings. The principles of just war gain their moral and legal force precisely from the horror of having to violate the sacredness of human life. The need to make a very special case is recognised. See, J. Andrew Kirk, 'Overcoming violence with violence: is it ever justified?', in *Mission Under Scrutiny: Confronting Current Challenges* (London, 2006).

Reasons for acting morally

Our discussion so far has sought to show that, whatever may be the nature of our moral thinking, in ordinary life we act as if we believe implicitly in the existence of moral absolutes. We may differ about which absolutes we want to defend, although the intrinsic right to life would come high on most people's list. We may not have articulated to ourselves how we come to hold the moral values we do, and we may find it even more difficult to explain our views to others, but we betray our convictions in the course of the choices we make, the actions we perform and the opinions we express.

Emotivism

So, what kinds of justification can we give for our moral verdicts? Before reviewing the various options, it is necessary to clear up one perception that has come to be attached to a post-modern way of thinking. In accordance with the general view that neither truth nor valid concepts of right and wrong are accessible to us, some thinkers conclude that the consciousness of external moral standards is an illusion. The apparent reality of a moral standard that confronts us with responsibilities and obligations from outside our desires and wishes is an expedient way of justifying what amount to no more than our own attitudes and preferences.

To say something is good or bad is to express personal approbation or condemnation. It is to manifest a private store of values. We are not saying that such and such an action is wrong; we are saying that it offends us. This is why this view is also sometimes called emotivism. It is an attempt to bridge the is-ought divide by conflating the fact of moral judgements with the rationale of the judgement itself:

> The *point* of making a moral judgement is not to assert an unknowable proposition, but to express a positive or negative attitude and thereby to influence human conduct, if only by endorsing or condemning one or another kind of behaviour.[40]

As a theory of moral behaviour this view fails on two basic counts. First, it does not accord with how we normally interpret our moral attitudes. When making a moral judgement, for example about an adult 'grooming' children for sexual gratification, we are certain that we are doing more than merely expressing our own disapproval, irrespective of having any non-personal reasons for doing so. If this were not the case, we would have logically to admit that the paedophile would be equally justified in expressing his belief that his attitude is to be approved.[41] In recognising that such a conclusion would be unacceptable, we appeal beyond our own internal dispositions to a more enduring and concrete moral norm. Or, to put it another way, we do not believe that our attitudes are the sole standard for what is deemed acceptable or reprehensible. Second, the theory would reduce moral discourse to 'the attempt of one will to align the attitudes, feelings, preference and choices of another with its own'.[42] In other words, it would convert ethical discussion into the desire and ability to persuade another person or group to share my attitudes and preferences. It is obvious that such a strategy is vastly different from one that seeks to persuade people on the basis of genuine moral principles held independently of pure self-interest. Emotivism, or Expressivism, as a moral theory is once again contradicted by observing what actually happens in moral debate.

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[40] Audi, *Epistemology: A Contemporary Introduction*, p. 261.

[41] If the argument were advanced that the paedophile is wrong, because of the trauma caused to the child, then the principle of the inherent inviolability of the person's humanity (in this case a minor) is being upheld: it is morally illegitimate deliberately to choose an action that is known to cause deep emotional suffering to a vulnerable person, when such action is wholly avoidable.

What other kinds of theories are current today? In the interests of a coherent analysis, it is appropriate to divide the theories into two classes – those that claim to explain how we come to think and act morally and those that develop a particular set of criteria for judging between right and wrong actions. It would be impossible, within the scope of this study, to do justice to the many different ideas that have been advanced. I will endeavour to summarise the crucial issues as they affect the central theme of this book – namely, the reintegration of knowledge, in this case empirically-based, theoretical and practical reason.

Evolutionary ethics

As an explanation of moral awareness, an evolutionary perspective has been powerfully advocated in recent years.[43] This perspective is bound by its essentially materialist and progressive assumptions. The universe is the result of impersonal forces setting in motion actions and reactions that just happened to have produced the universe, as we know it. There are no guiding principles, intrinsic ends or rational process that in any respect at all has shaped the stages of life. More complex forms of life have evolved out of less by chance mutations, which through adaptation and survival have become confirmed as dominant patterns. As Michael Ruse colourfully puts it, 'we are modified monkeys rather than the special creation of a good God'.[44] According to these basic premises, the existence of ethical intuitions has to be explained on the basis of an absolutely consistent evolutionary materialism. The evolutionary ethicist may not move one foot from a purely empirical, descriptive procedure without calling into question her assumptions. The basic empirical data that is adduced is co-operation or 'altruism' in the interests of survival, which means maximising 'one's units of heredity (the genes) in the next generation'. Survival in the struggle for existence is achievement. Such success can only happen when an organism minimises the risks involved in trying to win outright and agrees to share the benefits of not competing in a war of all against all. Somehow, Nature has programmed us to believe that co-operation is an obligation. In itself it is part of our adaptive mechanisms:

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[42] Knight, *The MacIntyre Reader*, p. 74.

[43] By Richard Dawkins, *The Blind Watchmaker* (Harmondsworth, 1991); Michael Ruse, *Evolutionary Naturalism* (London, 1992); E.O. Wilson, *On Human Nature* (Cambridge, 1978). For a full-length, critical discussion of the issues and arguments put forward in its defence see, Holmes Rolston III, *Genes, Genesis and God: Values and their Origins in Natural and Human History* (Cambridge, 1999), pp. 212–291.

[44] 'The Significance of Evolution', in Singer, *A Companion to Ethics*, p. 502.

> We think that we ought to help, that we have obligations to others, because it is in our biological interests to have these thoughts…We are moral because our genes, as fashioned by natural selection, fill us full of thoughts about being moral.[45]

Forgiving the pun, acknowledging moral responsibility is a ruse of the evolutionary process. The only justification ultimately for being moral is that it furthers the survival of the human species in an optimum manner. However, because morality is entirely determined by biological needs, the evolutionary process ensures that we are more likely to have a sense of obligation to co-operate with those genetically and geographically closest to us:

> All other things being equal, your best reproductive investments are going to be in helping close kin.[46]

This amounts to biological self-interest, a notion that has, according to this view, no adverse value implications, since we are programmed to behave in this way:

> Our moral beliefs are simply an adaptation put in place by natural selection, in order to further our reproductive ends; that is an end to it. Morality is no more than illusion fobbed off on us by our genes for reproductive ends.[47]

Strictly speaking, this theory is attempting to give an account of how we have come to believe that we should act morally towards others; it is not a justification, except in the sense that survival is the overriding intent of the materialist force of evolution and that, in order to conform most adequately to this end, we have no option but to act altruistically. This view does not deny that human beings have elaborated sophisticated reasons for behaving in certain ways and not in others. It simply says that such reasons are redundant. The causal explanation is sufficient. There is no need for rational justification. The theory entails believing that any change in our moral horizon is also a matter of adaptation; the course of ethics is the course of biological selection, to keep the human species in the best possible state to survive.

Intuitionism

Another theory, with its slight variations, goes under the name of intuitionism or prima facie duties. An explanation for moral sensibility arises from the recognition that in certain circumstances we notice a particular feature which makes a real moral difference to how we should behave. We go on to notice that what matters in one situation must matter in the same way in all other situations where it appears. The recognition of a moral principle (or prima facie duty) relevant to the situation comes about by intuitive induction. The moral importance of the feature becomes self-evident to us as we reflect upon it. We ‘see’ the issue with a kind of inner ‘perception’.

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[45] Ibid., p. 504

[46] Ibid., p. 505.

[47] Ibid., p. 506.

As an explanation of moral discernment, intuitionism can be applied to a number of further theories. For example, the ‘Kantian’ moral imperatives that contend that we should only act in a way that can be universalised (i.e. that we should not make ourselves into a special moral case), that always treats another person as an end, never as a means, and that so acts towards others, as we would wish them to act towards us, can be grasped as self-evident truths of practical reason. To deny any of them would entail self-deception, contradiction and the extinction of morality as such. The intuitionist theory seems to posit a kind of sixth (moral) sense, seeing that our moral beliefs are neither the product of reason nor of our physical senses. If our moral sense (or faculty) is working properly, we will simply recognise what our duty is.

There are difficulties with this view. The main problem lies in giving an adequate account of how this intuition helps us to decide in those cases (rather many) where moral intuition apparently shows us different moral realities pertaining in the world. In other words, how can intuition, whose workings are spontaneous, guide us in cases, where different intuitions conflict? We either ‘see’ something as morally binding, or we don’t. There seems to be no further basis from which we may be able to persuade people to see things as we see them. This evident deficiency has led some to look for an answer within human nature itself. Natural law theory is elaborated to guide people in right living according to those principles which enhance human well-being and hinder human misery. It is assumed that, by both introspection and observation of human life in the world, it is possible to discover actions which promote human health and those which cause harm. The justification for moral action is that it enhances one set of principles and diminishes the other. It is a way of distinguishing between what is good to do and what is bad. There is what one might call a basket of basic moral goods ‘to which the first principles of practical reason and basic precepts of natural law direct choice and action, and which, taken together, generate an ideal of *integral* human fulfilment – the fulfilment of all human persons and their communities’.[48]

Thus, on the basis of this theory, it would be argued that casual sexual relationships are morally bad, for they destroy the proper functioning of the most satisfying relationship possible between men and women, which can only flourish within the setting of long-lasting trust and exclusivity. Equally, divorce is bad for it signals a failure to work through discord and to achieve a level of harmony within a plurality of interests and opinions, both achievements being necessary for proper human prospering. Marriage is good for families where there are children, for it is in the nature of the latter to develop and blossom best in the context of a father and mother whose commitment to one another is signed and sealed publicly by the marriage bond. Other experiments in inter-gender or family relationships tend to inhibit or disrupt natural human growth. They operate against what is essential to a wholesome and productive human life.

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[48] Robert P. George, ‘Natural Law Ethics’, in Quinn and Taliaferro, *A Companion to Philosophy of Religion*, p. 462.

Evolutionary ethics, intuitionism and natural law are three theories devised to explain why and how human beings may sustain moral convictions: they are in the interests of our biological perpetuation; they are recognised intuitively as self-evidently valid by means of a moral sense we all possess; they accord with the way in which human nature is designed to maximise well-being.

There are two further theories not yet touched upon: consequentialism and theistic ethics. The first is, to my way of thinking, not so much an explanation of *why* we think we may know ethical values as a way of discerning *how* we may evaluate different moral options. We will conclude this part of our discussion by considering this viewpoint. It is characteristically the theory most frequently utilised in discussing moral issues today. We will note that it is of a different kind from the others.

The second theory is in a separate category from all the others, in that it claims that the source of moral knowledge cannot be generated in any way from within a self-contained human experience, but is dependent upon knowledge originating from beyond human sense perception, processes of reasoning and introspective activity. It will be dealt with in the final part of this study by comparing it with the alternative views. I will argue that it possesses a greater explanatory significance than any alternative theory in accounting for the human experience of moral knowledge.

Consequentialism

Consequentialism as a theory of ethical action has three different strands. The first, most obvious characteristic is that it defines what ethical action is required in any given set of circumstances by a consideration of the consequences that will follow upon pursuing any of a number of alternatives. An action is right to do if it produces overall beneficial results. There may be different ways of measuring benefits. The most famous, formulated in the thesis known as utilitarianism, states that the overriding criterion is happiness, defined as pleasure. It is a moral obligation to maximise happiness in the world and, conversely, to minimise suffering and adversity. Consequentialism is often stated in the negative form that any action is legitimate, as long as it does not cause any other human being harm or loss. This allows a considerable level of tolerance for individual moral behaviour in situations of consenting human relationships.

The second strand of consequentialism is that it is a theory of right action, not a theory of the good. That is, it suggests what it is right for individuals or communities to do, once they have decided what moral values they accept as good. If this were not so, the theory would simply argue in a circle by assuming that all human moral action, such as putting one's life at risk to promote a greater amount of happiness for others, can be subsumed under personal happiness. If everyone is assumed to maximise her own happiness, any action must be interpreted as contributing towards this end.[49] It is an obvious weakness of the theory that it begs the question about the good. In practice, this often depends upon a form of intuitionism. This is the case of a divorce: what is *right* to do about the children is what is in their *best* interests.

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[49] See, Kirk, *The Meaning of Freedom*, op. cit., p. 68.

A further difficulty is how one argues for happiness as the supreme moral good, without begging two fundamental questions: how do we know that happiness is the supreme moral good? How do we agree about the meaning and content of happiness? Without an answer to the first question, we do not know that the production of happiness as the consequence of our actions is what we should be aiming for. Without an answer to the second question, we do not know how to judge between different depictions of happiness. So, utilitarian consequentialism is not strictly speaking a theory about how moral principles can be discovered. It operates only on the basis that we already know that happiness overrides any other putative good.[50]

Thus, the third strand of the theory is that once we have decided which values we should adopt, the proper response is to promote them in such a way that they have the best chance, according to the best prognoses, of succeeding. One may summarise the theory by saying that it is about means rather than ends, about processes rather than about content.

> We judge acts in terms of the right, but when we need to explain what makes an act right, or whether it is right in a doubtful case, we can do so only in terms of the good.[51]

Recognising the correct order – first the good and then the right – has important consequences for theories of human rights.[52] However, the relationship between the two poses a conundrum. On the one hand, acknowledging and acting on human rights are often taken to be intrinsic goods. On the other hand, the notion of implicit rights raises fundamental questions about the nature and the origin of the good. In contemporary human rights discourse, the two are often confused, leaving the notion of rights hanging in the air as a question-begging concept. Perhaps the puzzle can be solved, if the notion of rights is understood to be derivative from the idea of the good. If then a particular right is admitted on the basis of the good from which it springs, clearly to uphold that right is also good. If this argument is correct, then it is the good, rather than the right, that is essential. To speak of *basic* rights confuses the whole debate.

In the next chapter, we hope to be able to resolve the theoretical and practical problems in ethical reasoning, highlighted in the discussion of this chapter. We will close our survey by showing how they result from the epistemological split between the two fundamental sources of knowledge, which has been the central theme of this study. In so doing, we hope to be able to demonstrate that the enigma, with which we started our survey, has a solution.

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[50] Naturally, utilitarianism is only one version of consequentialism. It is logically possible to argue for other values that ought to be promoted and that right action, therefore, would accord with the best means of maximising the value chosen.

[51] Schmidtz, *Rational Choice*, p. 151.

[52] A major issue to which we turn in more detail in the next chapter.

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Chapter Ten

Regaining a lost Opportunity: The Conditions

The contemporary plight of the West

A shrewd observer of the social situation of Western nations, Zygmunt Bauman, speaks of the inexorable spread of moral relativity through whole populations. He notes that it is hardly credible to pretend that moral norms can any longer be successfully made universal. He is as certain as he can be that 'many paths previously followed by ethical *theories* (but not the moral *concerns* of modern times) began to look more like a blind alley'.[1] He believes that our contemporary societies have inherited a set of illusions and pretences, setting for themselves objectives which are neither attainable nor desirable.[2] In brief, he blames the mind-set of modernity for assuming that free individuals could not be trusted to use their freedom wisely, but would inevitably slide towards unpredictability and disorder, thence needing to be rescued from the ensuing chaos of their unbridled passions. The modern project has striven to find a way of imposing a rational solution to the divisive fragmentation produced by some of its own ideals:

> One more effort, one more feat of reason, and the harmony would be reached – never to be lost again. Modernity knew it was deeply wounded – but thought the wound curable. And thus it never ceased to look for a healing ointment. We may say that it remained 'modernity' as long, and in so far as, it refused to abandon that belief and those efforts. Modernity is about conflict-*resolution*, and about admitting of no contradictions except conflicts amenable to, and awaiting resolution.[3]

However, in Bauman's opinion, the whole enterprise of trying to find 'rules that "will stick"and foundations that "won't shake"', which drew its inspiration and strength from a powerful faith in the ultimate triumph of the humanist project, is misconceived. He argues that morality is essentially ambiguous, that moral phenomena are inherently non-rational, that few moral choices are unambiguously good and that morality cannot be made universally applicable.[4] At the same time, he does not wish to endorse moral relativism, in the sense that all moral judgements are contingent upon local and temporary circumstances and that moralities therefore cannot be compared.

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[1] *Postmodern Ethics*, p. 2

[2] Ibid., p. 3.

[3] Ibid., p. 8.

[4] Ibid., pp. 9–12.

So, the quest is on for an approach to ethics that eschews universality and yet, simultaneously, disowns relativism. This is clearly an arduous task. It becomes clear at the end of his quest that he is not hopeful of resolving the dilemma. On the one hand, the rejection of a universally viable moral code leads inevitably to what he calls ethical, 'tribal parochialism'. On the other hand, many of humanity's most pressing problems today are global and, therefore, demand a global response. Two of the most urgent issues, he notes, are the degradation of the environment and the lack of integrity among political and business leaders worldwide. To tackle global crises a global consensus of some kind is needed. At the same time, this must not be imposed. Bauman ends up with the sovereignty of moral conscience – 'the ultimate prompt of moral impulse and root of moral responsibility'[5] – as the guiding principle. However, he admits that, because it is inherently subjective and fickle, it is a weak postulate. As humanity's only warrant it appears to be a preposterous proposition.

Bauman's discussion of ethics in the contemporary West illustrates cogently the epistemological split between objective reality and subjective conviction which we have been attempting to trace in its different manifestations. His objection to the modern project is that, in the face of the threatening chaos of individualism, which seems to be the natural consequence of the modern vision of liberty, society is more or less obliged to decree a set of moral principles to set bounds to the menacing floods of subjective desire and arbitrary choice. Where the moral consensus of culture has irretrievably broken down because, according to Alasdair MacIntyre, the culture believes itself to have been liberated from the traditional morality of God's law and natural teleology,[6] the politicians and legislators, guided by the most influential moral experts of their generation, step in and decide what will count for acceptable moral practices both in the public and private arena. Bauman's objection is that too often the results of the putative morality of the modern project turned out to be deeply immoral. In any case, he argues, a morality imposed is not authentic, because individual moral responsibility has to be intrinsic to the moral agent and, if traded for an extrinsic moral authority, ceases to be truly moral:

> Moral responsibility is the most personal and precious of human possessions, and the most precious of human rights. It cannot be taken away, shared, ceded, pawned, or deposited for safe keeping.[7]

The dilemma, so persuasively and uncompromisingly set forth in Bauman's discussion, is manifest. The modern project sought to establish notions of right and wrong on an empirical basis that would be patently obvious to all educated, right-minded, enlightened members of society using correctly their faculty of reason.[8] As human nature was uniform across all societies, and as binding moral convictions could be discovered (were discovered by competent ethnologists) deeply ingrained among all peoples, despite the apparent differences, an inventory of acceptable practices could be established which applied to the whole of humanity. Such a belief deeply influenced the civilising aspirations of the colonists of the old European powers.

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[5] Ibid., p. 249.

[6] Alasdair MacIntyre, *After Virtue: A Study in Moral Theory* (London, 1985/2), p. 68.

[7] Bauman, *Postmodern Ethics*, op. cit., p. 250.

[8] John Gray, *Two Faces of Liberalism* (Cambridge, 2000) uses a similar argument. He maintains that the Western tradition of liberalism contains two philosophies. 'In one toleration is justified as a means to truth...(it) is an instrument of rational consensus, a diversity of ways of life is endured in the faith that it is destined to disappear. In the other, toleration is valued as a condition of peace, and divergent ways of living are welcomed as marks of diversity in

Today, as the ethnocentrism of the West is no longer culturally acceptable (either in the West or in other parts of the globe) a new, universally acceptable uniformity is pursued. The only candidate seems to be a universal convention on human rights. This solution seems to overcome Bauman's modern/post-modern dichotomy.[9] Here we appear to have the most deeply ingrained moral tradition of the Enlightenment coming together with what Bauman might approve of as a grass-roots, bottom-up, moral conscience. The latter has grounds for pitting the interests of minority groups against the consensus ethical reasoning of the powerful forces of society – not least those of global business interests. Nevertheless, this apparently felicitous resolution of the dichotomy does not stand up to serious analysis; as we shall go on to demonstrate.

Human rights and the moral deficit of the West

One of the most insistent critics of the modern defence of universal human rights has been Alasdair MacIntyre.[10] He traces the history of the language of rights from the early modern period (around 1400). Before that time, there was no expression in any ancient or modern language that could be correctly translated by the modern term 'a right'. The concept began to appear in philosophical, political and legal discourse from roughly the time of the Renaissance onwards. It is tied to notions of the autonomy and liberty of the individual in relation to an absolute divine moral law as this was mediated by either Catholic or Protestant hegemonic states.

The clash between the opposing ideas that human beings are either born essentially free or they are subjects of a given, higher authority issued eventually in the notion of a social contract. In this, the interests of the inhabitants of a politically independent geographical region would have some redress against those who believed it was their duty to impose their 'higher' moral values on the majority. Thomas Hobbes was the first to elaborate a theory of social contract in which the overwhelming human desire for self-preservation would be guaranteed against the natural aggression of fellow human beings.[11]

Hobbes assumed that human beings were not under any final obligation to an indisputable, divinely-revealed law. Law is, rather, an act of human ingenuity in

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the good life' (p. 105). Gray argues against the ideal of a universal convergence of values. He advocates the attitude of *modus vivendi* as a way of accommodating many ways of life.

[9] Gray, *Two Faces*, also appeals to human rights 'as convenient articles of peace, whereby individuals and communities with conflicting values and interests may consent to coexist', p. 105.

[10] MacIntyre, *After Virtue*, pp. 69ff.

[11] See, the discussion in Kirk, *The Meaning of Freedom*, pp. 53–55.

which the body politic decides how it is going to arrange its life for the maximum security of all. Human laws are based on what a society can recognise in the way of natural rights for individuals. However, even though there is a liberal streak in Hobbes's view, his political thought is also shot through with an absolutism of a different sort: it is the responsibility of the sovereign power (the restored monarchy following the Puritan Commonwealth) to decide the terms of the contract.[12] Thus, in order to gain the greatest good – security against the predatory inclinations of fellow humans – individuals should be willing to cede some of their natural rights to the state.

The thought of John Locke differs considerably from that of Hobbes, even though their thinking is conjoined by the notion of social contract. Locke placed an emphasis on the moral law being prior to any political organisation and therefore determining the legitimacy of any particular government. However, the moral law has to be recognised as such by human beings. Locke was confident that most people would instantly recognise, as self-evident, the notion of the equal rights of all. Unlike Hobbes, Locke did not believe that certain individuals had been instituted with a (divine) right to rule.[13] Rather, he affirmed that human beings had been entrusted with natural rights that the recognised ruler was duty bound to guarantee:

> This emphasis both on the natural rights of the individual and also on the limitations of government, due to the function for which it is constituted, makes Locke the father of modern 'liberalism.' He was the first who seriously and systematically began to argue for limited government and an open society.[14]

Locke's influence on the subsequent development of an understanding of rights, liberty and democracy has been incalculable.[15] His theory of the right to the basic values of life, liberty and property is based on the notion of self-evident truths, given in natural law and known in experience. This basic right, written into the constitution of the universe (by God in Locke's thought), was inalienable. No other person, and certainly not collectives like governments, had any prerogative to disregard or annul these rights. No individual should place his life, liberty or property at the disposal of another. In Locke's thinking,

> natural rights yielded three main political consequences…First, since men enjoyed equal rights under the law of nature, no one could come under the political authority of another except by his own consent. Second, the maintenance and protection of natural rights constituted the primary function of government. Third, natural rights set limits to the

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[12] See, Max Stackhouse, *Creeds, Society and Human Rights* (Grand Rapids, 1984), pp. 66–67; Miller, *Encyclopaedia of Political Thought*, pp. 211–212.

[13] He was writing at the time of the overthrow of the Stuart dynasty in 1689; the *Two Treatises of Government* was published in 1690.

[14] Kirk, *The Meaning of Freedom*, p. 56; also, James Tully, 'The Two Treatises and Aboriginal Rights', in G.A.J. Rogers, *Locke's Philosophy: Content and Context* (Oxford, 1994), p. 165.

[15] See, J.C. Keene, *The Western Heritage of Faith and Reason* (New Yorker, 1963), p. 567.

> authority of governments so that a government which violated the rights of its citizens lost its claim to obedience and could be legitimately overthrown.[16]

For our purposes it is sufficient to recognise that modern discussions of human rights are directly attributable to early modern liberal theory:

> The idea of a human right remains that of a right which is 'natural' in that it is conceived as a moral entitlement which human beings possess in their natural capacity as humans, and not in virtue of any special arrangement into which they have entered or any particular system of law under whose jurisdiction they fall.[17]

In other words, rights are not conferred on individuals by the will of a sovereign state. Consequently, they cannot be removed by any authority. They are bestowed by the very fact of being human and they take precedence over all other legal codes and practices.

What, then, are the main objections to current notions of human rights? Alasdair MacIntyre believes that the idea of rights is a fiction because, in the last analysis, and attractive though the thought may be, there are no such things as self-evident truths. It has to be remembered that in contemporary Western-based rights language no plea can be made to any justification that appeals to a reality beyond the mundane, secular world. To maintain consistency, it would be illegitimate to smuggle in the sanction of a divine being, in order to escape from an epistemological dilemma. This means that the theory of natural, moral entitlement has to be based on either (a) an unchallengeable cognitive intuition – we simply know that this is the case – or (b) an argument from reciprocity – we should treat others in every respect as we expect to be treated – or (c) a reasoning from consequences – equal rights brings the best possible moral outcome in society. What we do not know, and in the nature of the case from a secular standpoint cannot know, is the intrinsic nature of human beings that somehow confers rights upon them. The optimistic notion that an inherent human identity exists prior to its recognition by the state is jeopardised because it disintegrates under the weight of the countless, often conflicting, claims that are made for individual rights. The unfortunate consequence that follows from this conclusion, as John Milbank argues, is that in the real world the s(S)tate

> assumes to itself a power over nature, a right even to define nature, and indeed defines itself by this power, and therefore secretly reserves to itself alone a supreme *de facto* right of pure nature prior to contract, by which in exceptional circumstances it may withdraw any right whatsoever.[18]

We know that human beings are unique among all living beings in having a moral conscience, the gift of language, a sense of history, a considerable critical and creative rational faculty, an appreciation of beauty, technological skills, and much more, but within a secular framework we do not know *who* human beings are in the vast scheme of things. We do not know why, intrinsically, we should treat human beings with special respect. Indeed, the justification of human rights often proceeds in a circle: the fact of being a human person affords an adequate criterion for having rights, and yet the latter are often invoked as a definition of what it means to be human.

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[16] Miller, *Encyclopaedia of Political Thought*, p. 222.

[17] Ibid., p. 223.

[18] *Being Reconciled: Ontology and Pardon* (London, 2003), p. 97.

There is a further problem. The notion of rights implies that some agency is responsible for ensuring that everyone receives his or her entitlement. As long as rights are cast in a negative form – the right, basically, not to be interfered with – responsibility is not so much of a problem.[19] However, if put positively, a new question arises – who has a duty to respond to a right's claim and who decides whether the claim is justified? The logical answer seems to be that it is we, the adult citizens of a state, who decide both on the nature of rights and the means whereby they are implemented. This brings us back to the contract theory. The legislative and judicial authorities of the land have been given a mandate by the people to ensure that certain rights, determined ultimately by the people, should be enforced. The difficulty is that this way of reasoning simply assumes what it is necessary to demonstrate, namely that there are such things as rights which every human being has a duty to uphold. To argue that the existence of rights is self-evident begs the question.

Perhaps the greatest quandary for a rights-based ethic is the individualism that underpins it. Individuals, being distinctive in their desires and tastes, will make conflicting demands that cannot all be satisfied. The claim of an author to have the right to publish a deeply offensive article, because of the right to freedom of speech and the totalitarian implications of censorship, will inevitably conflict with the right of the offended person not to be caused distress. The right to life and liberty is restricted in cases where the life or liberty of others is under threat, as in the instance of hostage taking.

Moreover, a rights' ethic is insufficient to guide action in cases where so-called rights cannot be fulfilled, for example in the availability of some forms of medicine. The implementation of 'rights' presupposes freedom of action. Freedom in the case of medical attention presupposes adequate resources. Resources, however, are not infinitely expandable. So the issue of the level of medical care, which it is the alleged natural entitlement of every human being to receive, illustrates well the limits of the theory. By what criteria is it possible to fix a minimum standard, seeing that medicine is devising ever more sophisticated (and expensive) treatments? Where, if at all, does the entitlement stop? Independent notions like justice and fairness have to be introduced into the moral discourse to decide on the distribution of welfare between competing claimants to the right of health provision. The claim of rights can become ever more fanciful and, through litigation, divides and fragments society. In the eyes of some, an exaggerated emphasis on the rights of individuals leaves them less fulfilled and complete than in a society less concerned about rights.

The purpose of setting out the basic problems of rights' language, as an answer to the moral confusion of a post-Enlightenment society, is to show how, in concrete cases, it contributes to the perplexity of knowing how to secure a proper moral anchor in a culture which no longer has an adequate framework for understanding what it means to be human. It is not without significance that, in the thinking of the original advocates of human rights, God's special creation of human beings in his likeness was taken as the guarantee of their intrinsic inviolability. However, this belief, even in its Kantian form as a requisite postulate of practical reason, is not available to a secular society. By definition the latter seeks to function on the basis of the sharp separation of private belief from public knowledge. Thus, a morality based on what the culture considers to be merely private opinion, namely belief in a personal God, cannot, presumably, become the basis of what the culture heralds as publicly binding – a morality that all can recognise without recourse to minority sentiments or creeds. This is a dilemma indeed, as MacIntyre powerfully points out:

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[19] Nevertheless, even here, the question arises as to who is responsible for maintaining and upholding the alleged right not to be interfered with and arbitrating in cases where the right is said to have been infringed.

> Up to the present in everyday discourse the habit of speaking of moral judgements as true or false persists; but the question of what it is in virtue of which a particular moral judgement is true or false has come to lack any clear answer. That this should be so is perfectly intelligible if the historical hypothesis that I have sketched is true: that moral judgements are linguistic survivals from the practices of classical theism which have lost the context provided by these practices.[20]

Human rights only begin to make sense if it is a *fact* that human beings, without distinction, are endowed with an intrinsic dignity and worth which override all other considerations and if, consequent upon this fact, all human beings are held responsible for mutually recognising, upholding and promoting this sacred characteristic. One thing is clear, human beings cannot accord themselves this dignity, except perhaps out of self-interest, but self-interest is an extremely flimsy basis for a robust moral integrity. From where, then, will an adequate understanding of the meaning of being human come?

The recovery of virtue and the moral deficit of the West

As a response to what its advocates perceive to be a contemporary crisis in moral theorising created by the failures of the modern and post-modern projects and as a way of breaking free from the subsequent impasse, a number of moral philosophers are looking again at the potential of virtue ethics. One of the foremost proponents of the retrieval of this tradition is Alasdair MacIntyre.[21] He argues that the various streams in moral thinking that have emanated from the Enlightenment and from its critics, namely Kantian deontology, utilitarianism and the Nietzschean 'will-to-power', have failed to provide a satisfactory account of moral reasoning that would provide adequate criteria for the practice of the good. Rather, he believes that, in their mutual exclusion, they have descended into a conflictual ethics of mere assertion. He accuses these traditions of ending up in a kind of emotivism.[22]

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[20] Knight, *The MacIntyre Reader*, p. 81.

[21] He elaborates his views in *After Virtue*; *Whose Justice? Which Rationality?* (London, 1988); *Three Rival Versions of Moral Enquiry: Encyclopaedia, Genealogy and Tradition* (London, 1990).

Much of MacIntyre's recent work has been dedicated to the study of the history of moral traditions and how it may be possible to overcome seemingly incommensurable beliefs, so as to avoid falling into subjectivism and relativism. He concludes that a restatement of the Aristotelian emphasis on virtue synthesised with Christian theology by Thomas Aquinas has the best chance of resolving the current failures in moral thinking.

It is not possible to trace adequately the complexities of MacIntyre's argument. For our purposes, it is sufficient to look briefly at the concept of virtue ethics and try to assess its strengths and weaknesses as an answer to the moral deficit of the West. 'Generally speaking, a virtue is an admirable or desirable trait of character. Virtue ethics may therefore be understood as a form of moral reflection which gives a central place to such traits of character.'[23] Examples of the traits of character to be admired include such virtues as 'courage, truthfulness, generosity, humility and practical wisdom'.[24] It would be important, therefore, to identify a core of virtues that are necessary for any form of society to flourish at any time of history.

Virtue ethics is said to be an advance on the deontological and utilitarian traditions for the following reasons. The first is defective because it does not properly engage the internal moral commitment of the moral actor. It is enough that individuals carry out their duties just because a universal moral obligation is laid upon them. The second is deficient because the content of the greatest good (or happiness) of the greatest number is rarely spelt out in the concrete realities of everyday life. What is important in virtue theory is the character of the person who is involved in making moral judgements and putting them into practice. In other words, we need to look at the overall quality of life of the ethical practitioner. The issue is not so much does she actually perform the good and do what is right. Rather, the question is does she seek to perfect those qualities of character that lead to a spontaneous practice of virtuous living?

The merit of this way of looking at moral reasoning is that it involves the moral subject as a whole person. Moral rectitude is much more than the outward discharge of morally acceptable acts. It involves the moral integrity of a person at the level of the conscious choice of what kind of person she wishes to be. However, in spite of some strengths in comparison with rival theories, there still appear to be two major weaknesses. It is hard to see how this account avoids the problem for utilitarian ethics of having to insert principles from another theory in order to define and justify the concept of the good and happiness. In other words, it too begs the question. On what grounds, that are not ultimately those of a particular historical tradition or social convention, does one identify an 'admirable or desirable trait of character?' How does one justify particular virtues, such as courage or humility, against conflicting opinions, except on the basis of incommensurable traditions? Is not MacIntyre in danger of being hoisted by his own petard of 'emotivism', that is that he is simply asserting that certain traits of character are to be applauded?

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[22] 'Emotivism' is applied to an interpretation of moral theory according to which the defence of moral principles is in essence the expression or articulation of ethical preferences.

[23] Jean Porter, 'Virtue Ethics', in Quinn and Taliaferro, *A Companion to Philosophy of Religion*, p. 466.

[24] Robert C. Roberts, 'Narrative Ethics', in ibid., p. 473.

In order to try to overcome this problem of self-reference, MacIntyre appeals to a further (one might call it, 'transcendental') dimension:

> This characterisation of the virtues in terms of practices is necessary, but not sufficient for an adequate specification. Virtues are also to be understood as qualities required to achieve the goods which furnish individual human lives with their *telos*.[25]

It is at this point that, seemingly, MacIntyre should be forced, by the import of his own argument, to introduce a theological, eschatological element. Virtues are qualities required to achieve the good defined in terms of the ultimate purpose of human existence, which is full communion with God. So, virtue ethics, to be sustainable, is here seen as requiring a theistic underpinning.[26] And, how is it possible to know what are the contours of a virtuous communion with God? The answer is by listening attentively to God's own word. If this is a valid conclusion to draw from an adequate exposition of virtue ethics, it rather confirms the hypothesis that only the reintegration of God's word and God's world is sufficient to overcome the moral deficit caused by the inadequacies of modern and post-modern thinking.

The crisis of identity and the moral deficit of the West

The thesis of this inquiry that, by abandoning the word of God in favour of the world (deemed to be 'not of God'[27]), Western culture on its own terms has walked into an irresolvable dilemma, is becoming clearer. The previous discussion seeks to indicate those preconditions that are essential for ethical theory to have a resolute foundation. This has been illustrated by the debate about the conditions necessary for human rights to have a sufficient rationale. The outcome reveals the observation that this culture has accepted a set of presuppositions which gradually, but inexorably, are generating an environment in which the culture in general *has lost touch with what it means to be human.*

Neo-Darwinian evolutionary theory as the dominant meta-narrative

The previously dominant Judeo-Christian theistic narrative has given way to another prevailing meta-narrative – neo-Darwinian evolutionary theory. There are two central theses to this latter story about the world. First, there is (usually) the naturalist assumption. This is a metaphysical theory about the nature of reality, presumed to be true. It states that there is no reality outside the material universe and, therefore, there cannot be any explanation for the existence of the universe that comes from such a hypothetical source. The universe, as a brute fact, just happens to be and any sense that we may make of it has to be couched in terms of unbroken chains of cause and effect working within purely material substances. There can be no explanation that is in principle outside the scope of scientific methods to elucidate[28] and, in essence, science can provide a theory of everything.[29]

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[25] 'The Claims of *After Virtue*', in Knight, *The MacIntyre Reader*, p. 71.

[26] Although not fully articulated, MacIntyre appears to have arrived at this conclusion in the brief autobiographical account he gives of his own journey in the *Cogito* interview; see, Andrew Pyle, *Key Philosophers in Conversation*, pp. 76–77.

[27] Or, if 'of God', not knowably so.

Naturalism is a metaphysical rather than a scientific theory, in that it is a truth claim made about the fundamental nature of reality rather than about the confirmation or falsification of hypotheses, related to observation, through empirical means. Its plausibility is derived mainly from confusion, largely unrecognised in the culture, between ontology and epistemology, between a statement about being and one about the means of gaining knowledge. Science is right to favour a *methodological* naturalism in the sense that it depends on the presumption of a regularly ordered natural order, not subject to wildly unpredictable alterations to its normal workings. However, to use this presumption to postulate a totally closed system into which it is deemed *impossible* that another kind of agency could act is to make an a priori assertion that is not warranted by scientific evidence. Laws do not have an ontological status as an inextricable and invariable part of reality. They are, rather, epistemological tools by means of which humans are able to organise their understanding of the physical world and from which they can, with a great deal of accuracy, make general predictions about what is likely to ensue.

Naturalism steps over the boundary of what it is legitimate to say on the basis of the methods of science, by holding that the physical can only be explained by resort to physical causes.[30] This fundamental assumption (part of the meta-narrative) leads, as we shall see, to rational incoherences. In brief it makes assumptions about the intelligibility of the scientific enterprise, about the fit between rational processes and an objective world, about the legitimacy of scientific experimentation, which are not available deductively from the inductive methods of perception, theory-formation and testing. Somewhere in the argument an exterior element is slipped in, as disguised as possible so as not to appear too obviously inconsistent.[31]

The second crucial element of the meta-narrative follows from the prior naturalistic assumption. Given that it is inadmissible to postulate any agent external to the universe as an explanation for the cause and effect sequence of the material world, some mechanism internal to its working must be discovered that will provide a sufficient explanation of how it has developed into its present form. Notoriously, the theory of evolution by *natural* (sic) selection is now the accepted orthodox account of animate existence. Over a very long period of time, beginning with the simplest organisation of cells, all species have evolved by progressive modification, adaptation and selection. Every living organism can be traced back to this singular beginning, without any break (breaks might imply either divine action or spontaneous generation – both ruled out, a priori, as inadmissible theories). Naturalistic evolutionary theory makes three successive claims: first, natural selection is a fact of life; second, it is sufficient as a mechanism to have produced the diversity of species, both living and extant; third, that the operative force that has pushed the process along has been the struggle to survive and reproduce.[32]

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[28] See, Trigg, *Philosophy Matters*, p. 27.

[29] See, Ward, *God, Chance and Necessity*, pp. 23–26.

[30] Needless to say, such a hypothesis is not even intrinsically open to falsification.

[31] See, Markham, *Truth and the Reality of God*, p. 92.

It will not be possible to debate all the arguments that have been given for and against the theory, or by way of modifying the theory. In the context of the discussion of this book, it is important to note that the orthodox position on evolution, even if not universally endorsed, is that natural selection has happened absolutely by chance. There is no guiding hand, purpose or goal towards which the whole process is moving. In a sense everything has arisen out of nothing. Somehow matter, mass, motion, energy have come into being as the result of an unknown first cause. Then, by sheer chance, through time, a wholly impersonal beginning has given rise to the utter complexity of the world as we today experience it, including ourselves.

As John Hedley Brooke sees it, a process in which natural selection worked on random variations is effectively atheistic, since it claims to make the hypothesis of an active divine involvement in natural processes not only unlikely or unacceptable, but unnecessary. The neo-Darwinian consensus purports to be able to explain every facet of life.[33] The theory is an example of the method of inference to the best explanation. It claims to be based on a simpler, more plausible, more comprehensive, less ad hoc account of the appearance of life on earth than its main rival, namely a view which allows for the separate special creation of individual species by the periodic intervention of a divine agent into the natural process, according to a predetermined plan.[34]

If, as its defenders claim it is, evolutionary naturalism were to be the best explanation for the vast and complex array of experience that human beings are confident that they are familiar with, then the problem of integrated knowledge would be solved. Every aspect of life, including the way we act, would be potentially explicable on the basis of a random process of mutations in the physical structure of all living organisms. It is part of the thesis of this study that, in reality, the theory (in its naturalistic form) is not the best explanation, for it singularly fails to explain many aspects of experience. Moreover, for this reason, it is one of the main causes of the disintegration of knowledge, not its cure.

There is a meaningful discussion about the status of the theory of evolution as a properly scientific explanation. Following Karl Popper's interpretation of scientific development in terms of conjectures and refutations,[35] some have questioned whether there could be, *in principle*, any evidence that would be admitted as counting against the theory. Can a theory, which appears to be able to defend itself, against any conceivable falsification, by multiplying auxiliary hypotheses,[36] be counted as scientific? Popper's original problem with the theory was that it was basically tautological in nature – those that are best fitted to survive will survive.[37] Then again, the nature of the evidence is such that it is hard to see by what empirical methods it could be confirmed. The evidence is scant and, in a number of important aspects, missing.[38]

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[32] M.J.S. Hodge, 'Origins and Species before and after Darwin', in Olby et al. *Companion to the History of Modern Science*, pp. 374–387.

[33] Richardson and Wildman, *Religion and Science*, pp. 303–305. I take it that there may be considerable differences of emphasis between those who advocate some form of theistic evolution and those who argue for 'intelligent design' as an explanation of the origin of species. What unites them, however, is their rejection of *metaphysical* naturalism as a device for excluding, a priori, personal divine involvement in natural processes.

[34] See, Banner, *The Justification of Science*, pp. 128–132.

[35] *Logic of Scientific Discovery*, op. cit. However, Popper himself later changed his mind about the theory of evolution as a metaphysical research programme, stating that the historical claim that the traits in current populations are the result of the selection of the fittest

Stephen Toulmin observes that by reference to 'Darwin's theory, explaining the origin of species by variation and natural selection, no scientist has ever used this theory to foretell the coming-into-existence of creatures of a novel species, still less verified his forecast'.[39] Carl Hempel's comment on this seeming anomaly in a theory claiming good scientific credentials puts the matter in a clear perspective:

> In examining this argument, let me distinguish what might be called the *story* of evolution from the *theory* of the underlying mechanisms of mutation and natural selection. The story of evolution, as a hypothesis about the gradual development of various types of organisms, and about the subsequent extinction of many of these, has the character of a hypothetical historical narrative *describing* the putative stages of the evolutionary process; it is the associated theory which provides what *explanatory insight* we have into this process…The undeniably great persuasiveness of Toulmin's argument would seem to

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ancestral variants is testable in principle, c.f., 'Natural Selection and the Emergence of Mind', in *Dialectica* 32 (1978), pp. 339–355. The question remains as to whether he was right to do so, for even if not strictly speaking true by definition, the criteria by which the theory might be tested do not seem to be independent of the theory.

[36] For example, the theory of punctuated equilibrium according to which long periods of evolutionary inactivity are punctuated by relatively brief periods of rapid evolution, see, Stephen Gould, 'Evolution as Fact and Theory', in *Hens' Teeth and Horses' Toes* (New York, 1983); Niles Eldredge, *Time Frames* (New York, 1985).

[37] See, Derek Stanesby, *Science, Religion and Reason*, p. 54.

[38] First, the fossil records are minimal in supplying evidence of intermediate organisms between those known to have existed and those presumed to have evolved from them. Indeed, no evidence can be brought forward with certainty to confirm the thesis that there has been a crossing-over of species boundaries. The descent of hominoids from apes, for example, is pure speculation. It is difficult to see what kind of evidence could be marshalled to prove the case. The variable size of crania, or the use of implements, simply begs the question. Near skeletal likenesses do not prove common ancestry. Then, second, there is the case of the eye. Evolutionary theory, to be credible, has to be able to account not only for the linear development of an organ, but the *simultaneous* development through random genetic variation of all the complex parts that allow it to function – lens, optic nerve, relevant muscles, retina, and many other delicate and complex structures, all of which have to be minutely adjusted so that they function harmoniously together. To claim that this complex, intricately interlinked elaboration happened by pure chance in a fortuitous, unplanned process staggers belief. Were it not for the philosophical capital invested in the (naturalistic version of the) theory, it would invite an overwhelming incredulity. See, Alvin Plantinga, 'When Faith and Reason Clash', in Robert T. Pennock (ed.), *Intelligent Design and its Critics: Philosophical, Theological and Scientific Perspectives* (Cambridge, MS, 2001), p. 133.

[39] Stephen Toulmin, *Foresight and Understanding* (New York, 1963).

> derive from two sources, a widespread tendency to regard the basically descriptive story of evolution as explaining the various states of the process, and a similar widespread tendency to overestimate the extent to which even the theory of mutation and natural selection can account for the details of the evolutionary sequence.[40]

Toulmin and Hempel (and many others) have raised here, for different reasons from those advanced by Popper, the question of the scientific standing of evolutionary theory:

> At best, this theory can offer only partial, probabilistic explanations of general facts about species survival and extinction. What it cannot do, at least in the present incomplete state of our biological knowledge, is explain why any particular species came into existence when it did. In short, by arguing that evolutionary theory explains considerably less than one might have supposed, Hempel denies that evolutionary theory explains what it is unable to predict.[41]

The issue at stake here is how much the theory of evolution can legitimately claim in terms of the accepted methods of science. At this stage of the argument, of course, it is not correct to air doubts about the theory (in its naturalistic form) on the basis that it conflicts with a theistic account of the emergence of life and, in particular, human life; though, as we have seen, it certainly does.[42] The salient point is, by taking it on in its own terms, to explore whether, or to what extent, it can substantiate its allegations about being able to explain present human experience (including the evidence of the historical sciences) within a wholly naturalistic frame of reference.

Here, it is important to emphasise that, to succeed as a credible and sufficient explanation, it must not waver at all from its own assumptions about blind chance; it is not legitimate, according to its own premises, for example, to use any language that has any hint in it of design or purpose. Everything, without remainder, has to be explained or, in theory be explicable, within a naturalistic (and, therefore, deterministic) structure of belief.

Judged by this requirement, a naturalistic theory of evolution is simply incredible.[43] In terms of our particular interest in an adequate epistemology for moral evaluation and action, based on a convincing account of what it means to be human, there is simply no plausible connection between the progressive development of life by random mutation from simple cells and the human disposition to be committed to a particular way of life as ethically just and right, just because it is just and right. The problems for naturalism are many and diverse. We have rehearsed some of them already;[44] there are others. For example, we have to believe that our intrinsic moral sensibility, in the sense that moral values have an unconditional essence, is a fiction. According to the theory, we are duped into believing in objective moral principles by a need to survive. However, as an explanation of the inception of moral impulses, this fails to account for a number of facts. Even such a minimalist theory, such as this, assumes, what naturalist evolutionists are at pains to deny, that there is purpose in the universe. Is not survival a goal? Does not the notion of survival suggest that an organism has a will to live? But, why, on an earth without any inherent meaning whatsoever, should an organism struggle to survive? The theory incorporates intentionality, a notion incompatible with its naturalistic starting-point.[45]

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[40] Carl Hempel, *Aspects of Scientific Explanation* (New York, 1965), pp. 368–369.

[41] Curd and Cover, *Philosophy of Science*, p. 776.

[42] Richard Dawkins famously professes that ‘Darwin made it possible to be an intellectually fulfilled atheist’, *The Blind Watchmaker* (London, 1986), pp. 6–7. For a critique of Dawkins’s well-publicised views on theism see Alister McGrath, *Dawkins’s God: Genes, Memes and the Meaning of Life* (Oxford, 2005). Amongst other criticisms, McGrath shows how Dawkins uses arguments based on scientific methodology illegitimately.

[43] It would take a separate book to discuss all the aspects of life which cannot be explained on the basis of the orthodox theory of evolution. They have been elaborated at length by a number of authors, such as John Bowker, *Is God a Virus?*; Holmes Rolston III, *Genes, Genesis and God*; Keith Ward, *God, Chance and Necessity*; Roger Trigg, *Philosophy Matters*.

It must be a serious weakness of the theory that it postulates a being (the human person) who is seriously concerned about questions to which intrinsically there are no possible answers: such as, why there is something rather than nothing? Why is it that we can develop a theory of evolution and debate it? Why, when the only value in the universe is successful gene replication, should human beings be so concerned to defend the truth of the proposition that gene replication is the only value in the universe? How is it that knowledge of naturalistic evolution is necessary for survival, when there is no evidence that such knowledge gives any competitive advantage in the struggle to exist? Why are neo-Darwinists so concerned about the veracity of their views, seeing that the search for truth and the elimination of falsehood are highly purposive activities which do not reflect the process of natural selection? How can we possibly know that scientific discovery is a genuine source of knowledge, seeing that, as in the case of moral knowledge (on naturalistic premises), it could be an illusion?[46]

The theory, as a pretended explanation for the whole of reality, is plainly circular. Issues of order and regularity, stability and intelligibility are fundamental to the question of whether naturalistic evolutionary theory is the best explanation for all that we know, with reasonable certainty, about ourselves. Without these we could not devise a scientific theory of evolution. However, the theory itself has no explanation as to why the world should be ordered, regular, stable and intelligible. Given nothing but chance processes, the prospect of it having happened the way the theory postulates is statistically so infinitesimally small as to be disregarded. If the theory is true, in its consistently naturalist form, we could not know it was true. What has to be assumed for the theory to be convincing is given no explanation by the theory. In this sense, it does not explain; and in scientific terms, if it does not explain, it is a poor theory.

Anthony O'Hear, after carefully considering the thesis that purely physical or biological explanations can be sufficient to account for human rationality, moral consciousness and aesthetic appreciation comes to some stark conclusions. He admits that we can do no more than speculate 'about just what are the conditions which allow the degree of normativity to *enter* the physical and biological world which we find in human life'.[47] However, he is clear that Darwinism is irrelevant to morality on the grounds that the highest form of moral action – pure, disinterested altruism – would be counterproductive for a system bent only on survival. It is also irrelevant, because our concern to know whether pure, disinterested altruism is truly the highest form of morality is inexplicable on the basis of biological effectiveness:

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[44] See, pp. 132ff., 164–166, 198–199.

[45] See, Neil Broom, *How Blind is the Watchmaker? Nature's Design and the Limits of Naturalistic Science* (Leicester, 2001), p. 115.

[46] See, Trigg, *Rationality and Science*, p. 101.

> From a Darwinian perspective, truth, goodness, and beauty and our care for them are very hard to explain. But they exist, at least in the sense that they condition and direct much of our activity. They are also implicit in our possession of rational and social self-consciousness in forms which are not reducible to Darwinian analyses and are not explicable in terms of Darwinian drives.[48]

O'Hear concludes his discussion by stating what ought to be obvious to anyone who tries to match up their experience of life with the Darwinian thesis, namely that the latter does not explain most of the fundamental aspects of being human:

> It is not just that Darwinian analyses strike at the base of our sense of self and at our self-respect, though they do that. It is rather that the account that they give of ourselves and our capacities involves a radical and unsustainable *redescription* of what we are and what we do.[49]

O'Hear is hesitant about suggesting an alternative theory to what he calls materialistic naturalism. He simply accepts that, whatever has caused the human species to possess the unique ability to create culture, we know that the reasons transcend explanations in naturalistic terms. However, he is ambiguous about a theistic explanation, and, in his chapter on aesthetics, leaves a fundamental conundrum unresolved:

> To show suffering as beautiful or as ultimately redeemable is to show the world as not ultimately alien, and ourselves as not necessarily alienated…But, how could we think of an aesthetic justification of experience, that really was a justification and not just a momentary narcotic, unless our aesthetic experience was sustained by a divine will revealed in the universe, and particularly in our experience of it as beautiful? Aesthetic experience *seems* to produce the harmony between us and the world that would have to point to a religious solution were it not to be an illusion. But such a resolution is intellectually unsustainable, so aesthetic experience, however powerful, remains subjective and, in its full articulation, illusory.[50]

The quote is highly revealing. Better, apparently, to deny the reality and comprehensibility of aesthetic experience than admit that its only plausible explanation is in the existence and activity of a creating, inventive, rational, Supreme Being. Such a conclusion consigns human beings to a permanent lack of fulfilment. They are being told to ignore the reality of their experience, because the one explanation that could make sense of it is, apparently, intellectually invalid. Given that O'Hear offers no reason why the religious resolution is unsustainable – it is in fact only unsustainable on the grounds of materialistic naturalism, which he dismisses – one can only deduce that the grounds of his conclusion rest on prejudice.

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[47] *Beyond Evolution*, p. 213 (my emphasis).

[48] Ibid., p. 214.

[49] Ibid., p. 214 (my emphasis).

[50] Ibid., p. 201. Interestingly, the argument here suggests that unmerited suffering, far from making belief in an absolutely good and powerful God dubious, points to such a Being as the only satisfying solution to injustice.

Given the explanatory deficiencies of the neo-Darwinian synthesis, both as an explanation of the origin of life and biological diversity and of the human faculties of consciousness, conscience, aesthetic appreciation and spiritual awareness, one is driven to the presumption that the rejection of theism is indeed based on prejudice, even bigotry.[51] It is grounded on the hypothesis that only science can provide certified knowledge of reality and that, therefore, as theism supposes a cause that cannot be detected by means of scientific methods it has to be discounted. This is called methodological naturalism which is then used as a powerful tool to demarcate not only the limits of scientific explanation but of every kind of explanation.[52]

However, if one takes the view that the sciences seek to explain phenomena evident to human experience and that the explanations most adequate to the evidence have the best chance of being the truest, then it may be necessary to suspend an inflexible adherence to the notion of an unbroken sequence of cause and effect. Already, in the case of, for example, quantum mechanics, tectonic plates or the iron core at the centre of the earth, scientists are obliged to postulate the existence of entities intrinsically unobservable, in order to make sense of observable phenomena. They are able to do this on the basis that such entities exist, even though we cannot detect them with the use of the most sophisticated instruments. Their existence is based on retroductive reasoning, a 'tentative working back from observed effect to unobserved cause.'[53]

Such theorising has been declared inadmissible by the empiricist tradition on the grounds that every claim about the world must ultimately be certifiable by sense experience. However, unyielding empiricism is now judged to be prejudicial to the full work of science, because it unjustifiably proscribes the hypothetico-deductive method of reasoning. Science, in part, works by means of the construction of models of hidden structures which are hypothesised as the cause of observable phenomena. The model provides, then, an approximation of the phenomenon from which the explanatory power of the model derives. The hidden entities function as an essential part of the explanation. They provide a successful elucidation of experimental data over a long period of time. They prove increasingly fertile in the interpretation of further diverse material. Without them, certain features of reality would be mysterious.[54]

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[51] Examples of both of these are to be found in several places in Grayling, *What is Good?* Much of his discussion of '…an important truth, namely, that the opposing intellectual structures of religion and science are direct and utterly incompatible rivals as claimants to possession of truth about the world (p. 213)', is based on a highly selective reading of history, misinformation and error concerning the claims of Christian faith and, in general, an intellectually disreputable polemic in favour of humanism against Christian belief and practice. It is difficult to know how to conduct an intelligent debate with anyone so cavalier in presenting evidence and facts and so unwilling to engage with the best advocates of views he does not share. Often, he simply resorts to innuendo and ridicule, hardly worthy of his own high-minded advocacy of the principle of reasoned discussion about what is true and false.

[52] Argued strenuously by, among others, Michael Ruse in his celebrated article, 'Creation-Science is not Science', *Science, Technology, and Human Values*, 7/40 (1982), pp. 72–78.

[53] Leplin, *Scientific Realism*, p. 18.

To deny the validity of inference to the best explanation as a necessary method of science, one either has to emasculate the methods of science, by dismissing certain explanatory criteria a priori, or to restrict arbitrarily the application of such criteria to the realm of the observable.[55] In this sense evolutionary naturalism is anti-realist in its theoretical assumptions and materialist in its insistence that only material causes can produce material effects. When it comes to the explanation of phenomena in the world, to claim the epistemic inalienability and superiority of inference from observational data is not self-evident. It is not even a good working hypothesis, as we have shown; rather, it is an article of faith. Once this is grasped, it is possible to begin to overcome the naturalist presumption by exposing its true nature as dogma.[56]

Overcoming the moral deficit of the West – recovering an intellectually satisfying theism

The genesis of evolutionary naturalism

One plausible historical interpretation of evolutionary naturalism is that it represents an all-inclusive theory looking for supporting evidence. There are a number of reasons for suggesting this thesis. First, it acts as an entire world-view, overstepping the boundaries of legitimate scientific method to make claims that are extrinsic to science: the understanding of the human person based on the evolutionary principle of natural selection works as a *regulative principle* having a function similar to that of theism in a theological account of the world. Each operates as an axiomatic core for building theory and testing data. Each is grounded in a metaphysical vision of the world and of human beings within it. The preference for an anthropological over a theological explanation of the whole of experience has been decided prior to an analysis of empirical data.[57]

Second, the fact that it belongs to the category of metaphysical commitment explains the vehemence with which naturalists reject theism.[58] It is not because theism is an alternative to good scientific methodology – on the contrary, as we have already argued, it grounds and supports the inviolable nature of the sciences within their own methodological framework – but because it opposes the notion of the complete autonomy of human reason in a closed universe. The conflict resides in the area of ontological truth not methodology. Were theism to be true, the consequences would affect not only one's intellectual understanding of reality, but one's entire existential stance vis-à-vis the purpose, meaning and demands of life. The line of moral accountability would shift radically. Historically and culturally, there is a huge intellectual and emotional investment in discrediting the case for theism.

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[54] Ibid., pp. 17–27.

[55] Ibid., p. 175.

[56] See, Clayton, *God and Contemporary Science*, pp. 169–185.

[57] See, Richardson and Wildman, *Religion and Science*, p. 178.

[58] See, the polemical article by Barbara Forrest, aimed to counter intelligent design, ‘the most recent – and most *dangerous* – manifestation of creationism’, ‘The Wedge at Work: how Intelligent Design Creationism is wedging its way into the cultural and academic mainstream’, in Pennock, *Intelligent Design Creationism and its Critics*, pp. 5–53. If evolutionary naturalism is a correct account of reality, alternative theories will eventually wither away. It can only be

Third, as we have seen briefly (and could expand with more examples), the evolution of all species from a common ancestor by chance natural selection in the struggle for survival is a hypothetical mechanism not so much deduced from the evidence of natural forms as imposed upon them. Naturalism has to believe in a self-contained, self-propagating evolutionary development. It has nowhere else to go. It is not free not to believe in the theory. It goes a long way beyond the limited evidence that does exist for intra-species development and singularly fails to explain such fundamental matters as the birth of life from non-life.[59] As a complete scientific and existential explanation of the genesis of human life, it is simply unconvincing.

The nature of theistic belief

Theism, as an explanation of the evidence of experience, comes in many packages. I will spell out, therefore, what I take to be its most acceptable and convincing form.[60] In the first instance, theism refers to the existence of a personal, infinite and perfect being who is the creator of the universe (and of all possible universes). Second, it assumes that the creation is contingent upon the desire and will of God; it does not exist by necessity. Third, it holds that God continues to sustain the mechanisms of the universe, until such time that he decides otherwise. Fourth, it states that God interacts with material existence in such a way that, on some occasions, for very specific purposes 'normal physical regularities are modified by a more overt influence of the underlying spiritual basis of all things'.[61] Fifth, theism is not only compatible with best scientific method and practice but is its necessary explanatory grounding. This means that science is the normal means of understanding the intricacies of the physical world. In special cases, however, where a scientific explanation of particular phenomena is

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dangerous, therefore, on the grounds that it challenges a secular, humanist orthodoxy and contributes to a plausible case for the truth of theism.

[59] It is impossible within the scope of this book to enter into the debate about how, for example, hundreds of amino-acids, necessary for the first proteins, themselves essential for living organisms, came to be arranged in unique, non-random, meaningful sequences. The implausibility, if not the near statistical impossibility of this happening by chance, is argued in detail in Broom, *How Blind is the Watchmaker?* pp. 61–108.

[60] My understanding of theism falls within mainstream, orthodox Christian belief as set out, for example, in Ward, *God, Chance and Necessity*, pp. 58–60, 96ff; Stephen T. Davis, *God, Reason and Theistic Proofs* (Grand Rapids, 1997), passim; Paul Copan and Paul K. Moser, *The Rationality of Theism* (London, 2003), passim.

[61] Ward, *God, Chance and Necessity*, p. 83.

intrinsically unattainable, it is necessary to see the presence of God in a singular and exceptional way. Sixth, theism rejects any 'God-of-the-gaps' explanation, whereby God is cited as a theoretical hypothesis to explain lacunae in scientific knowledge. Rather, God is the foundational source and clarification of all events in the universe, without whom nothing finally makes sense. He is the means of integrating all forms of knowledge, however acquired. For this reason, by definition, there can never be a conflict between the truth of God and the truths discovered through rational and experimental means. Seventh, theism is not committed to a particular interpretation of the Biblical account of creation, beyond the fact that all that exists comes into being by the divine will and, in its intention, is good, fruitful and beautiful. This means that theism is perfectly compatible with certain assumptions of evolution, for example, an ancient earth and the diversification of species. It is consonant, up to a point, with a theory of common ancestry. However, it is improbably consistent with the idea of one single, originating life form. It is clearly irreconcilable with a closed-order account of natural processes.[62] This implies that a theistic account of evolution is a credible theological option.[63] Special creation is also an option.

Theism as the necessary grounding for morality

After what might seem like a long digression from the main discussion of an adequate rationale for the justification of moral discourse given in the true meaning of human existence, we return to the subject in order to show that 'inference to the best explanation' also works in the case of moral reasoning. We have attempted to show how the rejection of theism has led to a situation where moral reasoning is caught between arbitrary moral injunctions and relativism and how theories of human rights have attempted to resolve the hiatus. We have also argued that the idea of human rights, within a non-theistic framework, is incapable of bridging the gap, because it is based on an incomplete understanding of human nature. The reason why it is incomplete is because of the widely accepted thesis that human beings are descended, without interruption, from other creatures of increasingly diminishing complexity and without any sense of moral values as such.

The challenge to a theistic-based morality

Having made these points, there is no easy route from the inadequacy of one set of theories to the greater plausibility of another. Theism as a warranted basis for the integration of moral theory and action is thoroughly contested. The traditional way of grounding moral reasoning on a theistic basis is by means of a divine command ethic. The standard of right or wrong is constituted by whatever God commands or prohibits. To know the meaning and content of goodness and evil is to know God's will. God has both created all that is and has instituted irrevocable moral laws for human beings to live by. These moral laws function in a similar way to the laws of the natural world in the sense that they are written into the way the world and humanity work, and they may be discovered through reflection and experimentation:

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[62] See, Alvin Plantinga, 'When Faith and Reason Clash', pp. 126ff.

[63] Philip Clayton, 'Natural Law and Divine Action: The Search for an Expanded Theory of Causation', *Zygon*, 39/3, September 2004, gives a sophisticated account of divine action within the process of evolution. He suggests that such features of modern scientific theory as entanglement phenomena in quantum mechanics, mental causes in psychology, information theory in determining the structure of DNA and epigenesis in biology suggest a much more open system of causation than that envisaged in Newtonian physics. Thus, a more complete picture of the emergence of mind, consciousness, aesthetic appreciation and moral sensibility requires the activity of formal and final causes alongside the efficient causes traced by strictly scientific means. Naturalistic explanations are, and always will be, insufficient to do the job.

> While generalisations are dangerous, it seems that 'righteousness' can be thought of as ethical conformity to the world-ordering established by God, while 'truth' can be considered its metaphysical counterpart.[64]

Also, traditionally, the idea that the notions of right and wrong can be beholden fundamentally to the will of God has been challenged as incoherent. Plato long ago posed the seemingly irresolvable dilemma of deciding which comes first 'the good' or God's will: is the 'good' defined wholly by what God wills, or does God will only that which is good because it is good. In the first case, God, being absolutely sovereign and accountable only to himself, could will what most people would consider to be immoral acts, such as cruel punishments. In such an event, morality would be defined by the quite arbitrary acts of an unpredictable divine being. In the second case, 'the good' is made independent of God, becoming a kind of free-floating absolute. The logical outcome of the dilemma is that either we have no real theory of morality at all, for there is no reason for doing the good and avoiding evil beyond unquestioning obedience, or we have a theory of morality that has little to do with God:

> Reasonable people might be excused for thinking that, since the one theory of religious morality gives God everything to do with what turns out not to be morality, while the other theory preserves the essence of morality at the cost of giving God a walk-on part that could easily be written out of the play, religious morality has been shown to be, at best, not worth any further serious thought.[65]

The divine command theory is susceptible to a 'projectionist' interpretation that argues that basing moral action on the commands of God is to prolong into adulthood a child's concept of right and wrong as that which is dictated by her parents. To lean on an external code for the whole of one's life is to commit the sin of failing to grow into adult maturity.

Patrick Nowell-Smith outlines three characteristics of this form of morality – *deontology*, *heteronomy* and *realism* – 'necessary in the development of a child, but not proper to an adult'.[66] *Deontology* marks the attitude that obedience, or disobedience, to the will of God is the fundamental measure of right and wrong.

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[64] McGrath, *The Foundations of Dialogue*, p. 42.

[65] Norman Kretzmann, 'Abraham, Isaac and Euthyphro: God and the Basis of Morality', in Eleonore Stump and Michael Murray (eds), *Philosophy of Religion: The Big Questions* (Oxford, 1999), p. 424.

[66] 'Morality: Religious and Secular', in ibid., pp. 408–410.

We learn, as children, to act acceptably, because not to do so incurs the judgement of our parents, or other adults. *Heteronomy* indicates an unquestioning trust in and surrender to the will of the Almighty, because he is almighty. Even if a course of action might appear, on other grounds, to be morally dubious, we are, like a child learning the meaning of parental discipline, to accept the indisputable ordinance of God. Right and wrong are defined by what God rewards and punishes me for doing or thinking. *Realism* expresses a frame of mind in which the main objective of fulfilling the good is to grow in the grace and favour of God: loving one's neighbour has little merit in itself, it is the means to the end of loving (and being loved) by God. All that is really important is to prepare one's soul for the life of eternity by ensuring that one is (as far as one knows) in 'a state of grace'.

Nowell-Smith sums up his critique of any form of a divine command ethic by making one negative and one positive statement. Negatively, it is imperative that we renounce a way of life built on submission to the dictates of others (or an Other), turning our back on dependence and learning to take responsibility for ourselves. Positively, each moral agent has to decide 'what life is most satisfactory to me as a whole?' On the base of that choice, we define what we ought to do by specifying a set of habits by which we intend to live. Morality is a matter of establishing an order of priorities among many different desires and regulating our dealings with others, through moral rules and codes of law, so that there might be the maximum of cooperation and the minimum of conflict in relation to other moral agents.[67]

Kai Nielsen summarises a fairly typical 'secularist' attitude to the justification of moral reasoning without God by seeking to ground it in a supposed empirical investigation of what human beings most deeply desire for themselves and others.[68] His starting point is happiness. He then notes a number of elements that constitute it: the enjoyment of simple pleasures, the avoidance of pain, the multiple needs of security, emotional peace, human love and companionship, creative employment or meaningful work, art, music and dance, travel and conversation and, finally, the challenge of diminishing the sum total of misery in the world. Such pursuits are enough to give meaning to life. To the argument that he is seeking to derive morality from observation – an 'ought' from an 'is' – Nielsen replies that it is self-evident that happiness is good. In the last analysis, we simply have to decide that this is a legitimate and plausible way of looking at life. He argues that a theist is in a similar position, for she also has to assume that happiness (as the basis for choosing the right and the good) is best achieved by obeying what God commands – a statement which appears to be factual in form – and has to make her existential decision on this basis.

Finally, against the superior claims made for a theistic account of morality, it can be argued that in reality non-theists are able to achieve a level of moral reasoning and practice usually as compelling as that of theists. There is not sufficient evidence to substantiate the theist's often quoted assertion that, once the reference to God has been abandoned, the standard of moral life slips. In epistemological logic, the basis for morality has to be posited as a hypothesis which then becomes the working model by which a person tries to live a consistent life of goodness and fairness towards others.

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[67] Ibid., p. 411.

[68] 'Ethics without Religion', in Michael Peterson et al. (eds), *Philosophy of Religion: Selected Readings* (Oxford, 1996), pp. 537–545.

A defense of a theistic-based morality

The question which we now pose is, first, whether the case against the theistic position has merit, and second, whether any conceivable alternative really is adequate to do the job that its proponents allege it can. We are testing the hypothesis that theism is (a) the best explanation for our human experience of obligation, (b) for the content of a moral life, (c) for the rational justification of morality – without which moral knowledge falls short of epistemic warrant – and (d) for an adequate incentive consistently to choose the good and shun the bad. In order to do this, theism must be able to give convincing reasons why its detractors are wrong and offer a satisfactory clarification of the observed fact that non-theists do indeed evince high moral aspirations.

With regard to the theistic claims, it is unfortunate that the divine command theory is often the moral scheme most often cited and disputed. The reason may be that it is the most vulnerable to the kind of argumentation that we summarised above. In fact, the reasons often given for rejecting the will of God as the foundation for morality amount to little more than a caricature of what a reflective theist, especially within the Christian tradition, would believe.[69] Obedience to the will of God is not an unthinking, childish, submission to an arbitrary set of moral absolutes for the sake of rewards and the threat of punishment. Such an approach to God may have been common-place at times within the history of Christianity. However, it does not measure up to a sufficient awareness of the tradition. In particular, it depicts a false picture of the relationship between the believer and God, for it suggests the model of the remote sovereign and the subservient vassal.

A more adequate model is very different. The Christian, on the basis of the meaning of the story of Jesus, sees her relationship to God as one of intimacy and delight. The motivation for following the will of God is gratitude and gladness, summed up perhaps in the word, joy. Doing the will of God is not experienced as an external obligation, to be fulfilled out of fear for the consequences. It is assumed as the result of finding that God's ways are in fact true and, because true, liberating and satisfying.[70]

The will of God as the source of ethical value cannot be seen as either arbitrary – God could will any moral task he proposes – or as independent of general concepts of the good and the right. The Christian theist insists that God's will springs integrally from his nature. If God is, by definition, the perfect being (more perfect than whom it would not be possible to be), he combines in faultless harmony all the virtues.

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[69] The divine command theory is the only one entertained, for example, by Grayling, *What is Good?* chapter 4. His arguments are good examples of how easy it is to set up and knock down 'straw men'. He has adopted a strategy of finding the most shameful examples of moral turpitude in the Christian tradition and then comparing them with the best examples of the humanist tradition. Is this his way of demonstrating his understanding of the good as fairness?

[70] I have endeavoured to set out the theological rationale for this state of affairs in my book, *The Meaning of Freedom*, pp. 196ff.

Christian theism has insisted consistently that the originating and sustaining power in the universe is the eternal love which has existed within the three persons of the Trinity. The universe is created as an expression of this love. When human beings rejected the perfect ways of God and chose their own destiny, bringing into the world selfishness, hatred, conflict and disruption both in nature and in interpersonal relationships, this same love created a way of deliverance. The path chosen by the Trinity entailed its own suffering. The nature of love is demonstrated in the costly sacrifice endured by God in order to overcome evil and put to right all wrong. God's intrinsic nature as love is confirmed. Love then becomes the overriding content and motivation of moral action. This love (*agape*), unlike the more familiar *eros* which is so heralded in contemporary society, is defined by God's salvific action through Jesus Christ. It measures the moral life in terms of the active promotion of the highest well-being of human beings according to the ends for which they have been created and redeemed.

Moreover, God's deciding, willing and acting are likewise united in complete agreement. Hence, the commands of God express, without any variation or inconsistency, his perfect moral attributes. If they appear to contradict his nature, then we have misunderstood either the essence of his nature or the substance and purpose of the commandments. The gist of the argument is that God *is* the definition of the virtues and that, when he acts, he always acts in accordance with his character. Hence, it would be literally impossible for *God* to command evil in any form. This can hardly be seen as a limit on his freedom and sovereignty, seeing that evil is, in itself, the contradiction of God.

This understanding of the relationship between God's intellect, will, action and nature is often referred to as the divine simplicity:

> In the light of the notion of simplicity in its bold form, God conceived of as an absolutely perfect being *is* perfect goodness itself.[71]

In other words, God is identical with his properties. There is no independent source of goodness or truth by which the being and action of God could be judged. Of course, this discussion does not settle all the disputes. There is still the question of how we may have access to knowledge of this God and how we may know that our perception of God coincides with God as he really is. We will return to these questions a little further on. Meanwhile, we still have to tackle the issue of how to recognise the content of the moral virtues.

The conundrum appears as a question about how we come to accept the detailed elements included in such notions as goodness, justice, compassion, love and righteousness. Do we simply take them on trust and refer them back to God? Or, do we possess some innate inner perception of their meaning, which we then use to judge claims made about God? I think the answer rests in a kind of reciprocity. We learn the meaning of the virtues gradually in all sorts of ways. We are dependent largely on the traditions of the society in which we live, which shape generally acceptable norms of goodness, honesty, truth-telling, respect for others, and so on. Most normal people have a fair idea of what they mean (which is not the same as saying that they are consistently practised). Thus, when they are broken, for example in cases of corruption, infidelity, cruelty and the abuse of power normal people recognise the discrepancy and protest. However, it could be that a society has disintegrated to such an extent that right and wrong are becoming hopelessly confused. In such a situation, there is an absolute norm to which appeal may be made: the nature of the one God who is. This allows a ‘prophetic distance’ to function between the generally accepted behaviour of a society and standards that transcend the conventions and consensus of a particular context.

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[71] 'Abraham, Isaac and Euthyphro', p. 426.

The relationship between the objective and subjective in discerning and acknowledging correct norms of ethical behaviour is perfectly explicable on the basis of what Christians assert about the reality of God and the world. If it is true that human beings bear the image of a God who is the very definition of ethical righteousness, one would expect them to have a deep consciousness of moral values. Such a reality would explain fully why it is that people who do not believe in God still have a vivid and, up to a point, coherent way of dealing with moral issues. They display the reality of which they are a part. On the other hand, without an assurance that the universe has its source and continuing existence in the activity of the one perfectly good, loving and righteous Supreme Being, there is no touchstone or measure for ethical judgement. Either God is the begetter of moral norms or human beings create their own.

The intrinsic problems of the latter, given an entirely naturalistic, evolutionary origin of human beings have already been explored (both in the previous chapter and in the discussion of human rights). There is no legitimate way to move coherently from an analysis of human behaviour to a sense of obligation (for example, to pursue happiness), from description to prescription. There is no way of judging whether what human beings most desire in practice is what they ought to desire. Likewise, the rational contemplation of appropriate means for reaching certain goals gives no clear direction, if we cannot tell what goals we ought to choose.

Ultimately, moral values are predicated on what human beings are in relation to the universe and on the inclusive reason for which they exist. If these are unknown, then how they ought to behave is also unknown. People may make inspired guesses, follow conventions and traditions or simply decide on their own account to create their own meaning. In such cases, on a Christian view of reality, they may sometimes get it right. However, to the extent that the habit of life, founded on the memory of a theistic understanding of the universe, declines they will more often get it wrong, for they will only have their own impaired moral compass to guide them. Inevitably, at some point, they will be forced to deny their own basic presuppositions about the nature of reality and live as if the theistic account is the true one. It may be for this reason that some fully secular people recognise the strength of the argument that a secular rationale for treating people fairly and with respect surreptitiously draws on Christian inspiration and, at crucial points, is parasitical on a God-centred morality.[72]

Recognising the living and true God

We come finally in this section to a consideration of how the will of God is communicated and heard. Throughout the previous discussion we have claimed from many different angles that Christian theism is coherent and gives the most satisfactory explanation of why we experience reality as we do. If God truly exists, by definition he must be the most perfect being possible. To the contrary he would be either a defective or malicious spirit. Included within his perfection would be the desire to become involved with the world he has created. Part of this involvement would be to communicate with the one creature able to establish reciprocal relations of trust, support and care. Communication, at the least, comes through the dual ability to speak and to hear.[73]

Thus, if God exists, one would expect God to take the initiative in making himself known. A rather inadequate analogy might be the desire of the caring, friendly, open and approachable person to her new neighbour. Her immediate, spontaneous gesture would be to call, introduce herself, invite the neighbours to meet other neighbours and offer to help them settle themselves into their new surroundings. Even if rebuffed, she would still try with the next new neighbours who came to live close to them. How much more this is true of God, if he is God! One would be totally surprised if God did not take the initiative to call round, as it were. This is precisely what theists claim has happened and that the substance of what he wished to say has been recorded in writing (so that all future generations would have equal access to it). Even more, God has not only spoken, but has actually come to be with his creatures. In terms of our analogy, he has not just rung up the neighbours, but visited them in person. So, we have the opportunity not only to hear a distant voice but to meet personally the owner of the voice.

Those disinclined to accept the claims of the Christian theist will at once point to a number of well-rehearsed quandaries, for example: (a) people of other religions claim that God has spoken to them, often in quite divergent ways; (b) Christians are often in dispute among themselves about what God has communicated; (c) what is claimed to be communication from God comes in human language and thought-forms and is subject to the vagaries of human transmission, and (d) it may well be the result of human rather than divine musings.

In the first case, whatever the differences, the principle of God's explicit and comprehensible communication has been conceded, at least for the monotheistic religions. The Christian makes the further claim that God has visited this world in person. If this is so, and the evidence needs to be judged fairly, there is a greater immediacy and directness about the words alleged to have been spoken on this occasion. In the second case, Christians, at least at the level of their respective ecclesiastical traditions, recognise that there are solid criteria for judging the adequacy, or otherwise, of what one purports to have heard and seen. In the third case, it has to be the case that God, if he wishes to communicate to human beings, has to avail himself of ordinary language. Although there may be legitimate disputes about the exact reference of some words and phrases, and although there are some irresolvable problems about recuperating portions of the original text, in neither case is the overall meaning of the message compromised. In the fourth case, a Christian might have to respond by saying that there is no final refutation of a sceptic who wishes to maintain the thesis of Ludwig Feuerbach that all theology is no more than anthropology, i.e. that human beings have projected their very own desires, longings and inadequacies on to an idealised, superhuman Being created in their image.

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[72] C.f., 'Ethics without Religion', pp. 542–543.

[73] As far as I know, the fullest discussion of the philosophical issues implied in the Christian understanding of revelation occurs in Wolterstorff, *Divine Discourse*, passim; c.f. also, Trigg, *Rationality and Religion*, pp. 209–214.

Nevertheless, it so happens that what is claimed by Christians as God's self-communication is, in many respects, the opposite of what humanity has generally believed about religion.[74] Such a unique performance seems to offer, at the least, a potent counterbalance to the projection thesis.[75] Also, this particular communication actually gives a comprehensive explanation for experience that actually does justice to the most exacting intellectual and existential demands. These would be curious facts, if the revelation were purely the creation of human beings. At the least, one would have to concede that the writers of the texts purporting to be revelation were unparalleled geniuses, creating quite incomparable statements about divine and human realities.

Then, there is the witness of history. Although the records of the life of Jesus of Nazareth are battlefields of contrasting claims, the fact of the Gospels, the early Church and the subsequent impact of the Christian community on the world have to be explained. By any account, the story of Jesus is remarkable and absolutely unique. If the Christian interpretation of the significance of this story is judged not to be the correct one, then those who would dispute it have to come up with a more plausible one. Such an alternative has to abide by canons of historical investigation and eschew, as far as possible, sensationalist and highly improbable reconstructions built on unconfirmable speculation. Of course, no one is compelled to accept the official Christian view of the matter. However, if they wish to maintain some kind of intellectual integrity in the light of the extraordinary claims made they should not simply dismiss the story out of hand, unless they have examined the evidence with critical care.

The Christian theistic belief about the God who reveals himself personally in the reality of a human person in a specific historical context is important to the debate about the grounding of moral values. It puts flesh and blood on the otherwise rather stark and somewhat remote idea of peremptory commandments. In terms of our parable, the neighbour does not communicate from a distance about what is considered good neighbourly behaviour, but actually demonstrates in practice what it means to be a good neighbour. If Jesus is the visible presence of the invisible personal and infinite God, then our knowledge of God and what God requires is lifted on to a different plane of understanding.

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[74] I argue this point at length in my book, *Loosing the Chains*.

[75] It also offers evidence to counter the various theories that propose that the origin of all religions can be found in primitive drives, such as fear of the unknown and the inexplicable.

Here, and only here, is there an adequate source for integrating knowledge of the world we live in with the understanding required for right ethical action within it: knowledge of the natural order with discernment of how that knowledge should, and should not, be harnessed. Context and content can be brought together again, but only in the re-establishment, following modernity and post-modernity, of the harmony between the two books tragically lost at the beginning of the era we are accustomed to call ‘modern’. To the extent to which the concordance between the two is not recovered is the extent to which contemporary societies will fail to perceive what it means to be human.

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Chapter Eleven

Summing Up: the Story; the Enigma; the Solution

At the end of a judicial process the presiding judge sums up all the evidence that has been presented in court and then instructs the jury to review the case and come up with a verdict. The story that has been presented in these pages is relatively clear, even if complex in its details. The third millennium has dawned among the nations of the West with a major cultural dilemma still unresolved. It concerns the source or sources of knowledge about the natural world and the place of human beings within it. Is it possible to have a justified, true belief about the nature and meaning of reality and the way we experience it?

The story

Most of the early-modern scientists believed that the new incentives to explore the world of nature, which arose in the seventeenth century with the development of experimental methods and more sophisticated instruments, were God-given opportunities to consider the benefits that could accrue to human beings from a more thorough understanding of God's creation. It did not occur to the majority that there would be any major reason why the knowledge accumulated by the methods of science should conflict with or make redundant knowledge gained through studying and applying the history of God's revelation recorded in Scripture. The two books – of God's word and God's world – offered separate, but complementary, routes to all the knowledge that human beings needed to enjoy a fulfilled existence.

However, over a period of time, knowledge of the world, gained through rational endeavour and empirical research, began to be viewed as sufficient to explain the meaning of existence. Knowledge, gained through what the dominant Christian tradition of the West had hitherto regarded as the self-communication of the God who created all things, was gradually questioned. Later it was either repudiated, ignored or consigned to the private world of individual belief for those who felt the need for some kind of 'transcendent', psychological support.

The questioning had both an epistemological and social dimension. First, knowledge through revelation was considered to be, at best, inferior and, at worst, dubious in comparison with the certainties derivable from systematic rational processes and empirical investigation. The claims of revelation could not be justified as true statements, either in the nature of the case or on the basis of experimental corroboration, by any methods which could command universal assent. Whatever evidence was adduced for believing that the book of God's word contained useful information about reality had to be confirmed by the light of reason and the knowledge being accumulated through discovery of the book of the world. An increasing number of people, from the beginning of the eighteenth century onwards, became sceptical about the plausibility of the claims of revelation.

Second, the putative truths of revelation were said to have social consequences inimical to a full flourishing of human life. The European nations were divided along the sectarian lines of Catholic and Protestant confessions. This resulted in (avoidable) military conflicts. In most countries, the national Church was deeply hostile to the basic freedom of an independent conscience in matters of religious belief. As a result, many who refused to conform to the state religion lost the benefits of citizenship. In general, a growing number of educated people considered that the institution that claimed a special authority in the affairs of state on the basis of revelation was a major hindrance to both academic and political liberties. In their opinion, the authority of the individual's conscience guided by a free rational faculty should be allowed increasingly to determine acceptable social behaviour. The individual's rights should be protected against the interference of the state, acting on behalf of the institutional Church.

The final nail in the coffin for theistic belief seemed to be the remarkable explanation given by Charles Darwin for the origin of life and the diversification of species. Building on the materialist explanations of the cosmos put forward by the eighteenth-century encyclopaedists, Darwin first assumed and then elaborated on a mechanism of evolving life that was self-generating. There was no longer any need, apparently, for the hypothesis of God. Another perfectly plausible explication of the seeming evidence for design and purpose in the functioning of nature was now available: the gradual adaptation of living organisms and beings to their environment through a long process of small mutations.[1] The engine for natural selection was survival. This explanation was to be preferred as one that both had good scientific credentials and fulfilled the methodological criterion of Occam's razor, i.e. of not multiplying unnecessary hypotheses. From henceforth, for a number of people, atheism became intellectually both acceptable and satisfying.[2]

In the heady atmosphere of freedom from the constraints of unverifiable beliefs and intolerably unprogressive institutions, the considerable difficulties with attempting to establish genuine knowledge apart from reliance on theistic belief were either not recognised or not acknowledged. Only towards the end of the final century of the second millennium did the inherent contradictions of the rationalist undertaking of the modern project become apparent. The chickens of the long tradition of human autonomy, begun in the Renaissance, came home to roost. When humanity starts from itself in a universe closed to any possible external influence it has no grounds for making some of the most basic assumptions necessary for knowledge to be possible: that there is a fundamental distinction between an external reality and an internal perception of it; that the universe is intelligible to the human mind; that there are legitimate and illegitimate ways of reasoning; that the scientific enterprise has an intrinsic value; that the universe operates in stable, consistent and predictable ways; that there are inherent moral values binding on all people, irrespective of history and culture; that there is an overall meaning to being human and purpose for being alive.

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[1] For a full account of the controversy unleashed by Darwin's theory of evolution, see Alister McGrath, *The Twilight of Atheism: The Rise and Fall of Disbelief in the Modern World* (London, 2004), chapter 4.

[2] Indeed, apologists for atheism, like Richard Dawkins, eloquently and uncompromisingly argue that, given the 'blind, pitiless indifference' of the natural world, theism is simply an irrelevance; c.f., *River Out of Eden: A Darwinian View of Life* (New York, 1995), chapter 4. However, having acknowledged that human consciousness is imbued with an insatiable curiosity about the purpose of things, he has no explanation for this state of affairs. All he can say is that we are mistaken to have this inquisitive attitude, for many questions about purpose are inappropriate. This is hardly a satisfactory or satisfying conclusion. To say that there is no explanation is not an explanation: we still need to give an account of why the question remains so insistent. For a full discussion of Dawkins's views from a theistic standpoint, see, Alister McGrath, *Dawkins's God.*

The early scientists would, I think, have been most perplexed, had they been able to foresee a future in which many of their successors would have thought it either necessary or worth-while to trade the very foundations that make knowledge intelligible for a narrow, putative certainty about facts of the natural order and a complete freedom for beliefs of any other brand. They would have been inclined to view freedom as an inevitable balance between recognising a reality given in a particular form and exploring openly the immense variety of components and opportunities deposited within that reality. Adherence to the truth of God's word was not only not inimical to discovering the truth of the (God's) world it was a necessary supposition.[3]

When the massive cracks began to appear in the intellectual edifice erected by the modern project, the scholarly and erudite strata of Western societies did not do the intelligent thing, retrace the steps that had wandered away from the promising synthesis of reality, faith and reason to see how knowledge could once again be reintegrated into an intellectually satisfying and purposeful unity. Instead, many of them exacerbated the dichotomy by appealing to the confused notion of temporally and contextually relative truths. If modernity had sought to emphasise the objective, universal, impartial and neutral nature of knowledge, post-modernity responded by calling attention to its subjective, local, prejudiced and revisable characteristics. On the one hand, immense claims were made for a rather limited field of understanding. On the other hand, considerable doubts were being expressed about the possibility of coming to any sure understanding at all.

In reality, both modernity and post-modernity, in making human experience in a closed system of material cause and effect the measure of what can be known, come close to some form of solipsism. The problem is to bridge the gap between individual perceptions and interpretations of objects and events and an external reality that exists independently of thought about it. The difficulty is compounded by epistemological uncertainty about the content of other people's minds: might it not be that everyone sees things (phenomena, ideas) in quite distinct ways. I cannot be sure that there is correspondence between my outlook and that of others. Once such doubts begin to raise their head, even inter-subjective agreement, let alone confidence in the accessibility of a truth that has the power to make us change our perceptions, becomes dubious and indeterminate.[4] Vacillation, mistrust and suspicion, if not deep scepticism, would seem to be a logical conclusion. This appears to be the price of an intellectual freedom that will not concede any constraints on the enterprise of reasoning.

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[3] The arguments are set out in chapter 2.

Needless to say, real scepticism rarely follows. In order to be able to conduct normal, daily business, we have, at the least, to suspend our doubt-inducing epistemological theories. This is most obvious in the area of moral judgement. As a matter of fact, in practice, every human being holds to some notion of moral absolutes. In the context of drawing boundaries between what is permissible and what can never be legitimate, human beings, whatever their epistemological theories, demonstrate a robust realism and hold on to the notion of a truth that exists externally to their individual feelings and desires. It would be legitimate to conclude that, in having to make assumptions which their theoretical beliefs do not allow, they are cheating normal rational argument. As a necessary strategy to live by, many have to make moral assertions for which they do not have proper warrant.

A good example of this dilemma comes in the arguments advanced by John Mackie.[5] He discusses a number of basic premises. First, there are no objective moral values. By objective he means ‘part of the fabric of the world’.[6] It is true, nevertheless, that moral judgements appear to be objective that is they purport to be propositions about life, capable of being true or being false. Second, their objectivity has mainly (but by no means only) been founded on the belief in an absolutely good divine being who governs the universe according to his perfect will. Third, as no such being exists (Mackie was an avowed atheist), one of the main arguments for objective morality is removed:

> The objectivist may have recourse to the purposes of God…I concede that if the requisite theological doctrine could be defended, a kind of objective ethical prescriptivity could be thus introduced. Since I think that theism cannot be defended, I do not regard this as any threat to my argument.[7]

Fourth, then, he argues for an ‘error’ theory of morals:

> although most people in making moral judgements implicitly claim, among other things, to be pointing to something objectively prescriptive, these claims are all false.[8]

If there were moral facts, they would by their very nature be prescriptive. However, such an intrinsic prescriptive quality is incompatible with a naturalistic view of the world. Here he introduces his argument from queerness:

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[4] See, the discussion in Roger Trigg, *Reality at Risk: A Defence of Realism in Philosophy and the Sciences* (London, 1989/2), pp. 21ff.

[5] J.L. Mackie, *Ethics: Inventing Right and Wrong* (Harmondsworth, 1977).

[6] Ibid., p. 15.

[7] Ibid., p. 48.

[8] Ibid., p. 35.

> If there were objective values, then they would be entities or qualities or relations of a very strange sort, utterly different from anything else in the universe. Correspondingly, if we were aware of them, it would have to be by some special faculty of moral perception or intuition, utterly different from our ordinary ways of knowing everything else.[9]

It is also inconsistent with a view of morality that emphasises contingency, personal motivation, choice and desire. Therefore, fifth, moral values are dependent on collective human choice:

> morality is not to be discovered but to be made: we have to decide what moral views to adopt.[10]

They are ultimately no more than attitudes and policies with regard to conduct that people happen to find useful in a particular society at a particular time. Nevertheless, sixth, it so happens that most people have internalised moral judgements in such a way that they appear to have the force of categorical imperatives. In other words, morality works because of human beings overwhelming propensity to believe in absolute right and wrong, good and evil.[11] This does not unduly concern Mackie, as he argues for a strict distinction between first and second order views of morality. He is not rejecting moral judgements as such. He is a moral sceptic only in relation to the first order proposition that, to be valid, moral values have to be objective. Even without objectivity, there are good grounds, he believes, for moral concern and action.

This view appears to be akin to a conventionalist account of the moral life whereby people implicitly agree to live together in society on the basis of a series of rights and obligations, in order to keep ‘active malevolence’ and ‘selfish ends’ in check. From early childhood people are educated into a set of moral disciplines that a particular society imposes as proper, expected and propitious for the well-being of the whole community. It would appear, in other words, that human life works to its optimum, when people can be persuaded to believe that ethical norms are built into the warp and woof of the natural order.

The problem with this account of ethics is threefold. First, a general realisation that there is nothing intrinsically right or wrong about behaviour is likely to produce an unstable society. Once people see through the deception that there is no truth in the supposed truth of absolute standards they are likely to question the legitimacy of all forms of morality. If they can no longer be persuaded to go along with the myth, they may have to be compelled to believe. Morality then becomes arbitrary, what society as a whole is prepared to condemn, accept or tolerate. Second, the nature of rights and obligations, as it has no ontological backing, is likely to be decided by the play of power. Morality will be decided by an intricate interaction between so-called progressive and traditional forces, not necessarily in the direction of what is good and right, but what is agreeable to the majority. Third, as a matter of fact, morality has been based on the firm conviction that the idea and content of the good is entirely independent of the propensity of human beings to make morality fit their desires and goals in life.

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[9] Ibid., p. 38.

[10] Ibid., p. 106.

[11] See, pp. 42–43.

Mackie is incorrect in his statement that for values to be objective they would have to be entirely different from anything else in the universe. On what grounds is moral realism different in kind from scientific or theistic realism? Each, in its own sphere of knowledge, states that there are entities that exist independently of any perception, belief or desire that we might have about them.[12] Certainly moral facts are, by definition, prescriptive. So too are prudential ones: for example, if we are aware that the snake in front of us is deadly poisonous, we tell ourselves not to pick it up. Thus he is also wrong in making the sweeping statement that consciousness of such objective values could only come through perceptions or intuitions completely different from the means we use to know anything else. The two claims that together constitute his 'argument from queerness' seem to reflect a narrow positivist interpretation of human experience.

So, I am arguing that Mackie's refusal to entertain an objective moral order, his view that a second order defence of moral values is nevertheless self-validating, his belief that the purpose of morality is to solve the problem of conflict and the absence of beneficial cooperation – 'the basic general structure of the human predicament, and this does not change'[13] – adds up to a meagre and inadequate groundwork for serious ethical reflection and action. His stance illustrates once again the paucity of intellectual resources open to those who dismiss the belief that we live in a theistically-shaped universe.

The enigma

This is a summary of the story so far. The clash between modern and post-modern ways of looking at the world continues into the third millennium, although other cultural forces are also on the ascendancy.[14] The enigma is that normally intelligent people would, on a massive scale, be willing to sacrifice the possibility of a consistent and unified explanation of the whole of life for an intellectual autonomy which allows the reasoning subject independence from an intrinsic reality to invent her own.

The enigma is deepened by the observation that, as matter of fact, scientific exploration and experimentation is dependent on the supposition that the material world is a given: in its regular workings, demonstrable in reliable laws, the scientist has a fixed point of reference in which she can have absolute confidence. To suppose that we are free to construct a natural world how we might like it to be would completely confound scientific research. Belief is constrained by the givenness of our environment. It is, therefore, a huge mistake to pit freedom against order. Freedom is only possible within order. However, in the case of moral, social and cultural norms, there is plenty of room (freedom) to debate which ‘order’ is true. Without such a point of reference for other aspects of life, human existence is, in the grand scheme of things, quite meaningless.

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[12] For a general discussion of theistic realism, see Peter Byrne, *God and Realism* (Aldershot, 2003).

[13] Mackie, *Ethics*, pp. 122–123.

[14] One account of the poly-centred nature of dominant, living cultures is given in Samuel Huntington's celebrated and controversial book, *The Clash of Civilizations and the Remaking of the World Order* (London, 1998). Part of his thesis is that the hitherto ascendent culture of the West is declining across the globe. It will be fascinating, though unpredictable, to see how the apparently increasing hostility between religious and secular interpretations of reality are played out in the future.

Attempting to avoid the dichotomy between the pursuit of material facts and intangible values by investing life with our own meaning (or borrowing it ‘off the peg’ from someone else) does not work. Although one may deny that there is any given meaning to human aspirations and desires, sooner or later, one will ‘bump into’ reality unexpectedly. Many contemporary Western people are, apparently, prepared to run the risk. They have calculated that autonomy is a good which outweighs the harm caused by the conflict between their beliefs and reality. Such a choice will probably be rationalised by reference to the unacceptable consequences which have often accompanied commitment to theism. Many have testified to the sense of personal liberation which abandoning belief in God has brought them. However, if the matter is considered carefully, as we have tried to demonstrate in this study, the cost of autonomy is great. Most muddle through life, unaware perhaps of the inconsistencies that exist between their beliefs and way of life, somehow adjusting choices to the exigencies of their context. It is an enigma, nevertheless, how any thoughtful person can experience human autonomy as intellectually (or, for that matter, emotionally) satisfying.

Another option is not only possible, but intellectually and existentially compelling. The theistic explanation of life gives a fully comprehensive framework for acquiring the whole range of knowledge that will ever concern humans. Of course, the fact that it does provide such a framework does not automatically make it true. It is still possible that life is, in reality, completely meaningless, but that, in order to cope with the *angst* that such a state of affairs would engender, human beings create a theory which aims to rescue existence from incomprehensibility and pointlessness. No doubt, one or another projection theory will remain part of the armoury of theistic detractors until the end of time. However, one of the problems with them is that they do not do justice to theistic belief. For this reason, they are inadequate in explaining this belief. They fall a long way short of being a good explanation, let alone the best.

The solution

My hope is that this study will have produced sufficient evidence and reasons for establishing the thesis that the contemporary Western world does not have to choose between the assumptions of the modern project and those associated with post-modernity, or try to live on the basis of a trade-off between the two. The theistic option is rationally available. It does not require one to commit any kind of epistemological self-immolation. In fact, the West has a marvellous opportunity to recover a lost heritage, whose abandonment is in danger of contributing to an increasingly destructive moral and intellectual confusion.

However, theism[15] has to be taken on its own terms. It would be no solution to attempt to reinterpret theism within the parameters of either modernity or post-modernity.[16] The theistic case rests on certain non-negotiable assumptions. The first is that the divine creator of all acts within his creation: that which is non-material can determine events within the material. Divine causality, and therefore an open universe, is assumed. This has to be the case, if one is to propose an alternative to the naturalistic story of the uninterrupted evolution of inanimate matter into animate. Theism does not stipulate a detailed account of the mechanisms God uses to interact with his world. It does, however, draw a distinction between his ordinary and extraordinary activity. The former is encompassed by upholding the normal workings of the natural order, so that the regular order of nature's structures and procedures remain in place. The latter occurs as exceptional actions, when it is necessary to accomplish a result not possible by the usual mechanisms. In theological parlance, these events have been called miracles. They are usually associated with God's will to restore humanity to its full and effective working in communion with himself: in other words, events in the history of salvation.

Theism assumes this ability of God to take the initiative, so that the closed circle of human experience reflecting upon itself can be broken into. It is crucial to theism that God is not the creation of faith, in the sense of being the object of human aspirations, needs or mental processes. Rather it is God's speaking and acting within the material world, human history and human lives that create faith. God's independent existence as a self-sustaining, self-explanatory being is the premise of any true knowledge that we may have of him. His relation to the universe presupposes his ability to cause human beings to know him through listening to his word and seeing him in action.

For some people this portrayal of theism is enough to make the whole thesis inadmissible. For them there would be a fundamental contradiction between the word and the world of God, just because the world does not admit any irregularities to breach the uniform, unvarying processes of the natural world. The advocate of theism, therefore, has to be able to give a compelling account of God's extraordinary activity in the world. She might begin by pointing out that the most celebrated argument against miracles (that of David Hume) appears to be circular in character. He assumes that a miracle is the equivalent of an event that has never been observed in any age or country.[17] His argument is that there could not be, in principle, any evidence available that should be sufficient to persuade us that a miracle has occurred. However, this is to beg the question. It is not good reasoning to rule evidence out of court before it has been examined.

He then goes on to his second main point:

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[15] As set out in chapter 10, see pp. 206–207, 210–215.

[16] As a number of individual theologians and philosophers of religion have attempted: for example, Mark C. Taylor, *Erring: A Postmodern A/Theology* (Chicago, 1984); G. Kaufman, *In Face of Mystery* (Cambridge, MA, 1993); D.Z. Phillips, *Wittgenstein and Religion* (London, 1993); William Drees, *Religion, Science and Naturalism* (Cambridge, 1995); John Hick, *The Fifth Dimension: An Exploration of the Spiritual Realm* (Oxford, 1999).

[17] 'On Miracles', in *An Enquiry concerning Human Understanding* (Tom. L. Beauchamp, ed.) (Oxford, 1999), p. 172.

> A miracle is a violation of the laws of nature; and as a form and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined.[18]

This assertion also assumes what the argument is supposed to demonstrate. It is, therefore, as dogmatic as the claim that a miracle has taken place, whatever the evidence may be. The whole discussion ought to be on the basis of a thorough investigation of whatever purports to be a miracle, i.e. it ought to be conducted on the basis of empirical evidence, not on the basis of a priori metaphysical commitments. Although, to ensure the integrity of scientific methodology, the burden of proof may well be on the witness to a miraculous event, the proof cannot be dismissed out of hand prior to its being assessed. The notion of uniformity has to be assumed, but it cannot be made to exclude, whatever the evidence, some counter-instances. Otherwise, uniform experience becomes the experience of only those who have discounted the possibility of miracles. We could only know that the experience against miracles is uniform, if we already knew that all reports of them are false – that, however, amounts to special pleading.[19]

Of course, it is imperative that a miracle is carefully defined to distinguish it from what has not, on current scientific theories, been explained. Otherwise, we are trapped within the God-of-the-gaps dilemma. Most theists approach the subject from two different points of view. First, taking seriously the integrity of scientific method, they wish to defend the propriety of scientists being obliged to trace natural causes for events in the world. This is the normal work of science, based on the supposition that in general there is a causal closure of mechanisms working in the natural order and these can be described in terms of regular laws. It is important for theists to defend the cohesion of science, because they wish to encourage the inquisitive and reflective exploration of the whole of material existence. Second, however, experience points to the fact that not every event or phenomenon can be encompassed within a more or less deterministic framework. The notion of scientific law is more open today than in the past:

> It is very clear from the science of unpredictability in non-linear dynamic systems (including the human brain) that it is inconceivable that the behaviour of a real-life system involving human beings could be the subject of a totally comprehensive scientific explanation.[20]

What is required is a theory which allows different types of explanation to operate freely at different levels of reality. Each description is complete at its own level, with no gaps at that level for other perspectives to fill. The natural sciences are marvellously competent at the level of their capacity. They cannot, however, do all the work of explanation. To attempt a total explanation produces the fallacy of scientism, for example in the attempt to reduce the non-material human mind to neuronal events in the brain. As has been cogently pointed out, the resulting behaviourism commits a number of fallacies in the processes of reasoning.[21]

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[18] Ibid., p. 173.

[19] See, Norman Geisler, ‘Miracles and the Modern Mind’, in R. Douglas Geivett and Gary R. Habermas, *In Defence of Miracles: A Comprehensive Case for God’s Action in History* (Leicester, 1997), pp. 77–78.

[20] See, Southgate, *God, Humanity and the Cosmos*, p. 264.

The claim that miracles (as God's extra-ordinary activity in the cosmos) occur is an affirmation that there are events in the natural world that can be investigated using the tools of science, but whose explanation will be found to transcend an explanation in purely scientific terms. To do justice to the event in question requires other sources of elucidation. In an open system of inference to the best explanation, a wider view of causality is required. Scientists, who are also theists, are working with ideas like top-down causality as a theoretical instrument to account for events so improbable that a comprehensive explanation necessitates the input of an intelligent, outside agency. Miracles are only an embarrassment to those who wish to save metaphysical naturalism at all costs. This, however, can lead to a kind of 'science-of-the-gaps' whereby explanation is always postponed in the hope that some day some naturalistic theory might emerge to account for the phenomenon.[22] There is a sense in which, contrary to the usual argument, theism becomes the most parsimonious explanation both of ordinary and extraordinary events, whilst naturalism has to resort to ad hoc conjectures to try to save its dogmatism.

It has often been argued that the traditional theistic 'proofs' are no longer tenable. Not all agree.[23] However, even supposing that the ontological, cosmological and teleological arguments are defective in terms of what they are supposed to achieve, namely to make non-belief in a supreme being rationally incomprehensible, this does not exhaust the ability of theism to advance a cogent case for acceptance. As one might expect, in this anthropological age, attention has been turned to a consideration of ordinary human experience as the channel for reconsidering the cogency of theistic belief. Here, as we have argued at some length, we have a perfectly plausible explanation for the normal experience of reality: for example, the accurate fit between human mental processes and the processes of the natural world; the fact that we cannot do without the notion of truth as correspondence; the intuition of moral absolutes; the meaningfulness of aesthetic appreciation; human consciousness and emotions; imagination and creativity, and the unbridgeable gulf fixed between human beings on the one hand and animals and the most sophisticated machines possible on the other.

The theist does not employ the language of 'proof', any more than it is normally used in the scientific world today. She rests her case on three complementary lines of reasoning: (a) theism is the best explanation for all our present and conceivable future knowledge; (b) alternative explanations just fail to explain the same amount of data, and (c) even those who reject theism have to live at crucial points in their lives, as if theism were true. Probably, in epistemological terms, the methodological approach which leads to theism as the best explanation acts as a moderate foundationalism. The foundation is that the existence of the God revealed in the natural world, in

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[21] See, Trigg, *Philosophy Matters*, pp. 79–82, 115–122.

[22] See, Francis J. Beckwith, 'Theism, Miracles and the Modern Mind', in *God, Reason and Theistic Proofs*, pp. 221–236.

[23] See, the compelling discussions in Davis, *God, Reason and Theistic Proofs, passim*.

Jesus Christ (God's word made a human being) and in the testimony of Christ's first disciples to the meaning of his life affords the best possible explanation for the whole of reality as we experience it.[24] It is foundational in the sense that it is basic and, as a premise, does not need further beliefs to justify it. At the same time, it is corrigible, in that it is open to challenge, revision and even refutation, does not claim to be immediately self-evident or immune from the need to provide reasons in open debate.

The method is, moreover, both faith-explicit and yet not enclosed in its own web of tradition.[25] Very specifically, it claims to be commensurable with other possible hypotheses explanatory of some of the evidence, in that it is rationally consistent and evidentialist.[26] Therefore, in principle, there are criteria held in common for deciding between competing explanations. In the last analysis, a Christian moderate foundationalism would claim that not all alternatives are either equally consistent internally or able to give as comprehensive a clarification of reality in its widest extension.

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[24] The conclusion has to be that foundationalism, carefully defined, has not been defeated by its alleged problems. It is surprising, in the light of the vigorous defence of some form of foundationalism by leading contemporary philosophers (e.g. Audi, *The Structure of Justification* ; Chisholm, 'The Myth of the Given', in Sosa and Kim, *Epistemology: An Anthology* pp. 107–119) that some theologians can speak so confidently of living in a post-foundationalist age, for example, Murphy, *Beyond Liberalism* and J. Wentzel van Huyssteen, *Essays in Postfoundationalist Theology* (Grand Rapids, 1997). I wonder, for example, whether it has escaped their notice that the eminent philosopher, Laurence Bonjour, once a doughty critic of foundationalism and defender of coherentism, has recently switched sides. In his article, 'Can Empirical Knowledge have a Foundation?' in *American Philosophical Quarterly* 15,1 (1978), pp. 1–13 and in 'The Elements of Coherentism', in Alcoff, *Epistemology: The Big questions*, op. cit., pp. 210–231, he defends coherentism. Whilst in 'The Dialectic of Foundationalism and Coherentism', in Greco and Sosa, *The Blackwell Guide to Epistemology*, pp. 117–142, he says, 'my conclusion for the moment is twofold: (1) coherentism is pretty obviously untenable, indeed hopeless; and (2) a very traditional version of experiential foundationalism can be successfully defended against the most immediate and telling objection…', p. 139. The switch does not make foundationalism necessarily more acceptable; it does, however, show that it is still capable of being defended intellectually by notable thinkers.

[25] It is not possible to discuss here whether it is compatible with Susan Haack's 'foundherentism', see, her *Manifesto*, pp. 85–86, 143–144; Polanyi's theory of personal knowing and tacit believing or Linda Zagzebski's virtue epistemology, see, 'Virtues of the Mind', in Sosa and Kim, *Epistemology: An Anthology*, pp. 457–467. However, I suspect that what differences there are may not be crucial. It does not, however, seem to be congruent with the 'Reformed' epistemology of Plantinga, Wolterstorff, Mavrodes and others which rejects foundationalism and replaces it with an epistemology of properly warranted basic beliefs and cognitive proper functioning: 'a belief constitutes *knowledge*, if it is true, and if it arises as a result of the right use and proper functioning of our epistemic capacities', Plantinga, 'On Reformed Epistemology', in Michael Peterson, *Philosophy of Religion: Selected Readings*, p. 336, also Plantinga, 'Warrant: A First Approximation', in Sosa and Kim, *Epistemology: An Anthology*, pp. 445–456; Nicholas Wolterstorff, 'Epistemology of Religion', in Greco and Sosa, *The Blackwell Guide to Epistemology*, pp. 312–317. The link to the kind of moderate foundationalism that I am advocating is broken by Reformed epistemology in not accepting that justification is needed for knowledge to be asserted. The problem with foundationalism, according to this perspective, is that it does not allow sufficiently for the effects of sin on noetic performance. However, I believe that this case would only be compelling for an extreme interpretation of foundationalism: see the discussion of the relevant issues in Paul Helm, *Faith and Understanding* (Edinburgh, 1997), pp. 177–191.

Then, it is able to do justice epistemically to both a common-sense account of knowing and the most sophisticated scientific theories. We touch reality because it is there in ordinary, everyday experience and in the work of scientific discovery.[27] It is there, because it has been put there in the act of personal divine creation and recreation. We also know it is there because of the impossible consequences of denying its reality.

Finally it brings together belief and action in the process of establishing the truth as something not only discovered in abstract thought, but in living reality. Indeed, the final test of the truth of theism is its ability both to explain the intricacies of ordinary human activities, behaviour and conduct and to be lived consistently in practice. This is not surprising given the theistic belief that the most basic truth about human beings is that they exist in the image of God. That is why it is perfectly possible to start with human experience and conclude that theism is the best explanation for all the knowledge we have.

The Christian theist has many good reasons for affirming that the situation of fragmented knowledge that has come about in Western societies as a result of failing to pay equal attention to the two books of God has been a tragic and unnecessary incident in the cultural history of one continent. One of the main contributions that Christian faith can make, therefore, to the endless challenge of cultural renewal is the exciting prospect of being able to overcome the destructive consequences of the false epistemological dichotomy that has so marked the modern and post-modern projects. Recovering this forgotten legacy of a unified knowledge should help Western people to experience a hitherto unimagined, reinvigorated world.

However, unlike previous Christian attempts to influence society, this one has to proceed without any pretensions to capture political or social influence for the institutional expression of the faith. Moreover, it is not possible, following modernity and post-modernity, to assert beliefs with the authority of unquestioned dogma. Christians are obliged by the cultural context in which they live to advocate their views by appeal to the plausibility of the evidence they assemble, knowing they will be challenged by many other opposing interpretations. It would seem that contemporary societies are irretrievably pluralist. People, rightly, are not afraid to question all meta-narratives. Adulthood implies being fully convinced in one's own mind and taking complete responsibility for one's own decisions. That is why the kind of debate or dialogue that I have attempted in these pages has to be an integral part of the Christian community's conversation with non-Christians. The task is to make out the best case possible for considering the book of God's self-revelation to be the most convincing explanation of the book of the human experience of life.

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[26] Evidentialism is the view that a belief is justified if and only if there is sufficient evidence for it. Evidence may be interpreted widely, as would be the case in a legal judgement, coming in the form of eye-witness testimony, reliable memory, sense perception, other beliefs, supporting statements and integrity of character. The analogy with the procedures of a law-court is illuminating in that, in order to be creditable, evidence must be able to withstand rigorous cross-questioning. Sufficient evidence is that which satisfies ‘all reasonable doubt’. Evidentialism rules out any approach to knowledge that relies on the internal self-justification of beliefs, as in some forms of ‘fideism’.

[27] The combination of the two is attested by a remark, attributed to Richard Dawkins, that he did not know anyone who is not a realist flying at 10,000 metres! See, Christopher Norris, ‘But will it fly? Aerodynamics as a Test Case for Anti-Realism’, in *Against Relativism*, pp. 248ff.

In addition, the message itself constrains Christians to engage in the task of persuasion. Like the early Church in the hostile and indifferent Roman Empire, one of whose spokesmen asked the fundamental question 'What is Truth?' with cynical intent, the contemporary Christian community bears witness, in weakness and with many imperfections, to the reply of its founder and head, 'God's word is truth.'[28] The encounter between the Apostle Paul and King Agrippa[29] is a paradigm of the type of witness we are talking about. Paul was accused by Festus, the Roman governor, of allowing too much learning to drive him insane. Paul replied that he was not out of his mind, but was speaking the sober truth. Moreover, he appealed to the king's own knowledge of the facts and his own convictions as a basis for believing the truth of Paul's message. Agrippa's response was to ask whether Paul was hoping to persuade him so quickly to become a Christian. Paul's final reply was to urge all listening to his witness to share his experience of God. From the point of view of the tension between beliefs and power it is worth noting that Paul at the time of the encounter was a prisoner in chains. Thus, we conclude that testimony to the truth, in chastened theory and in peaceable practice, as it is displayed in Jesus the Christ, is the whole of the Christian community's mission.

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[28] The dialogue between Jesus and Pilate is recorded in the Gospel of John, chapter 18, verses 33–38., c.f. also John, chapter 17, verses 14–19. A central aspect of the 'trial' of Jesus, as recorded in this Gospel, is the conflicting understanding of the meaning of power. A decisive contrast is drawn between the power of truth, manifest in the life and teaching of Jesus, and the power of religious and political authority and dominion. Tragically, the Church, all too frequently, has got them confused.

[29] Recorded in *The Acts of the Apostles*, chapter 26.

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Glossary of Terms

Atheism The conviction that there is no supreme Being who created and sustains the universe. It is often associated with a belief that perpetual matter in motion is a sufficient explanation for the existence and present form of all things. It tends to explain theistic belief in terms of the projection of human needs on to a suprahuman cosmic figure supposedly able to supply all that humans lack.

Common-sense The general, assumed beliefs of most ordinary people, which guide practical living. It has been developed by, among others, Thomas Reid and G.E. Moore, into a set of philosophical suppositions designed to refute scepticism about what we can know. Concrete, daily life would be impossible unless people were justified in understanding well the meaning of common expressions like ‘good’, ‘right’, ‘see’ and ‘know’ in relation to their experience.

Deconstruction An approach to theoretical thought derived from Heidegger and made popular by Derrida. It challenges the long tradition in Western thinking that has assumed an obvious correlation between words and reality. In particular, it disputes systems of thought constructed on the basis of binary opposites, such as universal/particular, good/evil, since one of the pair is always defined in antithesis to the other. This process means that legitimate convictions are suppressed and the privileged term is parasitic on the marginalised one. This approach has been applied to works of literature and philosophy to show that meaning is always deferred, because it is continually in process of being disclosed.

Deism A belief that the deity who created the universe is no longer actively involved in its life. Rather, the world continues its existence on the basis of imminent physical and moral principles placed within its structure from the beginning. It is argued that these principles can be uncovered by rational thought, without the need for a particular intervention by the deity in history or through the writings of specially selected people (**revelation**).

Deontology It is the position in moral philosophy that emphasises duty as the fundamental principle of ethical life. Certain beliefs and actions are intrinsically right and wrong; they do not depend upon circumstances. The position is often seen in opposition to views of the good that are grounded on a pragmatic assessment of their consequences. The word is derived from the Greek *deon*, meaning obligation.

Dualism The name for any system of thought which believes that there are some items, including in its most radical form reality, substance and/or the human mode of being itself, that display a binary distinction which can never be overcome. Examples of dualism are the divisions between the thinking subject and the object thought about, between the mind and the brain, between perception of an object and the object in itself.

Empirical method The method of the sciences which begins a discovery of reality by considering observed experience. Central to the notion is an approach to a problem through the collection of relevant data, the running of controlled experiments to test alternative theories and the confirmation or refutation of predicted outcomes. It is known for its insistence on the use of accessible, repeatable and verifiable evidence as the means of defining and validating research projects.

Empiricism The belief that the only certain knowledge of reality comes through critical observation of the experience of the material world. One branch of this tradition holds that only statements based on facts about physical existence have any meaning. Another supposes that all theoretical claims are ultimately claims about experience that can be tested by empirical methods.

Enlightenment, The An intellectual and cultural project of the eighteenth century that believed that reason and the experimental sciences would liberate humanity from the oppression of religion, the darkness of superstition and all dogmas based on the authority of the Church or divinely instituted rulers. The advocates of a new age of enlightenment and emancipation believed that the application of critical reasoning and technological advances could deliver humanity from the problems and mistakes of the past and provide a continuous progress towards the perfection of human society.

Epistemology The systematic enquiry into the nature, conditions and extent of human knowledge. It is a discipline that studies the proper criteria that justify claims to true belief about all aspects of human experience. It deals with questions of perceiving, remembering, doubting, explaining, inferring, establishing, corrobarating, being mistaken, imagining and so on.

Evidentialism A theory concerning the justification of belief that insists that the truth of propositions can only be confirmed when there is adequate evidence on their behalf. Evidence may be based on observation, experiment, reasoned discourse, historical analysis, memory or testimony.

Evolution, Theory of The belief, associated with the name of Charles Darwin (sometimes called neo-Darwinism), that all living organisms have developed from a single source. The theory seeks to provide a plausible mechanism that would explain the paleontological and biological evidence concerning the history and diversity of species. The theory suggests that species have evolved over a period of millions of years by means of random mutations triggered by the struggle to survive. The key to evolution has been adaptation through natural selection. The theory, widely accepted by most specialists in the field, has nevertheless been criticised on the grounds of using selective or inadequate evidence, of undue speculation, of an inability to predict and of seeking to demonstrate more than the evidence will bear.

Existentialism A movement in philosophy, connected with the names of Heidegger, Jaspers, Sartre and Camus, whose central tenet is that becoming precedes being. It is opposed to the notion that there is an inerradicable, essential human nature with which all humans are born. Human beings become what they wish to be through choices they make within a contingent historical process. They are ‘condemned’ to the freedom of absolute responsibility for their own lives. To be constrained by tradition, the authority of others or the notion of a given human essence is to live inauthentically, or in bad faith.

Faith A belief in the existence of a reality that is not either self-evident or open to confirmation or refutation through empirical study. The object of faith may be a philosophical, ideological or ethical theory or may take the form of a set of a priori assumptions. However, usually it has to do with convictions about the nature of the universe and human life within it related to a particular religion. Within the Christian tradition, the object of faith is a personal supreme Being who is knowable through the signs of his acts and presence in human history. Faith is trust in the absolute truth and dependability of this Being.

Falsification The theory, first elaborated by Karl Popper, that a scientific hypothesis can be corroborated or shown to be trustworthy just as long as it can survive all attempts to refute it. The theory was designed to replace the principle of verification through the testing of experimental data. Popper believed that scientific methodology was incapable of proving scientific theories to be true.

Foundationalism The quest for basic true beliefs that are clear and distinct, do not need to be justified and cannot be doubted. The idea is associated with the philosopher Descartes who wished to find a method that would withstand the greatest possible scepticism. Basic beliefs are true in virtue of their self-evident rationality or their empirical confirmation. They are intrinsically credible, therefore they do not need to be supported by further beliefs in an infinite regress. Contemporary foundationalists tend to hold to a modified form of the theory, which allows for basic true beliefs but does not claim that they are irrefutable.

Genetic fallacy, The The attempt to discredit a belief or theory by attacking the original context in which it arose. The argument is fallacious in so far as the belief or theory is not dependent on the context of its origin. It fails in that it does not address the belief or theory on its own merits.

Historicism The view that denies that there are universal, trans-historical principles or criteria for judging the worth of phenomena, values or beliefs. It claims that all judgements are imminent to a changing historical process that is always contingent, never necessary. As a result, truth claims can only be made from a limited, time-bound perspective. In reality they affirm no more than a personal or group point of view. The word has been used in two distinct ways. Some people believe that there are no normative standards for judging historical events. Others believe that history itself may provide principles analogous to scientific laws that provide keys to unlock the meaning of the whole.

Holism An alternative theory of epistemological justification to that of **Foundationalism**. It states that a belief is justified or warranted if it is supported by a coherent tradition of beliefs to which it belongs. The image is that of a spider's web that shows an intricate pattern of interlocking strands, rather than that of the foundation of a building on which the whole construction depends. It is claimed that holism allows for a more subtle approach to justification, in that tears in the web can be mended by attending to auxiliary hypotheses. The whole is not dependent on one core fundamental belief. The theory is linked to that of coherentism which states that a belief is justified if it coheres with a background system of beliefs.

Hypothetico-deductive method A model of science according to which scientists frame hypotheses axiomatically, which they do not test directly, but from which they deduce testable consequences. The model is necessary wherever theories are dealing with phenomena and processes not directly observable. The axioms are assumed in the process of research. They are said to be indirectly confirmed by the empirical laws that may be derived from them, which can be directly tested by experimentation.

Idealism The view that objects in the world only exist in relation to the knowing mind. This means that objects cannot be known in themselves. They do not exist independently of the way human minds perceive them. As far as thought is concerned, their nature and character is as they appear to the observer. We cannot know reality apart from the understanding of it that comes via the operations of the mind. As thought takes place through the medium of language, so our contact with the world is mediated linguistically.

Incommensurability This is the doctrine, associated with T.S. Kuhn and Paul Feyerabend, that the meaning of theoretical terms depends to such an extent on the theory in which it is embedded that rival theories cannot share common meanings. Kuhn has also maintained that criteria for choosing among rival theories do not possess a common measure, meaning that they cannot be properly and fairly compared.

Inference In its deductive form, is a manner of reasoning by which a person is justified in moving logically from a true statement to infer the truth of all that is entailed by that statement. Thus, if A is true then B, which follows necessarily from A, is also true. In the realm of scientific methodology **inductive inference** concerns the belief that observed regularities in natural processes, which may be formulated in terms of laws, allow us to assume the same continuing pattern of regular operation. This enables scientists to move from particular experimental data to general physical principles and back again. **Abductive inference** describes a model of reasoning that moves from an unresolved problem to a theory that, if true, would resolve it. **Inference to the best explanation** is a form of abduction. It states that a theory that explains a body of data in a more complete way than any rival theory is most probably the correct one.

Infinite regress The argument that there is no end to the chain of inferring one justified belief from another. This has led some to conclude that some beliefs must be non-inferentially or immediately justifiable, otherwise there cannot ultimately be any assured grounds for knowledge.

Intelligent design The belief that the nature and functioning of the universe requires an explanation in terms of an originating creative mind. The theory is opposed to the notion that the complexity and intricate interaction of living organisms could ever be explained by reference to pure chance, given a long-enough timespan. It seeks to counter the argument of those theories of evolution which affirm that it is illegitimate to appeal to divine intervention as the cause of natural processes.

Justification A process whereby the claim that a particular belief or statement is true is properly substantiated or warranted. The grounds on which a belief may be justifiably regarded as true are usually taken to be sensory experience, introspection, memory, intuition, rational reflection, proper cognitive functioning and inference. Any of these alone, or in combination, may be taken as sufficient evidence to establish the truth in question.

Knowledge One may be said to have knowledge of something, if and only if one has a justified reason to believe it to be true. Knowing is never equivalent to having absolute certainty about something. It is apparent, however, where all possible doubts have been cogently refuted.

Linguistic turn The name given to the view that the meaning of linguistic terms is not determined by the objects to which they refer but by their use in common patterns of language. This has led some to affirm that beliefs are to be understood as linguistic conventions, i.e. they describe the way in which language is used within particular communities or traditions.

Metanarrative A concept introduced by Francois Lyotard to refer to overarching explanatory religions, philosophies, ideologies or interpretations of history that pretend to give a coherent and persuasive account of key questions about existence. Lyotard proclaimed that the post-modern condition was characterised by a justified scepticism towards these grand stories, because of their tendency to eliminate all rival theories.

Miracle An event in time and space for which no material cause can be found. In Christian thinking such an event is the result of the direct intervention of God for a specific purpose that has to do with his purposes of salvation. A miracle is neither an extraordinary event on its own (such as a remarkable set of coincidences) nor a violation of supposedly immutable laws of nature. It constitutes a break in the regularity of natural causes, but not their contradiction. A miracle can be confirmed as such only if there is no other possible explanation for a particular phenomenon than that God has caused it to happen.

Modernity The ascription given to a broad way of thinking provoked by the rise of modern science in the late seventeenth century, which emphasises the ability of reason to comprehend existence and solve outstanding technical and social problems. It marks a historical break from a past dominated by the dictates of revelation by its strong advocacy of a split between public life – a secular world governed by a rational consensus – and private belief – a religious world open to a plurality of viewpoints.

Naturalism A theoretical conviction that nothing exists outside of what can be gleaned by a study of the natural order. In some versions, it becomes a methodological procedure: even if some supranatural reality existed, it would be undetectable by normal methods of critical observation. It has been criticised as a reductionist epistemological strategy as it proposes that the natural sciences are the only and sufficient measure of all that is knowable.

Natural law theory The view that ethical precepts can be inferred from a study of human nature. This means that fundamental principles of right and wrong, duty and virtue can be ascertained as truths about human existence. Instances of this might be the concept of justice as reciprocal respect and the principle that ends do not necessarily justify the means used to reach them.

Natural theology The articulation of a knowledge of God that is derivable from a study of ‘the book of nature’. This knowledge may come from introspection by reflecting on what human beings experience in consciousness and conscience, or it may come through observing the wonders of the natural world. It is supported by Paul’s observation that ‘ever since the creation of the world God’s power and divine nature, invisible though they are, have been understood and seen through the things he has made’ (Rom. 1. 20).

Noumenon A category used by Kant in his *Critique of Pure Reason* to refer to those entities that are ‘things in themselves’, i.e. that exist independently of human cognition. He contrasted this category of objects to that of phenomenon. The latter refers to ‘things as they appear to an observer’. It is a matter of interpretation whether Kant meant that two classes of entities exist, or whether it is the same class viewed in two different ways. Either way, it seems that for Kant noumena are not directly discernible. They can only be experienced as objects of sensible representations.

Paradigm A term used, particularly by T.S.Kuhn, to describe a scientific research project that serves as a model for further enquiry. In Kuhn’s thinking paradigms consist of *disciplinary matrixes* and *exemplars*. The first is roughly equivalent to a worldview about reality and inherited shared values among scientists which act as a framework for the scientific enterprise. The second are methods in practical scientific work that scientists learn to use to solve problems. Classical examples of paradigms are Newtonian physics and quantum mechanics. They represent wholly new ways of viewing and interpreting observational data.

Phenomenology A school of thought in philosophy, associated with the name of Edmund Husserl, that stresses the importance of studying one's inner experience prior to accepting beliefs about the relationship between the mind and the world. The phenomena in question belong to one's conceptual apparatus by means of which one ascribes meaning to objects and events in the world. The emphasis falls on intentionality in the reflective process of assigning significance, rather than on the immediate sensory appearances. Thus, the meaning assigned to the subjective experience of the world is more interesting than the reality itself.

Pluralism The view that, as a matter of principle, a variety of beliefs and a diversity of ways of acting should be encouraged in any society, since no one account of reality can have an exclusive access to the truth. Thus, it advocates a position that holds that any system of belief can, at the most, only be partially true. In the realms of religion, ethics and politics a society should promote the tolerance of competing ideals on the grounds that a genuine multiplicity of stances is more likely to be truth conducive, engender understanding and promote harmonious relations.

Positivism, Logical A movement centred in Vienna in the 1920s and 1930s whose central tenet was that knowledge can be acquired only by means of science. It propounded the doctrine that any statements that could not in principle be verified or falsified by empirical means were literally devoid of meaning. Sentences about moral or aesthetic values or about a non-material world were, at best, expressions of feeling or preference. This view expresses the greatest possible separation between the worlds of fact and value, between genuine knowledge and mere opinion.

Post-colonialism A movement in social thought that seeks to uncover the relation between culture and colonial power. Associated particularly with the writing of Edward Said, it proposes that much Western analysis of non-Western cultures is itself a cultural construction. The latter has consciously or unconsciously started with particular assumptions concerning conflicting values between cultures, assigning to them the categories of superior and inferior. The movement, by paying attention to the various forms of cultural resistance to the hegemony of the West, seeks to allow suppressed and marginalised cultures to speak for themselves. In so doing, it also addresses the failures of Western culture and regards the idea that normative criteria exist for judging the worth of distinct cultures to be false.

Post-modernity Declared by Lyotard to be 'a condition' of late twentieth-century post-industrial societies. Some regard it as a general reaction to certain emphases in modernity, such as an over-confidence in science, an imbalance between reason and the emotions and between the mind and the body in understanding experience, a neglect of spirituality and the suppression of minority beliefs. Others regard it as an expression of late modernity, where the capitalist enterprise culture has moved decisively from production to consumption, leading to a reinterpretation of freedom in terms of choice. As a cultural phenomenon it is characterised by a pluralism of beliefs and values and a relativistic attitude to truth.

Post-structuralism A critique of various notions put forward by the structuralist school of thought, namely that there is a deep, universal, hidden structure of language which controls the formation of human being in the world, that life is made up of binary opposites in eternal tension, such as permanence and change, unity and diversity, eternity and transience and that societies tend to create timeless myths to cope with the flux of history. The critique came to be known as **deconstruction**. It rejected the notion that there are hidden structures that control surface meanings, affirming instead that language is always in excess of the meanings given to it. It also repudiated the idea of contrasting alternatives as another form of metaphysical dualism.

Pragmatism Originally, as used by C.S. Pierce, it referrred to a view that the meaning of concepts depends on their relation to practical life. However, it has come to be associated with a view, propounded by philosophers like William James and John Dewey, that truth is understood in terms of its practical value in commending the best form of living. It is generally recognised as the position which relates the satisfactoriness of beliefs to their ability to promote desired ends. In ethical discourse it is related to consequentialism and utilitarianism: the view that good actions are determined by the kind of results they produce, whether they promote the sum total of human happiness and do not subtract from it.

Rationalism The view that all beliefs should be submitted to the judgement of rational thought and that nothing should be believed unless it can satisfy the criteria of the axiomatic truths of logical thought, such as the principles of the excluded middle and non-contradiction. Philosophically, it holds that all knowledge is determined by a priori assumptions about the nature of reality. It is thus opposed to **empiricism**.

Realism The assertion that objects and their properties, whether observable (e. g. a rose bush) or not (e.g. God or quarks), exist independently of human thought about them. Irrespective of the way humans may experience or reflect upon them subjectively, entities are there in an objective sense, such that appeal may be made concerning the truth about them against human interpretations. This means that it is always possible, in principle, to correct perceptual errors about them by reference to the entity itself. It has generally been assumed that scientific method is predicated on a realist construction of the world, such that scientific theories are to be interpreted literally, i.e. what they state about the world is true. Realism is opposed **to idealism**, **phenomenology** and **logical positivism**.

Relativism The doctrine that all statements, beliefs, ethical values and truth claims are context dependent. It follows that the pursuit of absolute or final truth about any matter is an impossible quest. Truth is always relative to peoples' historically and culturally conditioned perspective, such that what may be true for one is not necessarily true for another. Relativism has been sharply criticised on two grounds:

it is self-contradictory, in assuming the complete truth of its own doctrine, and its use of the concept of truth is idiosyncratic and ultimately incoherent.

Reliabilism The view that a belief is justified just in case it is based on indicators of truth that are reliable. What counts as reliable may be defined in terms of coherent and convincing evidence, virtuous cognitive processes, and well-grounded and tested witness. It is compatible with **foundationalism**, in the sense that it adds to the notion of basic beliefs the stipulation that they be formed by reliable non-inferential processes, and with **holism** by emphasising that internal coherence in belief systems increases reliability about their truth conduciveness.

Revelation Within the Christian tradition it refers to God's communication of truth about himself and about the world he has created to human beings. The tradition asserts that the three principal means of communication are the writings of the Old and New Testament, the person of Jesus Christ as the second person of the Trinity, and the Spirit-inspired community of God's redeemed people. These three together encompass a propositional, personal and communal view of God's '**speech-acts**' in history.

Romanticism A movement originating in the latter half of the eighteenth century which sought to restore the aesthetic and emotional dimensions to human life over against an excessive emphasis on the authority of reason. It took the form of creative works in literature, the visual arts and music which stressed originality, spontaneity and, above all, artistic imagination as ways of conveying the deep longings, anxieties and hopes of the human condition. In resisting the atomising effects of analytical reason, the objectification of the material world and the emphasis on the guiding principles of abstract universals, it celebrated subjective experience, individuality and the physical components of human existence which bound it closely to the whole of nature.

Scepticism A tradition of extreme critical thought, elaborated in the late sixteenth century by Michel de Montaigne. He presented a systematic programme of questioning that covered such topics as evidence for knowledge claims, the adequacy of all criteria for justifying true belief and the possibility of universal moral standards. Notoriously, Descartes sought to discover a method of reasoning that could defeat scepticism, i.e. a first truth that could not be refuted without descending into absurdity. Hume, who developed scepticism in relation to the supposed necessity of natural causes, nevertheless agreed that it was a theory that could not be followed in ordinary life. In this sense it becomes irrelevant as a theory, since in practice everyone is obliged to suspend their scepticism in order to live.

Secular A general condition that characterises a society where (a) religious beliefs and institutions are excluded from influence over public policy, (b) human life is interpreted and conducted normally without reference to any supernatural agency and (c) a large percentage of a population does not show even a minimal attachment to formal religious institutions and symbols.

Sociology of knowledge A discipline of study that is primarily interested in the social variables of particular beliefs. The objects of study will be the belief itself, the assumptions that inform it, the group who espouses it, the ways in which it is confirmed and defended against criticism, the use to which the belief is put and the place of the belief in its social context. A weak programme of study satisfies itself with the social reality and implications of the belief. A strong programme seeks to go further to explain how all beliefs and theories are conditioned and constrained by the social factors of the context of their origin and development. The latter study tends to stress the contingent and relative nature of all claims to knowledge.

Solipsism The view that every individual world is private to that person and cannot be experienced by another. Thus, it is not possible to share the mental and emotional processes through which others go. In some forms, the solipsist will contend that s/he alone can be certain of existing. In other forms there is doubt about any reality outside of the individual's own perceptions. The term is often applied to the argument that, everything else being equal, the justification of a person's beliefs lie wholly within the experience of that person.

Speech-act theory A theory within the philosophy of language derived from John Austin's ordinary language philosophy that observes that language is multifunctional. He first made a distinction between language that makes statements of fact and language that performs certain functions by producing certain effects. Later, he refined this distinction further by comparing three forms of linguistic activity: locutionary act – a meaningful statement about some object; illocutionary act – the action performed in saying something, e.g. promising or threatening; perlocutionary act – the consequent action brought about by the statement.

Supernatural The word usually used to describe an observable effect in the natural world that does not appear to have any known natural cause. It assumes that, parallel to the visible world of matter, an invisible world of the spirit exists that is able and does, on occasion, interact with the former. It often refers to claims about **miracles**, which in a strict definition are events that happen as the result of an extra-natural force. The word, though common, is unfortunate in that it implies a reality wholly above and separate from nature. A better term might be supranatural, which combines the notion of beyond, yet within.

Theism The conviction that a personal, self-explanatory, eternal and infinite being exists who is the cause of all that exists. In contrast to **deism** it stresses the continual activity of God both in the natural world, upholding its fine-tuned mechanisms, and in human history in bringing salvation to individuals and communities, who are willing to hear, receive and act on the **revelation** he has given. Theism is perceived either as unitarian (Judaism, Islam, Sikhism) or trinitarian (Christianity).

Truth The traditional view holds that everything is true if, and only if, it exactly corresponds with the way things are. A statement is true if it accurately represents a distinguishable reality. This notion has been challenged by a number of movements in twentieth-century philosophy, most notably by the various postulates of **postmodernity**. Some hold that truth refers to what is ‘mutually coherent’ within a tradition of belief (**holism**); others that it defines what is ‘pragmatically valuable’ (**pragmatism**). Yet others believe that it can only denote what is ‘verifiable in principle’ (**verification theory**). However, if a strict separation is made between the nature of truth and the criteria for testing truth claims, the correspondence theory seems to be the only one that does justice to the notion as an explanation.

Underdetermination The view that no amount of evidence is ever conclusive in determining the preference for one scientific theory over another. It may be that incompatible theories appear to fit the available evidence equally well. Alternatively, empirically equivalent theories may exist that are founded on radically different theoretical notions. In neither case, so the argument goes, will apparent anomalies be resolved by appeal to irresistible evidence for one theory over another.

Verification theory A belief that a sentence can only be meaningful if its propositions are in principle verifiable, or at least falsifiable, by the testing of evidence open to the senses. By means of this theory all moral and metaphysical statements were declared by **logical positivism** to be meaningless as affirmations of fact. At most they represent attitudes, whose truth value can only be discerned in the behavioural effects they produce. The theory is no longer supported on the grounds that (a) it is manifestly self-contradictory – i.e. it exempts its own proposition and (b) it uses an entirely idiosyncratic understanding of the meaningful and the meaningless.

Western The description which is applied to the history, thought and culture of a geographically circumscribed region of the world, namely Europe and its recognised extensions, the Americas, Australia and New Zealand. The adjective is generally associated with the diffused influence of Greek philosophy, the Christian faith (Orthodox, Catholic and Protestant), **modernity** and **postmodernity** on approaches to reason, knowledge, moral norms, political institutions and processes. In recent thought it represents a civilisation that can be distinguished from, and may be in conflict with, others – namely, Chinese, Japanese, African, Islamic, Hindu, Buddhist.

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Select Bibliography

Alcoff, Linda Martin (ed.), *Epistemology: The Big Questions* (Oxford: Blackwell, 1998)

Allen, Donald and Butterick, George, *The Postmoderns: The New American Poetry Revisited* (New York: Grove Press, 1982)

Allen, Diogenes, *Christian Belief in a Postmodern World: The Full Weight of Belief* (Louisville: Westminster/John Knox Press, 1989)

Alston, William, *A Realist Conception of Truth* (Ithaca: Cornell University Press, 1996)

Archer, Margaret (et al) (eds), *Critical Realism: Essential Readings* (London: Routledge, 1998)

Ashcroft, Bill, Griffiths, Gareth and Tiffin, Helen, *Key Concepts in Post-Colonial Studies* (London: Routledge, 1998)

Audi, Robert, *The Structure of Justification* (New York: Cambridge University Press, 1993)

——, *Epistemology: A Contemporary Introduction to the Theory of Knowledge* (London: Routledge, 1998)

Banner, Michael, *The Justification of Science and the Rationality of Religious Belief* (Oxford: Clarendon Press, 1990)

Barbour, Ian, *Religion and Science: Historical and Contemporary Issues* (London: SCM Press, 1998)

Bauman, Zygmunt, *Intimations of Postmodernism* (London: Routledge, 1992)

——, *Postmodern Ethics* (Oxford: Blackwell, 1993)

——, *Postmodernity and its Discontents* (Cambridge: Polity Press, 1997)

——, *Work, Consumerism and the New Poor* (Buckingham: Open University Press, 1998)

Beiser, Frederick (ed.), *The Cambridge Companion to Hegel* (Cambridge: Cambridge University Press, 1993)

Bertens, Hans, *The Idea of the Postmodern: A History* (London: Routledge, 1995)

Betts, C.J., *Early Deism in France: From the so-called ‘deistes’ of Lyon (1564) to Voltaire’s ‘ Lettres philosophiques’ (1734)* (The Hague: Martin Nijhoff, 1984)

Bonjour, Laurence, *In Defense of Pure Reason: A Rationalist Account of A Priori Justification* (Cambridge and New York: Cambridge University Press, 1998)

Bottomore, Tom (ed.), *A Dictionary of Marxist Thought* (Oxford: Blackwell, 1991/2)

Bowker, John, *Is God a Virus? Genes, Culture and Religion* (London: SPCK, 1995)

Brandt, Richard, *Facts, Values and Morality* (Cambridge: Cambridge University Press, 1996)

Brooke, John Hedley, *Science and Religion: Some Historical Perspectives* (New York: Cambridge University Press, 1991)

Broom, Neil, *How Blind is the Watchmaker? Nature's Design and the Limits of Naturalistic Science* (Leicester: Intervarsity Press, 2001)

Buckley, Michael, *At the Origins of Modern Atheism* (New Haven: Yale University Press, 1987)

Bunnin, Nicholas and Tsui-James, E.P. (eds), *The Blackwell Companion to Philosophy* (Oxford: Blackwell, 1996)

Burns, T. (ed.), *After History? Francis Fukuyama and His Critics* (London: Rowman and Littlefield, 1994)

Byrne, Peter, *God and Realism* (Aldershot: Ashgate, 2003)

Cahoone, Lawrence (ed.), *From Modernism to Postmodernism: An Anthology* (Oxford: Blackwell, 1996)

Castell, Alburey, Borchert, Donald and Zucker, Arthur (eds), *An Introduction to Modern Philosophy: Examining the Human Condition* (New York: Macmillan College Publishing House, 1994)

Chapman, Siobhan, *Philosophy for Linguistics: An Introduction* (London: Routledge, 2000)

Clayton, Philip, *God and Contemporary Science* (Edinburgh: Edinburgh University Press, 1997)

Clifford, W.K., *Lectures and Essays* (London: Macmillan, 1879)

Cooper, David, *World Philosophies: An Historical Introduction* (Oxford: Blackwell, 1996)

Cohen, I. Bernard, *Puritanism and the Rise of Modern Science: The Merton Thesis* (New Brunswick: Rutgers University Press, 1990)

Copan, Paul and Moser, Paul K., *The Rationality of Theism* (London: Routledge, 2003)

Cranston, Maurice, *The Romantic Movement* (Oxford: Oxford University Press, 1994)

Crary, Alice and Read, Rupert (eds), *The New Wittgenstein* (London: Routledge, 2000)

Curd, Martin and Cover, J.A., *Philosophy of Science: The Central Issues* (New York: W.W. Norton, 1998)

Dancy, J. and Sosa, E. (eds), *A Companion to Epistemology* (Oxford: Blackwell, 1992)

Davis, Stephen T., *God, Reason and Theistic Proofs* (Grand Rapids: Eerdmans, 1997)

Dawkins, Richard, *The Blind Watchmaker* (London: W.W. Norton, 1986)

——, *River Out of Eden: A Darwinian View of Life* (New York: Basic Books, 1995)

Derrida, Jacques, *Of Grammatology* (Baltimore: John Hopkins University Press, 1974)

Descartes, Rene, *The Philosophical Writings of Descartes* (translated by John Cottingham, Stoothoff, Robert and Murdoch, Dugald), 2 vols (Cambridge: Cambridge University Press, 1985)

D'Holbach, *Le Systeme de la Nature* (Hildersheim: Olms, 1966)

Diderot, Denis, *Oeuvres philosophiques,* (P Venniere, (ed)) (Paris: Garnier, 1961)

——, *Diderot's Early Philosophical Works* (Chicago: Open Court, 1916)

Dolejsova, Ivana, *Accounts of Hope: A Problem of Method in Postmodern Apologia* (Bern: Peter Lang, 2001)

Dostoyevsky, Fyodor, *Crime and Punishment* (London: Penguin Books, 1951)

Drees, William, *Religion, Science and Naturalism* (Cambridge: Cambridge University Press, 1995)

Dummett, Michael, *The Seas of Language* (Oxford: Clarendon Press, 1993)

——, *Wittgenstein's Philosophy of Mathematics* in G.Pitcher (ed.), *Wittgenstein, the Philopsophical Investigations* (New York: Doubleday Anchor, 1966)

Durkheim, Emile, *The Elementary Forms of the Religious Life* (London: Allen and Unwin, 1915)

Dworkin, Ronald, *Life's Dominion* (New York: Alfred Knopf, 1993)

Eagleton, Terry, *The Illusions of Postmodernism* (Oxford: Blackwell, 1996)

Eldredge, Niles, *Time Frames* (New York: Simon & Schuster, 1985)

Foucault, Michel, *Power/Knowledge: Selected Interviews and Other Writings 1972-77* (Colin Gordon (ed.)) (New York: Pantheon, 1977)

——, *History of Sexuality* (Harmondsworth: Penguin Books, 1986/2)

——, *Discipline and Punish* (Harmondsworth: Penguin Books, 1979)

——, *Madness and Civilization: A History of Insanity in an Age of Reason* (London: Routledge, 1989)

——, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York: Vintage Books, 1994)

Fukuyama, Francis, *The End of History and the Last Man* (London: Hamish Hamilton, 1992)

Gadamer, Hans-Georg, *Truth and Method* (London: Sheed and Ward, 1989/2)

Galbraith, J.K., *The Affluent Society* (Boston: Houghton Mifflin, 1984/4)

Gardiner, Sebastian, *Kant and the Critique of Pure Reason* (London: Routledge, 1999)

Geivett, R. Douglas and Habermas, Gary R., *In Defence of Miracles: A Comprehensive Case for God's Action in History* (Leicester: Intervarsity Press, 1997)

Giddens, Anthony, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Cambridge: Polity Press, 1991)

Glover, T.R., *The Jesus of History* (Montana: Kessinger Publishing, 2005 (first published in 1914))

——, *The Conflict of Religions in the Early Roman Empire* (London: Methuen, 1910)

Goodman, David and Russell, Colin, *The Rise of Scientific Europe 1500-1800* (London: Hodder and Stoughton, 1991)

Gould, Stephen, *Hens' Teeth and Horses' Toes* (New York: Norton, 1983)

Gower, Barry, *Scientific Method: A Historical and Philosophical Introduction* (London: Routledge, 1997)

Graff, Gerald (ed.), *Limited Inc.* (Evanston: Northwestern University Press, 1988)

Grant, Edward, *The Foundations of Modern Science in the Middle Ages: their Religious, Institutional and Intellectual Contexts* (Cambridge: Cambridge University Press, 1996)

Gray, John, *False Dawn: The Delusions of Global Capitalism* (London: Granta, 1998)

——, *Two Faces of Liberalism* (Cambridge: Polity Press, 2000)

Grayling, A.C., *Philosophy: A Guide through the Subject* (Oxford: Oxford University Press, 1995)

——, *What is Good? The Search for the Best Way to Live* (London: Weidenfeld & Nicolson, 2003)

Greco, John and Sosa, Ernest (eds), *The Blackwell Guide to Epistemology* (Oxford: Blackwell, 1999)

Grice, Paul, *Studies in the Way of Words* (Cambridge MA: Harvard University Press, 1989)

Haack, Susan, *Manifesto of a Passionate Moderate: Unfashionable Essays* (Chicago: University of Chicago Press, 1998)

Habermas, Jurgen, *The Philosophical Discourse of Modernity* (Cambridge: MIT Press, 1987)

Hacker, P.M.S., *Wittgenstein's Place in Twentieth-Century Analytic Philosophy* (Oxford: Blackwell, 1996)

Harrison, Peter, *The Bible, Protestantism and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998)

Hawkes, David, *Ideology: The New Critical Idiom* (London: Routledge, 1996)

Hegel, G.W.F., *Lectures on the History of Philosophy* (Atlantic Highlands: Humanities Press, 1983)

Heidegger, Martin, *Being and Time* (Oxford: Blackwell, 1962)

——, *Basic Writings* (translated by D.F. Krell) (London: Routledge and Kegan Paul, 1978)

Helm, Paul, *Faith and Understanding* (Edinburgh: University of Edinburgh Press, 1997)

Hempel, Carl, *Aspects of Scientific Explanation* (New York: Free Press, 1965)

Hesse, Mary, *Revolutions and Reconstructions in the Philosophy of Science* (Brighton: The Harvester Press, 1980)

Hick, John, *The Fifth Dimension: An Exploration of the Spiritual Realm* (Oxford: One World, 1999)

Hoedemaker, Bert, *Secularisation and Mission* (Harrisburg: Trinity Press International, 1997)

Hollinger, Robert, *Postmodernism and the Social Sciences* (London: Sage, 1994)

Hooykaas, R., *Religion and the Rise of Modern Science* (Edinburgh: Scottish Academic Press, 1972)

Hume, David, *A Treatise of Human Nature (1739-40)* (Oxford: Oxford University Press, 1978)

Hunter, J.D. 'What is Modernity? Historical Roots and Contemporary Features', in Philip Sampson, Vinay Samuel and Chris Sugden (eds.), *Faith and Modernity* (Oxford: Regnum Books, 1994)

Hunter, Michael and Wootton, David, *Atheism from the Reformation to the Enlightenment* (Oxford: Clarendon Press, 1992)

Huntington, Samuel, *The Clash of Civilizations and the Remaking of the World Order* (London: Touchstone, 1998)

Jacki, Stanley, *The Origin of Science and the Science of its Origin* (Edinburgh: Scottish Academic Press, 1978)

Jameson, Frederic, *Postmodernism, Or, The Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991)

Johnson, Patricia, *On Heidegger* (Belmont, CA: Wadsworth, 2000)

Kant, Immanuel, *Lectures on Ethics* (New York: Century, 1930)

——, *Fundamental Principles of the Metaphysic of Morals* (Indianapolis: Bobbs-Merrill, 1949)

——, *Critique of Practical Reason* (Chicago: Chicago University Press, 1949)

Kaufman, G., *In Face of Mystery* (Cambridge, MA: Harvard University Press, 1993)

Kearney, Richard, *Modern Movements in European Philosophy* (Manchester: Manchester Univ. Press, 1994)

Keene, J.C., *The Western Heritage of Faith and Reason* (New Yorker: Harper and Row, 1963)

King, Ursula (ed.), *Faith and Practice in a Postmodern Age* (London: Cassell, 1998)

Kirk, J. Andrew, *The Meaning of Freedom: A Study of Secular, Muslim and Christian Views* (Carlisle: Paternoster Press, 1998)

——, *What is Mission? Theological Explorations* (London: Darton, Longman and Todd, 1999)

——, ‘Overcoming violence with violence: is it ever justified?’, in *Mission Under Scrutiny: Confronting Current Challenges* (London: Darton, Longman and Todd, 2006)

Kirk, J. Andrew and Vanhoozer, Kevin J. (eds), *To Stake a Claim: Mission and the Western Crisis of Knowledge* (Maryknoll, NY: Orbis Books, 1999).

Knight, Kelvin (ed.), *The MacIntyre Reader* (Cambridge: Polity Press, 1998)

Kolakowski, Leszek, *Modernity on Endless Trial* (Chicago: University of Chicago Press, 1990)

Kramnick, Isaac (ed.), *The Portable Enlightenment Reader* (Harmondsworth: Penguin Books, 1995)

Kripke, Saul, *Wittgenstein on Rules and Private Language* (Oxford: Blackwell, 1982)

Kuhn, Thomas, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1996/3)

Ladyman, James, *Understanding Philosophy of Science* (London: Routledge, 2002)

Lakatos, Imre, *Philosophical Papers*, vol. 1 (Cambridge: Cambridge University Press, 1977)

Leplin, Jarrett,(ed.), *Scientific Realism* (Berkeley: University of California Press, 1984)

Lindbeck, George, *The Nature of Doctrine* (Philadelphia: Westminster, 1984)

Lipton, Peter, *Inference to the Best Explanation* (London: Routledge, 2004/2)

Losee, John, *A Historical Introduction to the Philosophy of Science* (Oxford: Oxford University Press, 2001/4)

Lowe, E.J., *Locke on Human Understanding* (London: Routledge, 1995)

Lycan, William G., *Philosophy of Language: A Contemporary Introduction* (London: Routledge, 2000)

Lyon, David, *Postmodernity* (Buckingham: Open University Press, 1994)

Lyotard, Francois, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: The University of Minnesota Press, 1984)

McCutcheon, Felicity, *Religion within the Limits of Language Alone: Wittgenstein on Philosophy and Religion* (Aldershot: Ashgate, 2001)

McGrath, Alister, *The Foundations of Dialogue in Science and Religion* (Oxford: Blackwell, 1998)

——, *Dawkins's God: Genes, Memes and the Meaning of Life* (Oxford: Blackwell Publishing, 2005)

——, *The Twilight of Atheism: The Rise and Fall of Disbelief in the Modern World* (London: Doubleday, 2004)

MacIntyre, Alasdair, *After Virtue:A Study in Moral Theory* (London: Duckworth, 1985/2)

——, *Whose Justice? Which Rationality?* (London: Duckworth, 1988)

——, *Three Rival Versions of Moral Enquiry: Encyclopaedia, Genealogy and Tradition* (London: Duckworth, 1990)

Mackie, J.L., *Ethics: Inventing Right and Wrong* (Harmondsworth: Penguin Books, 1977)

McLellan, David, *The Thought of Karl Marx* (Basingstoke: Macmillan, 1995/3)

Magnus, Bernd and Higgins, Kathleen M. (eds), *The Cambridge Companion to Nietzsche* (Cambridge: Cambridge University Press, 1996)

Markham, Ian, *Truth and the Reality of God: An Essay in Natural Theology* (Edinburgh: T. and T. Clarke, 1998)

Martin, Michael, *Atheism, Morality and Meaning* (New York: Prometheus Books, 2002)

Merton, Robert, *Science and Technology in Seventeenth Century England* (New York: H. Fertig, 1970)

Midgley, Mary, *Evolution as a Religion* (London: Routledge, 2002/2)

——, *The Myths We Live By* (London: Routledge, 2003)

Milbank, John, *Being Reconciled: Ontology and Pardon* (London: Routledge, 2003)

Mitchell, Basil, *Morality: Religious and Secular* (Oxford: Clarendon Press, 1980)

Moore-Gilbert, Bart, *Postcolonial Theory: Contexts, Practices, Politics* (London: Verso, 1997)

Munck, Thomas, *Seventeenth Century Europe: State, Conflict and Social Order in Europe 1598-1700* (Basingstoke: Macmillan, 1990)

Murphy, Nancey, *Beyond Liberalism and Fundamentalism: How Modern and Postmodern Philosophy set the Theological Agenda* (Valley Forge; Trinity Press International, 1996)

Murray, Michael (ed.), *Heidegger and Modern Philosophy* (New Haven: Yale University Press, 1978)

Nathason, Stephen, *The Ideal of Rationality: A Defense within Reason* (Chicago: Open Court Press, 1994)

Nebelsick, Harold, *Renaissance and Reformation and the Rise of Science* (Edinburgh: T. and T. Clarke, 1992)

Newton-Smith, W.H. (ed.), *A Companion to the Philosophy of Science* (Oxford: Blackwell, 2000)

Nietzsche, Friedrich, *On the Genealogy of Morals* (New York: Vintage, 1967)

——, *The Gay Science* (New York: Vintage, 1974)

Niznik, Josef and Sanders, John T. (eds), *Debating the State of Philosophy: Habermas, Rorty and Kolakowski* (Westport: Praeger, 1996)

Nordstrom, Carolyn, *Girls and Warzones: Troubling Questions* (Uppsala: Life and Peace Institute, 1997)

Norris, Christopher, *Reclaiming Truth: Contribution to a Critique of Cultural Relativism* (London: Lawrence and Wishart, 1996)

——, *Against Relativism: Philosophy of Science, Deconstruction and Critical Theory* (Oxford: Blackwell, 1997)

Norton, David F., *David Hume: Common-Sense Moralist, Sceptical Metaphysician* (Princeton: Princeton University Press, 1984/2)

—— (ed.), *The Cambridge Companion to Hume* (Cambridge: Cambridge University Press, 1993)

O'Hear, Anthony, *Beyond Evolution: Human Nature and the Limits of the Evolutionary Explanation* (Oxford: Clarendon Press, 1997)

Olby, R.C., Cantor, G.N., Christie, J.R.R. and Hodge, M.J.S., *Companion to the History of Modern Science* (London: Routledge, 1990)

Parker, Christian, *Popular Religion and Modernization in Latin America: A Different Logic* (Maryknoll: Orbis Books, 1996)

Pennock, Robert T. (ed.), *Intelligent Design and its Critics: Philosophical, Theological and Scientific Perspectives* (Cambridge, MS: MIT Press, 2001)

Peterson, Michael (et al.) (eds), *Philosophy of Religion: Selected Readings* (Oxford: Oxford University Press, 1996)

Phillips, D.Z., *Wittgenstein and Religion* (London: Macmillan, 1993)

Pinchin, Calvin, *Issues in Philosophy* (Basingstoke: MacMillan, 1990)

Pitcher, G. (ed.), *Wittgenstein: The Philosophical Invesigations* (New York: Doubleday Anchor, 1966)

Polanyi, Michael, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1958)

Polkinghorne, John, *Beyond Science: The Wider Human Context* (Cambridge: Cambridge University Press, 1996)

Popper, Karl, *The Open Society and its Enemies*. (London: Routledge and Kegan Paul, 1945)

——, *The Logic of Scientific Discovery* (London: Hutchinson, 1959)

——, *The Poverty of Historicism* (London: Routledge and Kegan Paul, 1960/2)

——, *Conjectures and Refutations* (London: Routledge and Kegan Paul, 1963)

Putnam, Hilary, *Reason, Truth and History* (Cambridge: Cambridge University Press, 1981)

—— 'Why Reason Can't be Naturalised', in Ernest Sosa and Jaegwon Kim (eds), *Epistemology: An Anthology* (Oxford: (pub details??) 2000)

Quine, Willard Van Orman, ‘Two Dogmas of Empiricism’, *Philosophical Review*, 60 (1951)

Quinn, Philip L. and Taliaferro, Charles, *A Companion to Philosophy of Religion* (Oxford: Blackwell, 1997)

Raz, Joseph, *Engaging Reason: On the Theory of Value and Action* (Oxford: Oxford University Press, 1999)

Rae, M., Regan, H. and Stenhouse, J. (eds), *Science and Theology: Questions at the Interface* (Edinburgh: T. and T. Clarke, 1994)

Reiss, Hans (ed.), *Kant’s Political Writings* (translated by H.B. Nisbet) (Cambridge: Cambridge University Press, 1970)

Richardson, W. Mark and Wildman, Wesley J., *Religion and Science: History, Method, Dialogue* (London: Routledge, 1996)

Rogers, G.A.J., *Locke’s Philosophy: Content and Context* (Oxford: Clarendon Press, 1994)

Rolston III, Holmes, *Genes, Genesis and God: Values and their Origins in Natural and Human History* (Cambridge: Cambridge University Press, 1999)

Ronan, Colin, *The Cambridge Illustrated History of the World’s Science* (Cambridge: Cambridge University Press, 1983)

Rosenberg, Alex, *Philosophy of Science: A Contemporary Introduction* (London: Routledge, 2000)

Ruse, Michael, *Evolutionary Naturalism* (London: Routledge 1992)

Russell, Bertrand, *Collected Papers, Vol. 8* (London: Allen and Unwin, 1986)

Russell, Colin, *Cross-currents: Interactions between Science and Faith* (Leicester: Inter-Varsity Press, 1985)

Sampson, P., Samuel, V. and Sugden, C. (eds), *Faith and Modernity* (Oxford: Regnum Books, 1994)

San Juan Jr. E., *Beyond Postcolonial Theory* (Basingstoke: Macmillan Press, 1998)

Sanneh, Lamin, *Religion and the Variety of Culture* (Valley Forge: Trinity Press International, 1996)

Savage, C. Wade (ed.), *Scientific Theories (vol. 14)* (Minneapolis: University of Minnesota Press, 1990)

Schmidtz, David, *Rational Choice and Moral Agency* (Princeton: Princeton University Press, 1996)

Scott-Kakures, Dion, Castagnetto, Susan, Benson, Hugh, Taschek, William and Hurley, Paul (eds), *History of Philosophy* (New York: Harper Collins, 1993)

Scruton, Roger, *Modern Philosophy: An Introduction and Survey* (London: Mandarin, 1996)

Sedgwick, Peter, *Descartes to Derrida: An Introduction to European Philosophy* (Oxford: Blackwell, 2001)

Seidman, Steven, *Contested Knowledge: Social Theory in the Postmodern Era* (Oxford: Blackwell, 1998/2)

Shapin, Steven and Schaffer, Simon, *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life* (Princeton: Princeton University Press, 1985)

Sim, Stuart (ed.), *The Icon Dictionary of Postmodern Thought* (Cambridge: Icon Books, 1998)

Simons, Jon (ed.), *From Kant to Levi-Strauss: The Background to Contemporary Critical Theory* (Edinburgh: Edinburgh University Press, 2002)

Singer, Peter (ed.), *A Companion to Ethics* (Oxford: Blackwell, 1993)

Sosa, Ernest and Kim, Jaegwon (eds), *Epistemology: An Anthology* (Oxford: Blackwell, 2000)

Southgate, Christopher (et al.), *God, Humanity and the Cosmos* (Edinburgh: T. and T. Clarke, 1999)

Spedding, John (ed.), *Letters and Life of Francis Bacon* (London, 1861)

Stackhouse, Max, *Creeds, Society and Human Rights* (Grand Rapids: Eerdmans, 1984)

Standish, Paul, *Beyond the Self: Wittgenstein, Heidegger and the Limits of Language* (Aldershot: Avebury, 1992)

Stanesby, Derek, *Science, Reason and Religion* (London: Routledge, 1985)

Stenmark, Mikael, *How to Relate Science and Religion: A Multidimensional Model* (Grand Rapids: Eerdmans, 2004)

Strawson, P.F., *Freedom and Resentment and Other Essays* (London: Methuen and Co., 1974)

Stroll, Avrum, *Wittgenstein* (Oxford: One World, 2002)

Stump, Eleonore and Murray, Michael (eds), *Philosophy of Religion: The Big Questions* (Oxford: Blackwell, 1999)

Tarnas, Richard, *The Passion of the Western Mind: Understanding the Ideas that have Shaped our Worldview* (London: Pimlico, 1991),

Taylor, K. (ed.), *Saint-Simon: Selected Writings on Science, Industry and Social Organization* (London: Croom Hill, 1975)

——, *The Political Ideas of the Utopian Socialists* (London: Cass, 1982)

Taylor, Mark C., *Erring: A Postmodern A/Theology* (Chicago: University of Chicago Press, 1984)

Thiselton, Anthony, *Interpreting God and the Postmodern Self: On Meaning, Manipulation and Promise* (Edinburgh: T. and T. Clarke, 1995)

Thomson, Garrett, *On Locke* (Belmont, CA: Wadworth, 2001)

Toulmin, Stephen, *Foresight and Understanding* (New York: Harper and Row, 1963)

Touraine, Alain, *Critique of Modernity* (Oxford: Blackwell, 1995)

Trigg, Roger, *Rationality and Science: Can Science Explain Everything?* (Oxford: Blackwell, 1993)

——, *Reality at Risk: A Defence of Realism in Philosophy and the Sciences* (London: Harvester Wheatsheaf, 1989/2)

——, *Rationality and Religion* (Oxford: Blackwell, 1998)

——, *Philosophy Matters: An Introduction to Philosophy* (Oxford: Blackwell, 2002)

——, *Morality Matters* (Oxford: Blackwell, 2005)

Tucker, Robert, *The Marx-Engels Reader* (New York: W.W. Norton, 1972)

Turner, Bryan S., *The Blackwell Companion to Social Theory* (Oxford: Blackwell, 1996)

Turner, Denys, *Faith, Reason and the Existence of God* (Cambridge: Cambridge University Press, 2004)

Turner, Harold, *The Roots of Science: An Investigative Journey through the World's Religions* (Auckland: Deep Sight Trust, 1998)

Urmson, J.O. and Ree, Jonathan (eds), *Concise Encyclopedia of Western Philosophy and Philosophers* (London: Routledge, 1989)

van Fraassen, Bas, *The Scientific Image* (Oxford: Clarendon Press, 1980)

van Huyssteen, J. Wentzel, *Essays in Postfoundational Theology* (Grand Rapids: Eerdmans, 1997)

von Wright, G.H. and Nyman, H., *Culture and Value* (Oxford: Blackwell, 1980)

Wagner, Warren, *The Secular Mind: Transformations of Faith in Modern Europe* (New York and London: Holmes and Meier, 1982)

Ward, Keith, *God, Chance and Necessity* (Oxford: One World, 1996)

Warsame, Amina Mohamoud, *Queens without Crowns: Somaliland women's changing roles in peace building* (Uppsala: Life and Peace Institute, 2002)

West, David, *An Introduction to Continental Philosophy*, (Cambridge: Polity Press, 1996)

Wilson, E.O., *On Human Nature* (Cambridge: Harvard University Press, 1978)

Williams, Howard, Sullivan, David and Matthews, Gwynn, *Francis Fukuyama and the End of History* (Cardiff: University of Wales Press, 1997),

Wittgenstein, Ludwig, *Tractatus Logico-Philosophicus* (London: Routledge and Kegan Paul, 1961)

——, *Philosophical Investigations* (Oxford; Basil Blackwell, 1967/3)

Wolterstorff, Nicholas, *Divine Discourse: Philosophical Reflections on the Claim that God Speaks* (Cambridge: Cambridge University Press, 1995)

Wood, Donald, *Post-Intellectualism and the Decline of Democracy: The Failure of Reason and Responsibility in the Twentieth Century* (Westport: Praeger Publishers, 1996)

Wright, Crispin, *Realism, Meaning and Truth* (Oxford: Blackwell, 1993)

Zagzebski, Linda (ed.), *Rational Faith: Catholic Responses to Reformed Epistemology* (Notre Dame: University of Notre Dame Press, 1993)

——, *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge,* (Cambridge: Cambridge University Press, 1996)

Zaman, Habiba, *Patriarchy and Purdah: Structural and Systemic Violence against women in Bangladesh* (Uppsala: Life and Peace Institute, 1998)

Zizek, Slavej (ed.), *Mapping Ideology* (London: Verso, 1994)

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