CONTENTS

SYNOPSIS AND INTRODUCTION

This dissertation is a consideration of some ways in which the relation between reason and commitment is conceived. This relation, it is argued, plays a vital role with respect to educational theory, concerning both the content and the control of education. The dissertation itself maintains that underlying every concept of reason and the diverse forms of reasoning (e.g. in the various disciplines) there are philosophical assumptions, which themselves rest upon religious (i.e. ultimate) commitments.

The first chapter is a historical sketch of the struggle of two such commitments, Christianity and Secular Humanism, for the direction of education. It is argued that while the Christian Church both founded and controlled almost every sort of educational institution (elementary, secondary and university) until recent times yet learning in the various academic disciplines - including theology itself to some measure - was never brought fully under the direction of the Christian commitment. The suggestion is made that behind this failure lay an accommodation of the Christian faith to Graeco-Roman culture and particularly Greek philosophy. This synthesis failed to recognise the total claims of the Christian faith on the one hand, and on the other mistakenly thought that at least some of Greek philosophy was religiously neutral, and therefore usable by Christians. This led to a dualism of faith and reason (or grace and nature) which found its classic expression in Thomas Aquinas. It is argued that the Reformation largely failed to break with this synthesis, in either of its Lutheran, Calvinistic or subsequent Puritan form. When Protestantism did in fact move away from this synthesis in the eighteenth and nineteenth century, it did so merely in order to engage in a new synthesis with the modern Humanist ideas which stemmed from the Enlightenment. It is suggested that the Christian 'appearance' of English education derives from two critical eras of our history. In the first place the beginning of popular elementary education (and the renewal of the public schools) took place against the background of the French Revolution. Christianity was seen as an essential support of the established order. Secondly the 1944

Education Act was produced in the context of the view that Christianity was a valuable ally against modern totalitarianism. Behind the Christian 'appearance' lay the rise of an almost completely secularised scholarship rooted in secular Humanism which proclaimed itself to be neutral and universally valid. This meant the effective end of the long standing Greek-Humanist-Christian synthesis and the movement of scholarship into a control of the whole field and Christian faith was regarded as, at best, quite irrelevant and at worst a source of bias and prejudice. The chapter closes with the suggestion that secular reason itself, the hope of Humanism, became deeply problematic. The identification of reason with scientific method was soon to be followed by a growing conflict and uncertainties in the philosophy of science concerning the role of reason in science; while the attempt to take a purely descriptive approach by means of linguistic analysis led to the complete fragmentation of the concept 'reason'.

Chapter II is centered around an examination of Paul Hirst's attempt to develop curriculum theory on the basis of a secular concept of reason. Hirst maintains that the notion of Christian education is 'self-contradictory' in terms of his view of the neutrality of knowledge. It is argued that Hirst's concept of reason - which has considerable affinities with that of Hegel - is logically incoherent and incapable of further development. It is suggested that his forms of knowledge fully reflect the fragmentation of identity and knowledge in modern Humanism, and that his whole philosophy serves to 'rationalise' this crisis. The remainder of the chapter sets out some features of the case that can be made for the possibility of Christian scholarship, arguing that even a Christian view of mathematics is possible, and that a religiously neutral view is impossible. The chapter concludes with an alternative view of the 'forms of knowledge' and identity which has been developed by the Dutch Christian philosopher Herman Dooyeweerd.

Chapter III is concerned with the mutual relations of epistemology, political philosophy and education. The focus is on the idea of the public control of education. This idea is traced from Plato and Aristotle and is seen to be closely connected with Secular Humanism in the modern world. It

occurs in Hobbes and becomes widespread in the Enlightenment, seen as a vital tool for implementing liberty, equality and fraternity. It is argued that the Humanist content of these ideals - which originally had Christian content - must necessarily exclude the Christian faith from public education and ideally from all education. It is argued that such public education rests upon and requires the idea of 'public knowledge' and 'public truth'. It is suggested that these notions, combining as it were, Rousseau's 'General Will' with Hegel's 'Reason' provide the epistemological foundations of totalitarian democracy. An examination of the liberal epistemology of Karl Popper and the anarchistic epistemology of Paul Feyerabend makes it clear that while they both explicitly acknowledge the vital role of 'irrational' commitments in human knowledge and the value of a diversity of commitments for the growth of knowledge, yet their individualism yields no institutional alternatives to state education. Popper's 'open' society and Feyerabend's 'open' education, it is argued, are both entirely abstract and negative in character and cannot be expected to provide a serious pluralist alternative to totalitarian democracy. The dissertation concludes with the case for the liberation of all education from state control together with the possibility of the various commitment (and therefore cognitive) communities being enabled - and encouraged - to develop their own educational and academic traditions.

Christianity and Humanism in English Education

Modern philosophy, as Michael Polanyi has convincingly argued, has been a massive attempt to eliminate commitments, 'prejudices' and presuppositions from human thought, and to seek direction from reason alone.[1] Descartes, the father of modern philosophy, sought to be critical and reject from consideration that which would not pass the requirements of reason, namely, clarity, distinctness and self evidency. This was, in a sense, the reversal of Augustines[1] credo ut intelligam[2] which assigned to belief a foundational role in human knowledge and who related knowledge to the activity of the Holy Spirit. Descartes sought to eliminate belief from any role in philosophy - and indeed in life - and looked to the light of natural reason for his sole illumination.[3] Such a step did, of course, have some sanction in the nature-grace dualism of Thomas Aquinas who took philosophy to be a semi-autonomous activity of natural reason, starting from the evidence of the senses. However, for Aquinas natural reason, without revelation, remained incomplete in its account of the world. It was also necessary to have faith in revealed truth which, though it went beyond reason, did not contradict it. Moreover, revealed truth stood above the deliverances of natural reason and could correct them if necessary, for philosophy was properly the handmaiden of Theology, the queen of the sciences.[4] Descartes, however, lived in the period of the disintegration of the medieval synthesis of faith and reason and was confronted by the conflicting claims of the Reformation, the Counter-Reformation and the Renaissance. Both the first and the last maintained a largely antithetical attitude to the medieval synthesis, the one finding its spiritual roots in the early church and the Scriptures, while the other looked to pagan antiquity and classical civilization. Both saw European man in need of regeneration, the former looked to God's grace while the latter believed man to possess within himself the resources for his own rebirth. The one saw man's very identity to be tied up in his relation to God, as God's image, creature and servant, while the latter thought that man could be rightly identified in terms of himself and wrote orations on the dignity

of man.[5a] At first it appeared that the Reformation and Renaissance were collaborating against a common enemy, medievalism, but soon it became apparent that each had its own distinctive direction, the one theocentric and the other anthropocentric. Even though he formally remained a Roman Catholic Descartes threw in his lot with the Renaissance. His epistemology with the radical anthropocentricity of the cogito ergo sum is a quest to find certainty and security for human thought and action without any reference to the Christian revelation whether understood in a Catholic or Protestant manner. This new certainty would place one beyond religion with its diverging creeds, its sects and factions and the consequent divisive wars. This new certainty held the promise of a united humanity, of liberty, equality and fraternity. Descartes thought he saw the model of human thought in the method of mathematics and universal human community intimated in the unanimity of mathematics. Such a vision of reason as providing a secure foundation for human knowledge and community has persisted as the central core of modern humanism.[5b] For example, Cohen and Nagel conclude their Introduction to Logic and Scientific Method with the following words:

> "... scientific method does enable large numbers to walk with surer step. By analysing the possibilities of any step or plan, it becomes possible to anticipate the future and adjust ourselves to it in advance. Scientific method thus minimises the shock of novelty and the uncertainty of life ...
>
> Scientific method is the only effective way of strengthening the love of truth. It develops the intellectual courage to face difficulties and overcome illusions that are pleasant temporarily but destructive ultimately. It settles differences without any external force by appealing to our common rational nature. The way of science, even if it is up a steep mountain, is open to all. Hence while sectarian and partisan faiths are based on personal choice or temperament and divide men, scientific procedure unites men in something nobly devoid of all pettiness. Because it requires detachment, disinterestedness, it is the finest flower and test of a liberal civilisation.

Both Paul Hirst's forms of knowledge and Karl Popper's open society - with its derivatives of open education and open mindedness - are expressions of this humanist tradition which have come to assume an important position in education[a] debates. The advent of such clear cut humanism on the educational scene is relatively new in Britain, and had little or no

advocacy prior to the 1870's. Indeed a central feature of English education, one which is often lost from sight, is the fact that education at all levels has been relatively recently dominated by the Christian Church and directed by changing conceptions of the Christian faith since Anglo-Saxon times. Not only were the Cathedral schools, as their name indicates church foundations but equally the ancient universities as the names of so many of the colleges intimate - Jesus College, Trinity College, Christchurch, All Souls, St. John's. The motto of Oxford University clearly reflects the Augustinian tradition confessing 'Dominus Illuminatio Mea'.

This tradition of the ecclesiastical control of education which continued into the nineteenth century, and to a much lesser extent into the twentieth, provides the often hidden point of departure for most contemporary reflections about education. The purpose of this present chapter is to make this explicit, and to clarify the nature of the conflict between Christianity and Humanism as it has shaped educational thought will proceed as follows. First a brief survey will be given of the mid-nineteenth century educational scene, interpreted in the light of earlier Christian educational involvment. This will be followed by an analysis of subsequent attempts to revive a Christian vision for education during the era of the second world war and the contemporary near termination of such concerns. Secondly some features of the crisis of contemporary secular humanism will be examined and particularly the increasingly problematic character of the central object of its faith and hope human reason. This will lead to an examination of Hirst's and Popper's ideas which constitute an attempt to bring renewal to humanism by reviving Hegelian and Liberal conceptions of reason respectively, and whose failure cannot but deepen the crisis of secular humanism, and consequently of the educational theory and practice which seeks direction from it.

A series of quotations will perhaps serve best to illustrate the earlier nineteenth century educational scene, dealing with the universities, the public schools and popular education in sequence. V.H.H. Green in The Universities writes that for ...

> .... At least seven centuries of their existence there would have been few to contradict Pusey's statement to the university commissioners in 1853 that:
> ... all things must speak of God, refer to God, or they are atheistic. History without God is a chaos without design, or end or aim ... Physics without God, would be but a dull enquiry into certain meaningless phenomena. Ethics without God, would be but a varying rule, without principle or substance or centre, or regulating bond; Metaphysics without God, would make man his own temporary God, to be resolved after his brief hour here, into the nothingness out of which he proceeded.[6]

In 1854 Parliament passed the first of the measures that was eventually to terminate the Church of England's monopoly of the ancient universities. The role which they had played comes to clear expression in a letter which Dean Burgon of Oriel wrote to a friend in that same year:

> Oxford, I fear, has seen her best days. Her sun has set and for ever. She never more can be what she has been - the great nursery of the Church. She will become a cage of unclean beasts at last. Of course we shall not live to see it; but our great grandchildren will: and the Church (and Oxford itself), will rue the day when its liberty and its birthright were lost by a licentious vote of a no longer Christian House of Commons ... The mischief will quickly show itself in some small respects. THE END will be the driving out the Church from what has hitherto been her fortress: and she will have to build herself little strongholds elsewhere.[7]

The same concerns animated the older and newer public schools. With respect to the chief ends of education Thomas Arnold of Rugby wrote to J.C. Hare:

> I hold ... that there are but two things of vital importance ... our duties and affections towards God, and our duties and feelings towards man; science and literature are but a poor make up for want of these.[8]

To the Praepostors on one occasion he said:

> What we must look for here is firstly, religious and moral principles; secondly, gentlemanly conduct; thirdly intellectual ability.[9]

Elsewhere Arnold summed up his vision as follows:

> The idea of my life, to which every thought of my mind more or less tends, is the perfecting of the idea of Edward the Sixth's reformers - the constructing of a truly national and Christian system of education.[10]

Likewise the introduction and maintenance of popular elementary education on a national scale was initiated and fostered by the Churches, both the National Society founded in 1811 and the British and Foreign Schools Society formed in 1808 and formally constituted in 1814. The aim of the former was stated as follows:

> The sole object in view being to communicate to the poor generally, by means of a summary mode of education lately brought into practice, such knowledge and habits as are sufficient to guide them through life in their proper stations, especially to teach them the doctrine of Religion according to the principles of the established Church and to train them in the performance of their religious duties by an early discipline.[11]

The aims of the British and Foreign School Society was similar except that it sought to provide a non-denominational Christian education. While it has been the case that, for the most part, Non-Conformists have largely abandoned any institutional involvement in education, the Church of England has, although not without hesitation, continued and extended its involvement in primary and secondary education and in the provision of teacher training. Not only so but the 1944 Education Act required of all state schools a morning assembly and the teaching of the Christian religion. Some Christian educationalists have concluded from such a survey as this - for which parallels can be found in most sectors of English life - that we are indeed a Christian nation possessing essentially Christian education and that consequently the proper role of the Christian is the defense of the educational status quo.[12a]

At this point a number of observations need to be made concerning our sketch of Christianity in English Education. The first is to note that ecclesiastical control does not necessarily imply a Christian curriculum. Indeed if we look carefully at the Christian tradition to which Pusey and Burgon appeal what is striking is the degree of synthesis with Graeco-Roman thought which is present. Some writers have described the tradition as 'Christian-Hellenic' and have seen it to be the main tradition until only a few decades ago. In the first phase of this tradition the study of theology was added to the seven liberal arts derived from Greek and Roman education. (In similar fashion the three Christian virtues of faith, hope and love were added to the four classical virtues of wisdom, courage, prudence and justice.)[12b] The second phase of the tradition was that of the Reformation, which by no means broke with the tradition of synthesis much though Luther's attacks on Aristotle and scholasticism might lead one to expect it. Luther had maintained that:

> I believe it impossible that the church should be reformed, without completely eradicating, root and branch, scholastic theology, philosophy and logic, as they are now received and taught and substituting others in their place. 13

Luther had entrusted Philip Melanchthon (1497-1560) with the reformation of philosophy and German education. The new philosophy was forthcoming and so Melanchthon, with Luther's confidence, turned to the schools of antiquity. He found the Epicureans too atheistic, the Stoics too fatalistic in their theology and too extravagant in their ethics, Plato and the Neo-Platonists either too indefinite or too heretical. Melanchthon concluded:

> A kind of philosophy must be chosen which has the least sophistry and keeps a just method: such is the teaching of Aristotle ... We cannot dispense with the monuments of Aristotle. I plainly feel that great confusion of doctrine will follow if Aristotle is neglected, who is the one and only constructor of method, although he who takes Aristotle as his principal guide and seeks a simple and unsophisticated doctrine can also take something now and then from other authors. 14

Of Melanchthon's influence on German education John Herman Randall has written that:

> ... he gradually brought back into the body of Lutheran teaching ... much of the intellectual system of the Schoolmen and much of the ethical spirit of the Humanists. As praeceptor Germaniae he organized Protestant education along humanistic lines; he reinstated the idea of natural law, which Luther had opposed to the Gospel; he set natural theology once more beside revealed theology; and he crowned the educational ladder with a systematic philosophy. But it was not the Platonism of the Renaissance nor any of its Augustinian variants that he employed to consolidate the intellectual life of Lutheranism; it was Aristotle as the Humanists understood him, with a strong Stoic and Ciceronian admixture in ethics. And for a century and a half the Protestant Universities in the Germanies were given over to a sterile Aristotelianism that shut them off from all contact with the currents of modern philosophy or the rising tide of natural science. 15

Nor was the situation much different in the reformed protestant countries. In Holland for example, ministers and members of the teaching profession saw that the spread of Descartes philosophy posed a threat to their teaching and they fought to defend Aristotle. Gisbertus Voetius,[16] one of the leading Calvinistic theologians of his time led the attack on Cartesianism which resulted in its prohibition by the Senate of Utrech University in 1642. Part of their judgment declared:

> That they reject this new philosophy, firstly because it is contrary to the ancient, which now hitherto with good reason been taught in all the academies of the world, and that it

> subverts the fundamental principle on which it rests; secondly because it turns away the young from the study of the old and true philosophy, and prevents them from arriving at the fullness of erudition, because, being once imbued with the principles of this so-called philosophy, they are no longer capable of understanding the terms made use of by the authors in their books, or those used by professors in their lectures and disputes, and finally because not only do many false and absurd opinions follow from this philosophy, but an imprudent youth can deduce from it certain opinions which are opposed to the other disciplines and faculties, and above all to the orthodox Theology.[17]

The situation was much the same in mid-seventeenth century in England. The Puritan divine John Owen in an address as vice-chancellor of Oxford University spoke of theology as '.. the queen and mistress of the other branches of learning, and it is our special task to see that they are ready handmaids to it.'[18a] The phrasing is clearly Thomistic and it was a degenerate Aristotelianism which prevailed during Owen's vice-chancellorship, bitterly complained about by Locke who was a student there at that time. Puritan Cambridge, by contrast, was to a large measure under the spell of Neo-Platonism, which had been first introduced into England by John Colet (1466-1519) from the Renaissance Italy of Pico Della Mirandola and Ficino of Florence.[18b] The Cambridge Platonists are celebrated for their appeals to 'Reason' which according to Whichcote is "the candle of the Lord", and to follow which, John Smith declares, is to follow God.[18c] However it would be entirely wrong to leave unmentioned the Puritan concern for the reformation of learning which showed the marked influence of Francis Bacon and Comenius. This involved proposals for the inclusion of scientific and technological subjects within the curriculum as well as that of universal education.[18d] The Restoration with the Clarendon code effectively delayed the implementations of these proposals for over two centuries. In this content it should also be said that while there was a close involvement of Puritanism with early modern natural science, yet their widespread espousal of what Merton has called an epistemology of 'empirico-rationalism' led to the rapid secularisation of science during the next century.[18e] Likewise Robert Boyle's adoption of the reductionistic 'Corpuscular or Mechanical Philosophy' was to lead in the same direction.[18f]

The educational theories of the later dissenters, though they broke to some degree with this orientation to pagan Greek philosophy, merely replaced it with a contemporary form of new humanistic philosophy. One example must suffice. Isaac Watts, best known as an orthodox eighteenth century hymn writer, was equally well known in his own time for his philosophical and educational writings.[19] His affinities with both classical and modern humanistic thought are evident enough in his Logick when he effectively defines man as a rational animal:

> REASON is the glory of human nature, and one of the chief eminences whereby we are raised above our fellow creatures, the brutes, in this lower world.[20]

Watt's conception of 'reason' is clearly Lockean in both his Logick and The Improvement of the Mind.

The first qualification, then, which we wish to make concerning the claim that Christian education has prevailed until the 19th century or till more recently is to draw attention to the compromised synthetic character of such education. The underlying assumption seems to have been that Christian education can be no more than the adding on of Biblical or doctrinal instruction to what is regarded as an otherwise neutral education. In such a situation two consequences are likely in varying degrees. Either the added 'religion' is not related to the vision of life that underlies the remainder of the curriculum which easily leads to the conclusion that such 'religion' is certainly irrelevant to this life and of marginal significance. Or 'religion' is related to the vision of the school in which case it is likely to be transformed into something very different from its original meaning. Consequently instead of religion providing the ultimate orientation of the whole of school life, the school uses religion to legitimate itself and its own concerns, thereby making a Durkheimian or Marxist account of the situation come very near to the truth.[21] With respect to our contemporary context we could suggest that where this is the case school religion uses elements of Christianity (Scriptures, hymns and prayers) and also of other traditional religions to legitimate the school order. This makes understandable the extremely high degree of participation of teachers in morning assembly and the inevitable participation

of the headmaster. Failure in this respect would be regarded in the first place as 'letting the school down' which is hard to forgive. There is no objection to either faith in God or atheism, as long as it is not divisive, although the latter is more generally assumed. It has been particularly easy for the Christian religion to lose any directive function in English life due to our Burkean passion for continuity whereby the formal continuity of institutions is carefully preserved while the reality is transformed.

The second qualification we wish to make follows closely from the first. It has been the Enlightenment which has been behind the main drift of English education and the development of various disciplines. For the most part the Christian 'appearance' of education in the 19th century and today derives from two periods of heightened national consciousness. The first was a response to the French Revolution with its clearly avowed anti-clericalism which threatened the established order in England in Church and state. The choice appeared to be between the Christian religion and order or irreligion and revolution.[22] It is clear that the former could be chosen either from Christian commitment or from commitment to the established order or from a mixture of both. It is not without interest that the National Society's statement mentions preparing the poor for 'their proper stations' because many thought that the provision of literacy among the masses would be subversive of national security by providing access to revolutionary literature. The second period of heightened consciousness was the period before, during and for a decade after the Second World War which formed the context of the 1944 Education Act. The choice then seemed to many to be between Christianity and democracy and either a Marxist or Facist totalitarianism which had an atheistic and pagan outlook respectively. This period saw a flood of Christian publications about education. Many of them compared the clarity of educational aims of the totalitarian states with the diffuseness of English educational aims. M.V.C. Jeffreys wrote in Glaucon: An Inquiry into the Aims of Education that:

> The most serious weakness in modern education is the uncertainty about its aims. A glance over history reminds us that the most vital and effective systems of education

> have envisaged their objectives quite definitely, in terms of personal quality and social situations. Spartan, Feudal, Jesuit, Nazi, Communist educations have had this in common, they knew what they wanted to do and believed in it. By contrast education in the liberal democracies is distressingly nebulous in its aims. [23]

One can distinguish three strands in the Christian response to this crisis of educational aims. Typical of the first sort are the prolific writings of Sir Richard Livingstone, whose books went through many editions. His hope lies in what he sees as the restoration of the Christian-Hellenic educational tradition. Two passages from his The Education of the Future (1941) are indicative of his orientation:

> Suddenly and somehow the whole bottom has fallen out of our civilization, and a change has come over our world, which, if left unchecked, will transform it for generations. It is the death, or the deathlike swoon of Christianity (Lenin and Hitler knew their enemy; and the Church of Italy knows its enemy), and also of the moral and religious ideas with which Greek and Christian thinkers tamed barbarism ..., The spiritual life of Europe, its civilization in the full and deep sense of the word, comes from two sources and only two, Greece and Palestine. The share of the latter is obvious but we must not underestimate the former - no one who knows the Greek achievement will. Christianity and Hellenism, these, I respect, are the sole sources of the spiritual civilization of Europe. On them nineteenth-century education was based, and they penetrated and moulded the ideas and conduct of its thinkers, and very largely all its educated men. [24]

Besides Sir Richard Livingstone there were many other leading Christian educational thinkers, for example, William Temple and Ernest Barker, also steeped in Greek philosophy and consequently advocating the perpetuation of the Christian-Hellenic tradition.

The second group included such men as W.R. Niblett, M.V.C. Jeffreys, T.S. Eliot, Sir Walter Moberly and Fred Clarke. They saw the Christian-Hellenic synthesis as a serious compromise of Christianity. M.V.C. Jeffreys, for example, in Education Christian or Pagan (1946) maintains that Livingstone:

> ... shows no conception of Christianity as a revelation or as a gospel of salvation; for him Christ and His gospel, like Plato and his teaching, are one important ingredient in our western culture. We recognise idees mères of our civilization in the cardinal virtues of Plato - Wisdom, Courage, Temperance and Justice, and in the longer list of Aristotle which he adds to these Intelligence, Moral Insight, Liberality, Munificence, High-mindedness, Right Ambition. Good Temper, Friendliness, Truth, Just Resentment, Modesty. Christianity, in the Beatitudes and elsewhere in the

> New Testament, but most of all in the life of its Founder, modified and added to, but did not supercede this vision of human greatness. There is nothing here about conviction of sin and the need for redemption ... It is, in short, a view of religion which is pragmatist and humanistic, conceived in terms of man's spiritual aspiration and moral progress with little or no discernment of the central truth of Christianity that 'Christ Jesus came into the world to save sinners', a view that finds explicit reference to Christ and Christianity embarassing, and prefers a broadminded and well meaning eclecticism that leaves everyone free to make things mean what he likes ... The truth is that, in spite of the European adoption of the Christian religion, the prevailing cultural tradition of the West has been Hellenic rather than Biblical.[25]

However, while rejecting the Christian-Hellenic tradition this second group tend to endorse the liberal university as if it were Christian, or at least fully acceptable to the Christian. The writer of the general preface of the University Pamphlets published by the Student Christian Movement in 1946 assures the liberal university that it stands in no danger from what the pamphlets advocate:

> I trust it is not necessary to do more than say briefly that any form of 'Christian authoritarianism' or 'ecclesiastical control' is far from the minds of the writers ... The writers believe that a 'free' university is for the good of Christianity itself. 26

Apart from their attachment to the liberal university the writers of the pamphlets vary in the concerns they advocate. Dorothy Emmet asks whether Christians should look for 'an agreed philosophical outlook' and replies:

> If this means the attempt to overcome the atomization of knowledge into different subjects and specialisms by achieving a new comprehensive synthesis, a kind of modern Summa Theologica, I am doubtful whether in the present state of knowledge this is either possible or desirable. We are, I believe, at a stage in which such an external unity in the pattern of knowledge could only be achieved by the imposition of an ideology. By an 'ideology' I mean an oversimplified unity of outlook achieved by the domination of one particular interest or type of thinking over others. For instance, the 'scientific outlook' in art or ethics might be an ideology, and so might the theological or moral dictation of what should be the results of scientific enquiry. Now the departmentalizing of knowledge at the present time is partly due to the fact that those pursuing different kinds of enquiry are almost wholly concerned with problems which lie within the sphere of their own proper presuppositions. 27

By way of contrast H.A. Hodges regards Christian students and academics as having a positive and constructive task, and calls for the development of a Christian logic. This he describes as follows:

> What I mean is a study, not of one department of thought, but of human thinking in general, carried out in the light of Christian faith. This faith has a real light to shed. It is true that there is a kind of formal logic, perhaps better known to students than any other, which is so abstract that no faith, Christian or other, has anything to do with it; but there is also a wider treatment of the subject, which takes in such questions as the nature and criterion of truth, the limitations of human thinking and the extent to which they can be overcome, the relation between thought and its object, and the part played by thought in life. Such questions lead us in the end to the fundamental issues of the nature of man and his place in the scheme of things, and here Christianity has a word of its own to say. It is impossible that the reflective Christian should take the same view of the nature and function of human thinking as is taken by some of the movements of our time. In short, there are consequences for logic which flow from the Christian faith, and we ought to set ourselves to find them.[28]

The third and most radical trend, which shares Professor Hodges' concern to develop a Christian logic and posits some deeper criticisms of the liberal democratic university is best represented by Arnold Nash's: The University and the Modern World. Nash proposes a new international order of Christian scholars for whom he recommends a four fold task.

1. To discover an answer not only to the question: 'How can we as individuals serve God in the University?' but also to the question: 'How can the liberal democratic University itself be a witness to the Glory of God?'
2. To discover the meaning of Christian vocation for a man or a woman who is a chemist, sociologist, historian, psychologist, mathematician and the like.
3. To apply Christian criteria in the working out of the presuppositions which are relevant to the study of individual academic subjects and to discover the place in a Christian speculum mentis of the knowledge given in such specialized subjects.
4. To work towards an intellectual synthesis for the twentieth century, which as an interpretation of human life and destiny, can be set over against the positivistic, the Marxist, the liberal humanitarian Weltenschauung now current in the liberal democratic world. Such a speculum mentis will be dialectical between the two poles of unity and freedom. Like Scholasticism it will derive its unity from its theological basis which will provide its presuppositions. But it will differ from Scholasticism in that specifically theological sections of the maps will not determine the nature and character of the 'non-theological' sections. God, not theology or any system, is sovereign. [29]

This proposal marks the high point of Christian academic radicalism from which there has been a continuous retreat ever since,[30] the writings of Paul Hirst representing the most extreme repudiation of these proposals. The explanation of this retreat is complex and many of the factors appear to interlock. The following suggested factors apply in varying degrees to

the three different trends we have mentioned.

a) Without doubt many looked to the Christian Faith as a source of morale and national unity in wartime, as a transcendent legitimation of the rightness to wage war against the Nazis. (Indeed, even Karl Popper in his wartime book, The open Society and its Enemies speaks highly of the Christian Faith and is eager to assure us that none of his principles are incompatable with it).[31] This was, of course, coherent with Erastianism and the Anglican identification of Church and Nation. When the emergency of wartime passed and when it became ever more difficult to identify Church and Nation the serious advocacy of Christian scholarship and education could mean nothing other than a repudiation of the ultimacy of both national and educational unity. This is something which none of the writers we have mentioned seemed to be prepared to countenance. While they all appeared quite prepared to tolerate a diversity of educational institutions based largely on class (e.g. public, grammar and secondary modern schools) they didn't at any time consider the possibility of diverse educational institutions based upon diversity of world view, and in particular Christian schools, colleges and universities. Sir Walter Moberly in The Crisis in the University momentarily does consider the possibility but rejects it. His response is instructive. He writes:

> We have now to choose between two policies, one of which must be adopted and acted upon with determination. Either we must regard ourselves as a small Christian enclave within a predominantly pagan university, like the early Christians in the Roman Empire, or a Christian group within a Chinese, Indian or Russian university today; in that case, we must decline responsibility for a machine which we cannot hope to control, we must separate ourselves more sharply, as dissenters, from the sub-Christian motives and practices of the majority, and we must devote ourselves to securing sufficient freedom of action to build up an intensive Christian life within the small circle of the faithful. Or, as is here strongly advocated, we should aim at exercising influence on the university as a whole. We should then seek to play the role of a 'creative minority' from which the whole community may gradually take colour; as, for example, the Utilitarians in one generation and the Fabians in another permeated British public life and shaped both legislation and administration. No doubt it would be fanciful to expect that, in any near future, British universities will be filled by good Christians, but they may still in a significant sense be Christian minded universities.[32]

What is striking about the two alternative policies that Moberly proposes is that both presume the continuance of the liberal university as the university. Consequently he sets before us a choice between the Inter-varsity Fellowship (I.V.F.) policy of 'in it but not of it' and the Student Christian Movement (S.C.M.) policy of 'in it and of it'.[33] Moberly does not countenance the possibility that Humanist and Christian principles are so radically opposed that a common institution cannot cater adequately to their diverse perspectives and interests. Indeed having started his book by declaring the crisis of the university to be the fruit of modern unbelief he concludes by appearing to maintain the actual or potential Christian character of the contemporary university. First, at the individual level Moberly maintains that 'Whether he looks like it or not, every student (or potential student) and every teacher is made in the image of God, has been redeemed by Christ, and is in the process of preparation for eternal life.'[34] The consequence of this universalistic soteriology is that all the members of the liberal secular university are already Christians whether they know it or not ... even whether they like it or not! Secondly his programme of 'Christianization' involves three principles (a) the value of individuals (b) hopefulness in the face of difficulties and (c) the rejection of utopianism. He brings against this programme the criticism that:

> You talk much of 'christianizing' but the actual reforms you suggest have little to do even with theism. They are such as the humanist also often wants and wants on precisely the same grounds as you. You advocate them on grounds of natural reason and not of any distinctive, biblical insights. They are possibly desirable in themselves, possibly even compatible with Christianity but Christianity is not their driving force, nor in your picture is God really the keystone of the arch. 35

Moberly admits the force of this criticism, while continuing somewhat equivocally to defend his position. In the end his Christian educational ideal seems to be none other than the 'best course practically possible i.e. the best for which the genuine consent of a sufficient number of people is obtainable ...'[36] Thirdly, in the closing paragraph of his The Crisis in the University he speaks of the contribution such a policy will make to 'the family life of the university'[37] a phrase which intimates

that he would not think well of any 'dissenting academy' whether Christian or otherwise. Moberly thus makes peace between his Christian faith and the educational status quo by removing the scandal from the former by making its implications mildly humanitarian and by Christianizing the image of the latter.[38] The consequence is that no authentic educational alternative can appear till all (or the majority) of the members of a society are Christians. The underlying assumption here is that of a closed society which will not tolerate a plurality of a diversely orientated educational institutions, viewing them as divisive and insisting upon a single institution based on what are taken to be common assumptions and values. Consequently the aims of such institutions tend to be vague in the extreme and even contradictory so that no one will feel excluded or protest. Such institutions (a) have little resistance to political control and (b) by their attempt to be all things to all men in the end will satisfy no one.[39]

b) A second major reason for Nash's proposals not becoming articulated as a worked out and influential philosophy of education is that while Nash eschews compromising his Christian vision with Hellenic philosophy he fails to perceive that the thinkers to whom appeals (e.g. Reinhold Niebuhr, Nicblas Berdyaev, Paul Tillich, Karl Mannheim, etc.)[40] are themselves largely shaped by the modern Humanist dialectic of the science and personality ideal.[41] The tendency - which is also present in Barth, Brunner and Bultmann[42] to whom others appeal - is to interpret Christianity in the light of the humanistic personality ideal with the consequence of having to cope with the science ideal which becomes something over against the former. Existentialistic versions of Christianity tend to depreciate human culture generally as the realm of inauthenticity and regard the only true culture as the cult of the self.[43] This means that theologians such as Barth and Brunner strenuously repudiate any idea of a Christian philosophy or Christian culture and so by implication a Christian education. Furthermore as the science ideal is identified as abstract systematic knowledge the whole issue of the structure of curriculum is left untouched

apart from the demand that at least some of it - in the form of religion or theology or philosophy - caters to the personality ideal.

c) A third major reason is closely connected with the science ideal of humanism. It is the view that each of the academic disciplines is self-contained or autonomous, and neither having nor needing deeper religious or philosophical presuppositions or direction. We have encountered a form of this view already in the lengthy quotation of Dorothy Emmet in the claim that "those pursuing different kinds of inquiry are almost wholly concerned with problems which lie within the sphere of their own proper presuppositions." The autonomy and consequently the religious neutrality of the various forms of knowledge (and techniques) is something about which there is considerable ambivalence in the Christian writers of this period. On the one side there is devotion to an ideal of unbiased, value free objectivity, reinforced by the spectre of totalitarian governments (and churches) dictating Nazi mathematics or Communist biology or Ptolemaic astronomy. On the other hand it was hard to accept the view that Christianity which was regarded as a whole view of God, man and the world made no difference to the various disciplines. M.V.C. Jeffreys in Education Christian or Pagan writes:

> In one sense there is no such thing as Christian education, just as there is no such thing (to name an operation that has much in common with education) as Christian agriculture. There is good farming and bad farming, good education and bad education; and about the connection of Christianity to these activities one thing can be said positively - that to be content with bad farming or bad education is less pardonable in Christians than in other people ... Viewed in this way Christian education is nothing more nor less than education carried on to the best of their ability by Christians. That is to say there is no specifically Christian technique, though there are Christian values which can and should determine the choice of aims and methods and thus exert an indirect influence on technique. 44

From this passage we can abstract three propositions, (a) there is no such thing as Christian education (b) Christian education is education given by Christian teachers (c) Christian education is education whose aims and methods are determined by Christian values. The strongest proposition appears to be the last, but then the 'Christian values' may turn out to be those of Moberly for which the qualification 'Christian'

may appear more or less redundant. We are also left in the dark about what 'good education' might be: is it education which is universally recognised to be good by all possible ideological viewpoints ... or is it education whose aims and methods are determined by Christian values ... or is it an 'essence' which all 'rational men' are supposed to recognise. These ambivalences have persisted to the present time, with Paul Hirst as the leading advocate of the autonomy of the disciplines and of the consequent impossibility of 'Christian education' at the greatest remove from Nash's educational vision.

c) Finally in order to understand the difficulties in articulating Nash's vision we must not focus exclusively on the confusions of Christendom but draw attention to the fact that the Second World War marked a turning point in the world of education. From that time British education has increasingly repudiated the Christian-Hellenic educational ideal of Oxbridge and the public school, a fact symbolically summarized in the film "If". We witness the rapid growth of far larger educational institutions, programmed learning, management techniques, computerization, the prestige of science and technology, the democratization of education. On the other hand we see the virtual disappearance of the classics with the associated respect for tradition; and the universities instead of being the great guardians and transmitters of traditional culture have become its most determined critics.

This break with the past is also evident in the educational disciplines. Psychology and sociology of education are orientated to present research, while history of education representing the values and achievements of the past has all but disappeared. The names of Loyola and Comenios are unknown and the massive contribution the Church has made to Western education is unsuspected. A consequence of this is that present forms of education tend to take on an aura of necessity and inevitability which the study of past education (or comparative education) would help to dispel. Furthermore both the modern psychological and sociological traditions work from radically secularized assumptions. Freud, Skinner, Piaget, Marx, Durkheim and Webber have mutually exclusive 'explanations' of Christianity none of

which relates it in any way to Divine revelation, the possibility of which is rejected apriori. Nor do any of them in any sense seek to develop a Christian psychology or sociology.

With respect to the philosophy of education the writings of Nash, Moberly, etc. came at precisely the time when a shift was beginning in the centre of gravity of the subject following a shift in philosophy which began about a decade before. The philosophy of education had been - and continued to be often into the sixties - taught in a largely historical manner with Plato, Rousseau, Newman and Spencer often being the focus of attention. One went to past educational thinkers to find wisdom for today, to help one construct a contemporary philosophy of education. Even when the orientation was less historical and more modern, philosophy of education was seen as a matter of developing a view of education on the basis of a recognised philosophical system. For example in the preface to his The Philosophical Bases of Education (1928) Robert R. Rusk writes:

> The scientific or naturalistic standpoint has been ably stated in Professor Nunn's Education: Its Data and First Principles; the practical or pragmatic in Professor Dewey's Democracy and Education; this work offers a restatement of the philosophy of education from the idealistic standpoint.[45]

In the body of his book Rusk has chapters dealing with the implications of Materialism, New Realism, Naturalism, Progmatism and Idealism for education. However it should not be overlooked that this older philosophy of education with its more generous orientation to the past and its willingness to recognise as legitimate a diversity of philosophical viewpoints that neither Plato, Rousseau or Spencer nor the positions discussed by Rusk held much promise for the development of a Christian philosophy or philosophy of education such as Nash had programmatically recommended. Nor did the subsequent shift in academic philosophy of education under the impact of logical positivism and analytic philosophy improve the situation; if anything, it deteriorated. A.J. Ayer's Language, Truth and Logic (1936) denounced the traditional attempts to formulate a general theory of reality as cognitively meaningless and left no doubt that the idea of a Christian metaphysic was absolutely to be excluded. Indeed in a critique of Rudolph Carnap's logical positivism Karl Popper proceeded

to defend, for the sake of his argument, what he called 'the arch-metaphysical assertion': 'There exists an omnipotent, omnipresent and omniscient personal spirit'.[46] At best for the positivists, such an assertion could be but an emotional expression. However there was not lacking the suggestion that such metaphysical tendencies might be symptoms of emotional (if not of psychiatric) disturbances from which enlightened secular men ought to be free. In the face of the growing failure of positivism to establish its contentions concerning the meaningless of metaphysics there arose the view that metaphysics required therapeutic treatment rather than argument, and concrete reminders of what there is in order to cure delusions of generality. If anything it was secularized common sense plus science that was regarded as supplying whatever was needed in terms of a grasp of reality. A.G.N. Flew, one of the spokesmen for 'the revolution in philosophy' maintained that:

> ... enterprises of metaphysical construction have seemed less and less practicable, less and less respectable. For anyone who has seen how much muddle and perplexity, how much paradox and absurdity, has already been traced back to its tainted sources in misleading idioms, or in unexplained and unnoticed distortions of standard English, must suspect that any further metaphysical construction which he might feel tempted to erect would soon meet with a similar and embarassing debacle under the assaults of the new 'logic and critic'. 47

The phrase 'the revolution in philosophy' was coined by Ryle as the title of a collection of papers by leading members of the revolution in 1956. The suggestion came that at their best the pre-revolutionary thinkers e.g. Plato, Aristotle or Kant were really doing the same thing i.e. 'philosophical analysis' although this was by no means intended to diminish the significance of the revolution but rather it served as legitimating the claim to be called philosophers, indeed the claim to be the only movement doing acceptable philosophical work.[48] When Herman Dooyeweerd, a leading Dutch Christian philosopher, called into question the claims of philosophy concerning its religious and ideological neutrality in Transcendental Problems of Philosophic Thought the reviewer in Mind paid scant attention to his arguments but rather simply re-affirmed his faith in the revolution. The reviewer ended by averring:

> Dr. Dooyeweerd is hardly likely to make many converts by this book, especially among those who feel that the errors in the metaphysical systems of the past and in many of the '-isms' of today are sufficiently explained as due to bad logic, misconceptions about language or mathematics, etc. without recourse to the hidden workings of religious motives. [49]

Not only was pre-revolutionary philosophy dismissed but almost all past philosophy was disqualified - with the possible exception of certain highly limited epistemological aspects of the work of Locke, Berkeley and Hume, themselves unhistorically interpreted. This represented a severe break with the Western intellectual tradition and cultural heritage. The virtual exclusion of the history of philosophy from philosophy meant a rejection of the classical and Christian tradition, and indeed of the secularized revisions of that tradition e.g. the writings of Hegel, Comte, Marx, Spencer and almost all subsequent continental philosophy.[50a] Two of the particular targets of English positivism were absolute idealism and existentialism, partly because of their doctrines but perhaps even more because of the type of questions to which their doctrines were answers. With respect to absolute idealism, it was in a Hellenic-Idealist-Christian synthesis that the educated later 19th and early 20th century clergy took refuge against the renewed militancy of the Enlightenment tradition in the form of scientific naturalism and empiricism.[50b] Consequently idealism was perceived to be part of the apologetic armoury of Christendom. Warnock hazards the suggestion that in fact Idealist metaphysics, for those who had left behind any distinctive Christian belief (e.g. T.H. Green, F.H. Bradley, B. Bosanquet, J.E. McTaggart) has "... arisen from, and often too become a substitute for, religious or theological doctrine".[51] Gellner indeed speaks of absolute idealism as being the established religion of the period. While idealism remained powerful, irrespective of whether it was somewhat Christianized or not, it had the function of keeping open the large questions about the meaning of life - God, values, man, society and the world - which retained Christian answers as possible answers, recognising as it did that 'science' and 'common sense' did not exhaust the matter. A similar account is possible of the animus of the analytic tradition against existentialism

which kept alive - almost with a vengence - the large questions, and often indeed the existentialists used visibly theological language to voice their concern. Nietzsche, Heidegger, Sartre and Camus work out in their own distinctive ways the serious consequences of atheism - the repudiation of the central affirmation of Christendom - and arrive at conclusions remote from those which could be welcomed by the spiritual descendants of the Enlightenment. Indeed so remote as to almost constitute a reductio ad absurdum of atheism and consequently a powerful Christian apologetic. On the few rare occasions when analytically orientated philosophers do touch upon the large question of the meaning of life one can almost feel the embarassed reticense with which it is discussed. Karl Britton in Philosophy and the Meaning of Life writes:

> My conclusion is that life has meaning because of the following facts - if they are facts but not if they are inventions:
> (1) A man may be guided by his own convictions.
> (2) The life of a person matters in itself; because it may matter to him and it may matter to other people.
> (3) The relationships between persons matter in themselves and many of them are of value in themselves.
> (4) A person may detect and accept a particular pattern in his own life. If so, he may be guided by it in the restricted sense I have explained. 52

A far less thin and formal account is given by John Passmore in The Perfectability of Man:

> These are the men to be feared above all others - the Robespierres who 'love humanity', the Inquisitors who 'love God'. The loves which determine the quality of a society are not such pseudo loves as these but what, relatively speaking, might be called the 'little loves' - the love of one's work, of one's friend, of works of art, or scientific and technological achievements, of justice, of political freedom, of one's community, one's wife, one's children ... 'To be a man' Sartre has written 'means to reach towards being God'. That is why he also describes man as a 'useless passion'. For certainly man is a 'useless passion' if his passion is to be God. But his passions are not useless if they help him to become a little more humane, a little more civilized. 53

Passmore's account, though it appears more contentful still seems to suspend judgement at the deepest level leaving one to wonder what the actual content of the 'little loves' should be, for one lacks a principle for their ordering and interpretation. Such a suspension of judgement seems endemic amongst those who see a focus to life as inevitably constricting and reductionistic.[54] Such a 'pluralism in a vacuum' we have

encountered already in Dorothy Emmet and will encounter again in Paul Hirst's and image of the educated man in Ernst Cassirer's anthropology. A consequence of such a view is that a man easily becomes the sum of his roles in society and lacks any deeper identity, a 'mass man' lacking 'authenticity' in existentialist terminology.[55] Such a pluralism, connected with Wittgenstein's idea of the diversity of language games which are played, has been basic to the later analytic philosophy itself to which we now turn.

G.J. Warnock in his well known English Philosophy since 1900 does his utmost to discredit metaphysical questions particularly, one feels, to eliminate amongst others possible Christian answers. First he contrasts metaphysics with science, in particular the theory of evolution (a particularly ill chosen example) of which he says that it is "... supported not so much by arguments and would be arguments as by an immense variety and range of empirical facts."[56] Secondly he disqualifies metaphysics in terms of a near dogmatic affirmation of common sense. "It appears" he says "to be most evidently true that, in its simple foundations, our ordinary 'way of seeing' the world is absolutely stable and obstinately unshakable."[57] Thirdly, and it seems at complete variance with his previous objection to metaphysics, he plays the relativist and maintains:

> It has ... become almost impossible to believe that some one way of seeing, some one sort of theory, has any exclusive claim to be the right way; the notion of 'reality' itself, it would commonly be held, must be given its sense in terms of some particular theory or view, so that the claim that any such theory reveals or corresponds to 'reality' can be given a circular justification which is also open, in just the same way to quite other views as well. [58]

Warnock clearly reserves his relativism for 'metaphysics' and in no way will allow it to undermine his faith in the virtual infallability of science and common sense ... and as we shall see, analytic philosophy. Fourthly he leaves us in no doubt that those who wander out of the way of science and common sense must be suffering from a condition which is simultaneously pathological and religious. He writes:

> To be, after all, sufficiently obsessed by a visionary project of intellectual reform to spend years upon its systemization and propogation is, fortunately no doubt, a very rare condition ... such ... labours are surely as pointless as they are usually uninteresting ...

> the condition of true metaphysics fervour ... depends in large part upon a kind of illusion ... (and) ... cosmic anxieties. 59

And so with a rhetorical sweep, it seems that Plato, Aristotle, Aquinas, Descartes, Spinoza, Leibnitz, Kant, Hegel, Marx et al are dismissed. Fifthly, with reference to the suggestion that philosophy should deal with fundamental beliefs or Weltenschauungen Warnock avers his view that ... "when one comes to look into these questions at all closely, they either break up or melt away to such a degree that any general statement becomes quite impossible."[60] This, of course, is bound to be the case with any general statement if by "look ... at all closely" means to be guided by Bishop Butler's nominalistic dictum that 'Everything is what it is and not another thing'. If such a policy were followed consistently it seems that even language would be rendered impossible. Both analysis and synthesis are involved in logical normativity, both logical distinguishing and logical identifying. 'Analytic philosophy' as its name indicates has a fixation with logical distinguishing and speaks as if this is (a) only proper task of philosophy or (b) the only proper task in this historical epoch. However, synthesis is, of course, always present in that analysis and synthesis are interconnected. Analysis always presupposes some theory of relevant differences and good distinctions even if those (thought to be) present in ordinary language are embraced. All 'analysis' occurs therefore within a wider synthetic perspective, without which it would become quite directionless. There is no logical analysis without logical synthesis (the possibility of concepts requires that) and neither can occur outside of a philosophical framework shaped by a religious groundmotive, as I shall argue later. Any such suggestion is most unwelcome to Warnock. He himself refers to the suggestion that analytical philosophy is not ideologically neutral and that its "... views and proceedures are not distinct from, unrelated to, matters of Weltenschauung variety, so that for philosophers to distain any concern with these matters amounts in fact to their being blind to the implications of their practices". To this he replies "What is certainly lacking is any demonstration of the ways, if any, in which current

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philosophy has such general implications, to set against the undeniably plausible *prima facie* contention that it has none. However, this might be attributed to the difficulty of becoming aware, at any given time, of the deepest, most unquestioned presuppositions of the day. If so, it would be the course of prudence to await with due humility the verdict of history."[61] Warnock's book was published in 1958 and one feels tempted to suggest that it was one year later, in the form of Ernest Gellner's *Words and Things* that the verdict of history arrived. The verdict has been studiously ignored by those of Warnock's persuasion. He is so confident of the neutrality of analysis that he is able to end his book with the parting insinuation that ... "they only need feel strongly hostile to contemporary philosophy who have cause to fear or to dislike a clear intellectual air and a low temperature of argument." [62]

So far in this chapter we have reviewed both the inner weakness of past Christian involvement in education due to the effect of synthesis which has both resulted in a dialectical dualism of nature and grace, and has divided the Christian community into parties who have engaged in different types of synthesis. We have also touched upon the external hostility of philosophical and educational thought during the last four decades. Both of these factors have taken a heavy toll of the exciting possibilities which were glimpsed by Christian writers during the era of the Second World War. Christian awareness has shrunk from the level of *weltenschauung* and *speculum mentis* to narrow ecclesiastical and theological concerns. So far we have not mentioned the development of theology so a few comments at this point might help to fill out the picture. Not inappropriately there is a chapter on theology in *Crisis in the Humanities* (1964), for theology has been caught up in the crisis of Western Humanist scholarship. Alec Vidler concludes his chapter by urging the setting up of Christian research institutes at the universities, with the hope that:

> We might find some English theologians emerging who would take the lead in adventures of the mind, instead of waiting for new advances to be made in Germany or elsewhere - and then making sure they are adapted for home consumption only in a safe form! Why is it that no theological classic, like Butler's *Analogy* or Maurice's *Kingdom of Christ*, has been produced in England

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> in this century? Our professional theologians have been admirably erudite and masters of critical acumen, but they never seem to have any devastating new ideas, at least not ones that they succeed in communicating outside their own coterie. Not until something of this sort happens will 'divinity' once more make a lively impact in the field of higher education or become again a natural talking-point wherever men face together their deepest beliefs and perplexities. 63

Theology's major point of contact with the general intellectual world has been with philosophy, both British and Continental. If theology is taken to be the scholarly exposition of revelation then both sorts of philosophy have tended to call the very possibility into question. The former doubts whether theological language has cognitive content while the latter, in correlation, denies that revelation can come or be expressed in unambiguous propositional form. To the subjectivism of the former the latter adds an individualism which tends to make 'God' the subject of a private unspeakable mysticism. Due to the failure to develop a Christian philosophy to undergird and structure theological thought no major work in systematic theology has been undertaken in Britain. Furthermore the acceptance of analytic or existentialist philosophy by theologians has meant that anything in their positions which went beyond or contradicted Humanism was rendered problematic. Consequently a major part of their effort went into the attempting to show that some sort of Christianity was compatable with 'modern philosophy'. A reading of two representative volumes New Essays in Philosophical Theology (ed. A.G.N. Flew and A. McMacintyre) and Faith and Logic (ed. Basil Michell) gives the impression that Christianity is a marginal phenomenon which lives by the grace of modern philosophy. Not only are the Christian apologists usually a decade or more behind the state of philosophic debate, but they nowhere seriously question modern philosophy or penetrate to its deepest assumptions.[64] Analogies of this situation one finds in every field of human culture. A consequence has been that the Christian community has sought to either survive by isolation, or to win acceptability in terms of secularist norms and methods. The Christian world has been polarized between a clearly Christian but culturally irrelevent pietism and a form of Christianity which in its desperation to prove its relevence in terms of secular norms has all but lost any Christian

identity. The latter sees in the former a schizophrenic existence torn between quite unrelated 'sacred' and 'secular' concerns and advocates a unified existance even if this means a 'secular' or 'religionless' Christianity ... living without God. The former sense that the logic of the appeal to secular norms is that Christianity is bound to be unacceptable unless and until it becomes identical with the position which has posited these norms.[65] However pietism is invariably prepared to go along with these secular norms - for it has developed no Christian aesthetic, political, educational, etc. norms of its own - up to a certain point beyond which it is not prepared to negotiate. The difference between these positions is not radical but rather one of degree. Pietism is prepared to have most of life secularized whereas liberal theology is prepared to have almost all of it secularized. This has meant that Christianity has failed to develop its cultural potential on the one hand, and, on the other, due to synthesis, the crisis of Humanism has become its own crisis. It is to some central features of the crisis of Secular Humanism that we now turn.

The crisis of secular humanism, at the level with which we are concerned, relates to its central doctrine of reason. At the beginning modern western humanism largely inherited the late medieval faith-reason dualism giving primacy however to reason and increasingly depreciating (Christian) faith as 'unreasonable' and therefore as unacceptable. This development one can see as one moves from Descartes who regards faith with reverence (albeit as largely irrelevent to secular concerns including philosophy) to the politely veiled or unveiled hostility of the Enlightenment. Hume makes clear his exclusive and unqualified commitment to autonomous human thought in the form of philosophy:

> 'Tis certainly a kind of indignity to philosophy, whose sovereign authority ought everywhere to be acknowledged to oblige her on every occasion to make apologies for her conclusions, and justify herself to every particular art and science which may be offended at her. This puts one in mind of a king being arraigned for high treason against his subjects. 66

Here we have a clear inversion of the medieval relation of revelation and natural reason, of theology and philosophy. Young Karl Marx in his Ph.D. thesis rightly interprets the thrust of this quotation (along with some

similarly sceptical passages from Greek writers) as a declaration of opposition" ... against all gods, heavenly and earthly, who do not acknowledge the consciousness of man as the supreme divinity. There must be no god on a level with it."[67] This declaration of autonomy, this confession of the finality of man is the root of all humanist philosophy. The task of that philosophy then is to provide a theoretical formulation and expression of that humanist faith, in particular the vindication of the "consciousness of man as the supreme divinity". Two passages from contemporary leading Humanists make it clear that they recognise a difference between their humanist religion and its theoretical expression.

H.J. Blackham writes:

> There are humanist philosophies and non-humanist philosophies, but humanism is not a particular philosophy. If it had been it would have died and been embalmed in the history of philosophy. Technical philosophy is concerned with epistemology, ontology, axiology, ethics, metaphysics and such special disciplines. Humanism is immediately concerned with decisive answers to questions that will not wait for the resolution of puzzles and the settlement of age-old disputes. As theology does not invent Christianity but serves to formulate and to defend it, so the philosophies may be used to attack or to defend the blunt position of those who according to their lights and what they feel in their bones find themselves constrained to think that man is on his own and this life is all, and who go on to conclude that nevertheless human values are worth all the endeavour they exact. 68

In a similar spirit Cyril Bibby writes:

> Even though all available evidence of the workings of the universe seems to indicate that the present has followed inevitably from the past, and it might seem that the future will follow inevitably from the present; nevertheless the humanist has faith that he can in some way influence the future. Without such a faith, he could well be a rationalist and a philosophical materialist, but he would scarcely be a humanist. Such faith (and the word is justified, for the belief it expresses has not been and probably never could be proved) the humanist has something in common with the religious man. It is not so much that the latter is a believer and the former an unbeliever, but rather that one puts his faith in a deity and the other in humanity.69

This second passage adds to the first a recognition of the dialectic in the religious groundmotive of humanism between the ideal of science and the ideal of free personality. How is one to rightly characterize the supreme divinity, namely, the consciousness of man? Is it to be found in an autonomous <u>rationality</u> or in a rational <u>autonomy</u>, an unconditional science or an unconditional freedom?[70] Which of these is

to be given primacy leads to the first major division in Humanism. Further division occurs when the question is asked concerning the content of 'rationality' and 'autonomy'. One of the major tendencies has been to identify rationality with science. At first this was with scientific results and more recently with scientific method. This shift occured because of the increasing recognition of the ever changing character of scientific results in contrast with the assumed stability and reliability of scientific method. Allegiance to scientific method meant too that one was not committed to doctrines and theories which remained ever open to question, revision and rejection. Such an attitude, open and critical, was contrasted with the closed and dogmatic attitudes of others and especially those of Christian believers. A.J. Ayer in his introduction to The Humanist Outlook writes:

> They (Humanists) put their trust in scientific method, with its implication that every theory is liable to revision. This open, critical spirit has continued to be a distinctive mark of Humanism ... The hostility of the rationalists to religious dogma was ... envinced ... in their fidelity to the natural sciences. 71

Combining Bibby and Ayer we arrive at the view that the Humanist puts his faith in humanity and specifically in human thought and in scientific method, a method deserving all men's trust and fidelity. But what is scientific method? We encounter a diversity of disciplines claiming to be sciences, a greater diversity of 'methods' used by those disciplines. Further we find a diversity of disciplines (e.g. sociology of science, psychology of science, history of science, philosophy of science, etc.) studying science and producing very different accounts of it. If we simply restrict ourselves to the 'philosophy of science' for the moment then we detect the polarizing effect of the Humanist dialectic of 'science' and 'personality'.

Under the influence of the science ideal earlier philosophy of science maintained that there were the rules of scientific method which if properly applied to the facts would infallibly lead one to the laws of nature. Of this new method of induction Francis Bacon proclaimed "I have provided the machine, but the stuff must be gathered from the

facts of nature". Bacon further commented that ...

> ... it is an amazing thing to one who rightly considers the matter, that no mortal should have seriously applied himself to the opening up and laying out of a road for the human understanding direct from the senses, by a course of experiment orderly conducted and well built up, but that all has been left either to the mist of tradition, or to the whirl and eddy of argument, or to the fluctuations and mazes of chance and of vague and ill-digested experience.

If Bacon's own view can be called 'classical' then it is clear from such a viewpoint the 'romantic' alternative is going to be associated with the terms 'tradition', 'argument', 'fluctuations', 'chance', and 'ill-digested experience', and indeed, at least most of these terms have been used in contemporary reflections about science. Bacon's view of method, mediated by the canons of experimental inquiry of J.S. Mill's System of Logic have led to what has been called the received view of scientific theories. Beginning in the 1920's it became commonplace for philosophers of science to construe scientific theories as axiomatic calculi which are given a partial observational interpretation by means of correspondence rules. The received view did not see itself as proposing a method of scientific discovery, but rather made a sharp distinction between the 'context of discovery' and the 'context of justification', restricting attention to the latter. The genesis of theories was to be ignored and exclusive attention was to be paid to theories as final products. Not even so, but the latter was to be reconstructed 'rationally' as axiomatic systems; the latter would display the structure of science. Already in this move one can see a severe restriction of scientific method and a growing distance between science and philosophy of science, developing a formalization said to be in the interests of logical clarity, but in fact completely ignored by, and ignoring, developing contemporary science. Such a logical positivist position projects an image of science under the control of the 'science ideal' of Humanism and radically rejects everything connected with the 'personality ideal' as metaphysical and therefore meaningless. Science was a matter of empirical facts and logical inferences and could be fully characterized in such terms.

Karl Popper embracing both ideals of 'science' and 'personality'

put forward a theory of science in which explicit room was made for the activity of free personality. Without it there would be no theories. While Popper has a logic of theory testing he maintains that ...

> ... there is no such thing as a logical method of having new ideas, or a logical reconstruction of the process. My view may be expressed by saying that every discovery contains 'an irrational element', or a 'creative intuition' in Bergson's sense.

For Popper the logic in science is the deduction of testable propositions from the hypothesis, not the origination of the hypothesis. Even so Popper's logical method of testing is but a pale reflection of Bacon's machine for producing scientific truth on the basis of experience. Says Popper in a new appendix of The Logic of Scientific Discovery:

> I think that we shall have to get accustomed to the idea that we must not look upon science as a 'body of knowledge' but rather as a system of hypotheses, that is to say, a system of guesses or anticipations which in principle cannot be justified, but with which we work as long as they stand up to tests, and of which we are never justified in saying that we know that they are 'true' or 'more or less certain' or even 'probable'. 72

This may seem bitter medicine for those enamoured of 'scientific method' but recently far more drastic proposals have issued from the 'enfant terrible' of philosophy of science, namely Paul Feyerabend. He has collected the central ideas of his previous papers in a volume just published titled significantly Against Method (1975). In an earlier paper he maintains that "... science both is, and should be, more irrational than Lakatos and Feyerabend (the Popperian author of the preceeding sections of this paper and the 'Problems of Empiricism') are prepared to admit".[73] Feyerabend seeks to exploit what he sees as the weakness and ambiguities of the logic of scientific explanation to the end of showing that there is no such logic and that if there was it would be detrimental ~~of~~ to scientific progress. Against the Popperians he writes:

> Now this reference to tests and criticism which is supposed to guarantee the rationality of science and, perhaps, of our entire logic may be either to well defined proceedures without which a criticism or test cannot be said to have taken place, or it may be purely abstract so that it is left to us to fill it now with this, and now with that concrete content ... In the second case we have but a verbal ornament ... 74

Furthermore:

> None of the methods which Popper wants to use for rationalizing science can be applied and the one that can be applied, refutation, is greatly reduced in strength. What remains are aesthetic judgements, judgements of taste, and our own subjective wishes ... it seems to me than an enterprise whose human character can be seen by all is preferable to one that looks 'objective ' and impervious to human actions and wishes. The sciences, after all, are our own creation, including all the severe standards they seem to impose upon us. It is good to be constantly reminded of this fact. It is good to be constantly reminded of the fact that science as we know it today is not inescapable and that we may construct a world in which it plays no role whatever (such a world, I venture to suggest, would be more pleasant than the world we live in today). What better reminder is there than the realization that the choice between theories which are sufficiently general to provide us with a comprehensive world view and which are empirically disconnected may become a matter of taste? That the choice of our basic cosmology may become a matter of taste? 75

Feyerabend's 'romantic' theory of science is something he recognises as such. In a footnote connected with the passage above he comments:

> Popper has repeatedly asserted, both in his lectures, and in his writings that while there is progress in the sciences there is no progress in the arts. He bases his assertion on the belief that the content of succeeding theories can be compared and that a judgement of verisimilitude can be made. The refutation of this belief eliminates an important difference (and perhaps the only important difference) between science and the arts and makes it possible to speak of styles and preferences in the first, and of progress in the second. 76

Nor does Feyerbend's account of science stand as an isolated one. One can discern during the course of the past twenty years, a movement in the philosophy of science against the two central (and related) features of positivism. (i) that it is possible to theorize free from metaphysics and commitments and (ii) that it is possible to unproblematically theorize on the basis of experience. The problems of empiricism have been long visible in the history of philosophy, and certainly since Hume, but they managed to survive within philosophy of science after they were implausible elsewhere. The work of some further philosophers of science are relevant to our present argument. In 1958 there first appeared Michael Polanyi's Personal Knowledge: Towards a Post-Critical Philosophy. It was a remarkable work in many respects and generally ignored by philosophers of science. It was remarkable in its extensive references to contemporary and past science. Even more remarkable is the critique of critical

philosophy, the critique of post-Cartesian philosophy which Polanyi proposes. Polanyi a ~~Roman Catholic~~ Anglican, turns back to the Christian tradition for the understanding of science. He writes:

> In the fourth century A.D. St. Augustine brought the history of Greek philosophy to a close by inaugerating for the first time a post-critical philosophy. He taught that all knowledge was a gift of grace, for which we must strive under the guidance of antecedent belief; nisi credideritis, non intelligitis ... We must not recognise belief once more as the source of all knowledge. Tacit assent and intellectual passions, the sharing of an idiom and of a cultural heritage, affiliation to a like-minded community: such are the impulses which shape our vision of the nature of things on which we rely for our mastery of things. No intelligence, however critical or original, can operate outside such a fiduciary framework. 77

Polanyi anticipated Feyerabend in maintaining that:

> No rules can account for the way a good idea is produced for starting an inquiry; and there are no rules either for the verification or the refutation of a proposed solution of a problem. Rules widely current may be plausible enough, but scientific inquiry often proceeds and triumphs by contradicting them. 78

It is worth noting that the history of science is a very new discipline and has only recently begun to move beyond the stage of positivistic chronicles. Earlier positivistic philosophy of science had been able to project its picture of the 'structure of science' without the check of either historical or sociological studies of science to see whether there was any relation between the proposed structure and actual scientific thought and practice past and present. Now that the history of science is more developed we find disputes between philosophers of science such as Stephen Toulmin and Ernest Nagel as to whether philosophy of science should be a study of scientific achievement in vivo or a study of problems of explanation and confirmation as reformulated in terms of deductive logic.[79]

If any one work can be said to have brought the history of science into the philosophy of science arena it is undoubtedly T.S. Kuhn's The Structure of Scientific Revolutions first published in 1962. Like Feyerabend and Polanyi Kuhn's doctrine of the scientific paradigm undermines positivistic appeals to verification or falsification with respect to theories rooted in different paradigms, in that he holds them to be incommensurable. While the Vienna Circle and its spiritual descendants wanted to free science (or to maintain that science was free) of metaphysics,

beliefs, and commitments, Kuhn takes a positive delight in inverting this viewpoint. Indeed he chooses to compare normal science with theology both implicitly and explicitly, finding massive similarities between them. He writes of scientific education as a 'process of initiation'[80] which 'prepares the student for membership in a particular scientific community'.[81] He says that 'it is a narrow and rigid education, probably more so than any other except perhaps in orthodox theology'.[82] He maintains that normal science 'often suppresses fundamental novelties because they are necessarily subversive of its basic commitment'.[83] When it comes to repudiating an old paradigm and embracing a new one, he describes it as a 'conversion experience',[84] adding that 'a decision of that kind can only be made on faith.'[85] In the year prior to the publication of his book Kuhn anticipated many of these ideas in a paper entitled 'The Function of Dogma in Scientific Research'.[86]

These developments have made the identification of rationality with science and scientific method appear at least problematic rather than something which could simply be assumed.[87]

This whole development has raised in a pointed form fundamental problems concerning (i) whether 'faith in reason' is an appropriate attitude for a rationalist (ii) the scope of reason in human life and (iii) the precise content of reason. With respect to the point (i) it has been W.W. Bartley in his book The Retreat to Commitment (1962) who has been most acutely aware of the problems of a rationalism which is structurally similar to a religious faith, so that the Christian believer, for example, is able to correctly characterize rationalism as simply an alternative religion. Bartley therefore tried to develop what he called a comprehensive critical rationalism from which he thought he had eliminated every element of faith or commitment. Even rationalist principles are to be open to rational criticism. However, this pre-supposes the ultimacy of rational criticism itself. Consequently two questions arise here. First, if the phrase 'rational criticism' is to be more than a slogan and to carry some genuine content then it seems that one has introduced a new rationalist doctrine providing an ultimate criterion

which all possible doctrines will have to meet. In the second place, if Bartley's 'rational criticism' of rationalism is seriously intended then as a follower of Popper we have the right to know how he would answer the questions; under what conditions would he be prepared to abandon his rationalism, what arguments would lead him to regard rationalism as rationally unacceptable. It seems doubtful whether he is really prepared to put into question his commitment to the autonomy of human thought and the Humanist faith on which it rests.[88]

With respect to (ii) the issue of the scope of reason in human life has varied partly in relation to (iii) the precise content of reason. Sometimes it has been restricted to formal logical inferences. Sometimes the terms 'logic' and 'logical' have been used in a much broader sense often giving an *apriori* status to the assertions of ordinary language and thereby to the ontological and epistemological assumptions lying behind it. Sometimes the 'factual' is seen as the realm of reason with 'values' lying beyond it. Others e.g. P.H. Hirst seems to think of the scope of reason being as wide as human life (or at least as wide as his seven forms of knowledge) and resists any attempt to limit it to the area of natural science alone.

Finally, with respect to the content of reason, while the intimations of universal validity (and the consequence of universal human community) remain, the Enlightenment expectations have been chastened. At its narrowest reason is identified with formal logic so that it may claim more inferential validity or consistency but remain distent from truth. Others have identified reason (and reasonableness) with giving reasons. Others again seem to have developed a social account of reason in terms of human agreement. Perhaps the most fragmented account imaginable has been given by G.J. Warnock, who in the tradition of J.L. Austin has simply enumerated the diverse ways in which the word 'reason' (or its cognates) is in fact used. He does not see this so much as the point of departure for developing a theory of reason as of being the conclusion and the nemesis of any such attempt to find some essence or underlying unity or the acceptance of some and the rejection of other uses.[89]

We turn now to examine the success of two contemporary philosophers, P.H. Hirst and K. Popper, who have remained committed to the rationalist tradition and whose work has had and undoubtedly will continue to have much influence on British philosophy of education and educational policy.

Footnotes: Chapter 1

1. Personal Knowledge: Towards a Post-Critical Philosophy (Harper & Row, New York, 1965).
2. I believe in order that I may understand.
3. In the Discourse on Method Descartes writes: "... I always had an excessive desire to learn to distinguish the true from the false, in order to see clearly in my actions and to walk with confidence in this life." (Vol.1 p.87) "I do not intend to speak of matters pertaining to the Faith or the conduct of life, but only of those which concern speculative truths, and which may be known by the sole aid of the light of nature." Synopsis of the Meditations on First Philosophy (Vol. 1 p.142) Both (and all) page references are to The Philosophical Works of Descartes (trans. E.S. Haldane and G.R.T. Ross, Cambridge University Press, 1967).
4. Summa Theologica Part 1 Qu.1 Article 5 Reply O.G. 2; Article 6 Reply O.G. 2.
5a. e.g. Pico della Mirandola's Oration on the Dignity of Man. Indeed Nicolas Lobowicz links Pico's Oratio, Vico's notion of man as posse, Kant's "myth of self-determination", Marx's notion of man as self-creator, and Heidegger's "claim that man is delivered over to his own freedom". He writes: "Kant's philosophy, later that of German Idealism, and last but not least, the ideas of the young Marx are the last outcome of the peculiar self-confidence and the 'new practical humanism' so admirably formulated in Pico's oration, a summary of the whole Renaissance intent and in fact, an expression of the basic intent of postmedieval man". Theory and Practice: History of a Concept from Aristotle to Marx (University of Notre Dame Press, 1967) p.199.
5b. Ref. Cohen and Nagel. At this point it seems suitable to briefly introduce what Dooyeweerd has referred to as the religious groundmotives of Western culture. The fundamental religious-motive of Greek thought, in his view, is that of matter and form. This basic motive originated in a conflict between the pre-Homeric formless nature-religion of life and death and the younger cultural religion of the Olympian Gods - the religion of form, measure and harmony. The groundmotive of scholastic Christian thought is that of nature and grace, originating in the attempt to accommodate the classical Greek view of nature with its form-matter motive to the Central motive of Biblical revelation. In modern and contemporary thought this scholastic Christian motive has often led to a pseudo-synthesis between the original and authentic Biblical motive and that of Humanism in its various forms. Dooyeweerd indentifies the groundmotive of humanist-thought as that of nature (or science ideal) and freedom (personality ideal), originating in the humanist reversion of, firstly, the Biblical view of man's divine vocation to subdue nature and, secondly, man's freedom in Christ. Dooyeweerd has attempted to show that the humanist groundmotive lies also at the basis of the dialectical polarity between individualism and universalism (or collectivism) in modern social and political thought. Finally, Dooyeweerd formulates the Biblical groundmotive as one of creation, fall and redemption by Jesus Christ as incarnate Word of God, in the communion of the Holy Spirit. The philosophy of the cosmonomic idea developed in Dooyeweerd's New Critique of Theoretical Thought attempts to base its theoretical account of empirical reality on this latter motive.
6. The Universities (Penguin, Harmondsworth, 1969) p.264).
For example William of Wykeham was prompted to the foundation of New College, Oxford, by the need to replenish the priesthood decimated by the Black Death. The statutes provided "that in the same college, by the Grace of God, diversity of knowledge shall thrive and diversity of faculties also, that is to say, faculties of philosophy, civil and canon law and above all sacred theology, that in especial Christ may be preached more fervently and more frequently and the faith and worship of the Divine name may be augmented and more strenuously sustained."
J.H. Newman, like Pusey, argues that the omission of Theology from the list of recognised sciences is not only indefensible in itself but prejudicial to all the rest. He writes that:

... revealed truth enters to a very great extent into the province of science, philosophy and literature, and that to put it on one side, in compliment to secular science, is simply, under colour of a compliment, to do science a great damage. I do not say that every science will be equally affected by the omission; pure mathematics will suffer not at all; chemistry will suffer less than politics; politics than history, ethics or metaphysics; still, that the various branches of science are intimately connected with each other and form one whole, which whole is impaired, and to an extent which it is difficult to limit, by any considerable omission of knowledge of whatever kind, and that revealed knowledge is very far indeed from an inconsiderable department of knowledge, this I consider undeniable ... Revealed religion furnishes facts to the other sciences, which those sciences left to themselves, would never reach; and it invalidates apparent facts, which, left to themselves, they would imagine".
The Idea of a University (Image Books, Garden City, New York, 1959) p.105.

7. F.E. Goulburn Life of Dean Burgon (1892) Vol. 1 p.283.
8. A.P. Stanley The Life and Correspondence of Thomas Arnold D.D.(1901) p.395.
9. Ibid. p.107.
10. Quoted by W.H.G. Armitage Four Hundred Years of English Education (Cambridge University Press, 1965) p.108 from Miscellaneous Works (1845) p.492.
11. National Society Annual Report (1812) p.19 in Educational Documents 800-1816 (ed. D.W. Sylvester, Methuen & Co., London, 1970) p.287.
See H.J. Burgess Enterprise in Education (National Society and S.P.C.K., London, 1958).
12. The most recent expression of this viewpoint is to be found in a book by Philip May who is a lecturer in education at Durham University Which Way to School (Lion Publishing, Berkhampstead, 1972).
13. Epist.Vol.1 p.64 (ed. De Wette) quoted by F. Ueberweg A History of Philosophy (4th ed. Hodder & Stoughton, London, 1885) Vol.II p.16-17.
Philosophically Luther was largely aligned to Ockham's Nominalism in which he had been educated.
14. Corpus Reformation XI p.282 XIII p.656 quoted by J.H. Randall The Career of Philosophy (Columbia University Press, 1970) Vol.1 p.114.
15. The Career of Philosophy Vol.1 p.114 cf. H. Dooyeweerd A New Critique of Theoretical Thought (H.J. Paris, Amsterdam & Presbyterian & Reformed Pub. Co. Philadelphia, 1953) Vol.1 p.510-515.
Melanchthon's influence spread beyond the German Lutheran universities to Calvinist Geneva and then, indirectly to Leyden, Franeke, Groningen, Utrecht and Harderwijk. R.S. Scharlemann in Thomas Aquinas and John Gerhard (Yale University Press, New Haven, 1964) has shown that the classical Catholic scholasticism of the thirteenth century and classical Protestant scholasticism of the seventeenth century in their common allegiance to Aristotle are logically continuous.
16. Hume writes of his youth "... and while they fancied I was poring upon Voetius and Vinnius, Cicero and Virgil were the authors I was secretly devouring" My own Life reprinted in C.W. Hendel's edition of An Inquiry Concerning Human Understanding (Bobbs Merrill, Indianapolis, 1955) p.3-4.
17. The Philosophical Works of Descartes Vol.II p.368.
18a. The Oxford Orations of Dr. John Owen (ed. Peter Toon, 1971).
Gordon Leff Paris and Oxford Universities in the Thirteenth and Fourteenth Centuries (John Wiley, New York, 1968) pp.116-134.
18b See Leland Miles John Colet and the Platonic Tradition (Open Court, La Salle, Illinois, 1961).
18c Basil Willey (The Seventeenth Century Background (Penguin Books, Harmondsworth, 1967) pp.125-154.
J.D. Roberts From Protestantism to Platonism in Seventeenth Century England (The Hague, 1968).
18d W.H.G. Armitage Four Hundred Years of English Education ch.II.
Christopher Hill Intellectual Origins of the English Revolution (Panther Books, London, 1966) pp.100-109.
Richard L. Greaves The Puritan Revolution and Educational Thought.

18e R.K. Merton Science, Technology and Society in Seventeenth Century England (Harper and Row, New York, 1970) and R. Hooykaas Religion and the Rise of Modern Science (Scottish Academic Press, Edinburgh, 1972).
18f A.R. Hall Robert Boyle on Natural Philosophy (Indiana University Press, Bloomington, 1965).
19. David Fountain Isaac Watts Remembered (Henry Walter, Worthing, 1974).
20. Logick, or the Right Use of Reason in the Enquiry after Truth (1725) p.5.
21. Basil Bernstein and Brian Davis actually recognise this tendency in the Plowden Report but do not wish to take it seriously. They write: "While there are almost Durkheimian echos in some of the passages upon the school community and the Act of Worship, it may be held that the views expressed are platitudinous rather than prescriptive." Perspectives on Plowden (ed. R.S. Peters, Routledge & Kegan Paul, London) p.79. Durkheim maintained that religion was actually the worship of society itself, and Marx regarded it as an ideological tool by which the ruling class maintained its position. cf. E. Durkheim The Elementary Forms of Religious Life and K. Marx and F. Engels On Religion (Foreign Languages Publishing House, Moscow, 1955).
22. cf. E.M. Howse Saints in Politics: the Clapham Sect and the Growth of Freedom (George Allen & Unwin, London, 1971).
23. Glaucon: An Inquiry into the Aims of Education (pitman, London, 1950)p.51.
24. The Future of Education (Cambridge University Press, 1941).
25. Education Christian or Pagan (Cambridge University Press, 1946) p.22-24 quoting Sir Richard Livingstone's Education for a World Adrift (1943) p.95.
26. University Pamphlets No.1 (SCM, London, 1946) p.7 (hereafter as U.P.)
27. The Foundations of a Free University (1946) U.P. No.4 p.12-13.
In a similar tone John Baillie writes:

> We shall all be agreed that the right of independent enquiry, which the various departmental studies have won for themselves, must be jealously conserved. The unity characteristic of mediaval thought was far too compact a unity, and it would be wrong to derive its rehabilitation, whether under a Christian or any other metaphysic, whether in accordance with a Christian or Fascist or Marxian or any other party line. We do not want the scientist or the historian to be all the time looking nervously over his shoulder to see whether the discoveries he thinks he is making are in agreement with what either the priests or the commissars are saying, or what is written in the Bible or Das Kapital or Mein Kampf ... The attempt to coerce students into the adoption of a simple philosophy of life, Christian, Communist, Fascist, Nationalist or what not, would be an assault upon liberty. Even the attempt on the part of the university as a whole to inculcate in the minds of all students a simple philosophy of life would be to do violence to the existing intellectual situation within the community as a whole; for while the public mind remains so divided, a free university is bound to some extent to reflect this division.
> The Mind of the Modern University U.P. No.1 (1946) p.32,33-4.

28. The Christian in the Modern University (U.P. No.3 1946) p.15.
29. The University and the Modern World (1945) p.205.
30. A notable protest against this decline is found in the writings of Harry Blamires particularly in his book The Christian Mind (S.P.C.K., London, 1961). During the past few years there has been a growing interest throughout the English speaking world in the impact of Abraham Kuyper's Calvinism on Holland, particularly the Free University of Amsterdam, the A-R Party and the philosophy of H. Dooyeweerd.
31. cf. The Open Society and its Enemies (Harper & Row, New York, 1967) Vol.2 ch.25. One should note however that Popper appears to define genuine Christianity in terms which are consistent with his philosophy.
32. The Crisis in the University (SCM, London, 1949) p.300-301.
33. cf. David M. Paton Religion in the University U.P. No.9 (1946) p.17-26 and my 1973 Bristol University M.A. thesis The Growing Crisis of the Evangelical Worldview.

34. The Crisis in the University p.309
35. Ibid. p.310
36. Ibid. p.310
37. Ibid. p.311
38. This tendency towards mutual adjustment is equally prevalent amongst those who hold a much more conservative theology cf. The Growing Crisis of the Evangelical worldview.
For a fascinating cross cultural comparison in which Christianity was adjusted to Shinto nationalism see John M.L. Young's The Two Empires in Japan (Presbyterian & Reformed, Philadelphia, 1961).
39. cf. Charles Silberman's The Crisis in the Classroom (Random House, New York, 1971).
40. Robert D. Knudsen "Symbol and Myth in Contemporary Theology, with special reference to the thought of Paul Tillich, Reinhold Niebuhr and Nicolas Berdyaev" S.T.M. Thesis, Union Theological Seminary, N.Y. 1952.
41. cf. H. Dooyeweerd A new Critique of Theoretical Thought Vol.I p.169-495.
42. G.C. Berkouwer The Triumph of Grace in the Theology of Karl Barth (W.B. Eerdmanns, Grand Rapids, 1956).
H. Ridderbos Bultmann (Presbyterian & Reformed Publishers, Philadelphia, 1960)
F.G. Schrotenboer A New Apologetic: An analysis and appraisal of the eristic theology of Emil Brunner (J.H. Kok, Kampen, 1955).
43. J.M. Spier Christianity and Existentialism (Presbyterian & Reformed Publishers, Philadelphia, 1953).
S.U. Zuidema Communication and Confrontation (Wedge Publishing Foundation, Toronto, 1972).
44. Education Christian or Pagan (London University Press) p.37.
45. The Philosophical Bases of Education (University of London Press, 1928)p.V
46. Conjectures and Refutations (Harper & Row, New York, 1968) "Demarcation between science and metaphysics" p.275.
47. A.G.N. Flew in Logic and Language (Doubleday & Co. New York, 1952) p. 9
48. G.J. Warnock writes:
'Around the usual, and particularly the more imposing, types of philosophy, the air is already black with philosophical theories, and the ground, in Austin's words, is 'trodden into bogs and tracks' by generations of philosophers ... We flounder in the bogs ... extreme measures are called for. The escape ... from the magnetic fields of Plato, or Aristotle or Kant ... it may be salutary to place a moratorium on discussion of the state, or virtue or the moral law, and consider instead ... the difference between kindness and kindliness, or exactly what it is to be tactless and inconsiderate.'
'J.L. Austin: a Remarkable Philosopher' in the Listener 7 April, 1960, p.617.
49. Mind July, 1949 p.4-7
50. cf. G.J. Warnock English Philosophy since 1900 (Oxford University Press, 1959) p.11
51. Ibid. p.93
This is well supported by Melvin Richter who writes: "The most prominent spokesmen for British Idealism were all sons of Evangelical clergymen within the Church of England. It was essentially religious concern which first brought Green, Bernard Bosanquet and F.H. Bradley to the study of philosophy." The Politics of Conscience: T.H. Green and his age (Weidenfeld and Nicolson, London, 1964) p.36. Richter further suggests the close historical association there has been between evangelical pietism and idealism, the latter being a secularized form of the former. In our next chapter the intellectual development of P.H. Hirst appears to fit this same pattern. It is not without interest that Absolute Idealism was one of the factors behind the shift from the old liberalism (individualistic laissez-faire with a minimal state) to the new liberalism (collectivism) which lay behind the rise of the welfare state and contributed to the passing of the 1870 Education Act. Hirst's epistemology based on a public-private distinction shares, we shall argue, a similar collectivism.

52. Philosophy and the Meaning of Life (Cambridge University Press, 1969) p.109
53. The Perfectability of Man (Duckworth, London, 1970) p.324 & 327
54. cf. Peter Schaulis Man in Communication (Wedge Publishing Foundation, Toronto)
55. Or to 'play the roles' in the thoroughly alienated fashion described by Kenneth Keniston in The Uncommitted (Dell Publishing, New York, 1965)
56. English Philosophy since 1900 p.39
57. Ibid. p.91-2
58. Ibid. p.93
59. Ibid. p.92-4 cf. anticipations of this view in John Wisdom's Philosophy and Psycho-Analysis
60. Ibid. p.106
61. Ibid. p.110-111
62. Ibid. p.112
63. Crisis in the Humanities (Penguin, Harmondsworth, 1964, ed. J.H. Plumb) p.94-5. It may be of some significance that the institutional context (and plausibility structure) of Theology was formerly the church (and the church controlled university). The new context is that of the (partially) state-controlled university. Consequently it is now the secular university which is the context of theology and accredits the ministers of most mainline denominations. (It is perhaps symptomatic that the wearing of university hoods is widespread even amongst clergy who are much opposed to ritualistic vestments). The same has occurred to Church of England Colleges of Education without, it appears, an iota of concern.
64. I have attempted to demonstrate the essentially Humanist character of the analytic philosophy tradition in Religious Groundmotives and Philosophical Analysis (McMaster University M.A. 1967)
65. Dewey "congratulates" the conservative theologian on recognising this when he writes:

> ... whenever a particular outpost in surrendered it is usually met by the remark of a liberal theologian that the particular doctrine or supposed historic or literary tenet surrendered was never, after all, an intrinsic part of religious belief, and that without it the true nature of religion stands out more clearly than before. Equally significant is the growing gulf between fundamentalists and liberals in the churches. What is not realized - although perhaps it is more definitely seen by fundamentalists than by liberals - is that the issue does not concern this and that piecemeal item of belief, but centres in the question of the method by which any and every item of intellectual belief is to be arrived at and justified.

A Common Faith (Yale University Press, New Haven) p.32
66. A Treatise on Human Nature Vol.I (London 1874) p.532
67. On Religion p.15
68. Humanism (Penguin, Harmondsworth, 1968) p.21-22
69. The Humanist Outlook (ed. A.J. Ayer, Pemberton, London, 1968) p.13-14
70. It could be suggested that here we have a radically secularized - anthropocentric-version of the conflict between Aquinas' God of pure reason (pure Form) and William of Ockham's God of pure will, a dialectic which shows the extent of the Greek form-matter religious groundmotive on medieval thought. & its influence
71. The Humanist Outlook p.4
72. The Logic of Scientific Discovery p.317
73. 'Consolations for the Specialist' in Criticism and the Growth of Knowledge (ed. Imre Lakatos & Alan Musgrave, Cambridge University Press, 1970) p.214-5
74. Ibid. p.218
75. Ibid. p.223
76. Ibid. p.228
77. Personal Knowledge: Towards a Post Critical Philosophy p.266
78. Ibid. p.1x

79. Scientific American (214) Feb. 1966 p.129-136, April 1966 p.9-11, April 1966 p.8-9
80. The Structure of Scientific Revolutions (University of Chicago Press, Chicago, 1962) p.[illegible]
81. Ibia. p.11
82. Ibid. p.165
83. Ibid. p.5
84. Ibid. p.150
85. Ibid. p.157
86. Reprinted in A.C. Crombie's Scientific Change (1963)
87. For example Morton L. Schagrin concludes a paper on the rationality of science:

> Previously, we have all admitted that one cannot tell beforehand if one's conjecture is correct - one must test it, try to refute it. Now we find that if there is no test, or if the tests refute the theory, the fault may lie with our imagination, or the tests, or other assumptions. That is, the theory may really be a good and useful one. In this case too, we must wait and see: history is the only judge. But if this is so, the only thing an individual operating in the present can do is believe what he will and give reasons for his belief and against the beliefs of others. What more does anyone want, and why? 'On Being Unreasonable' Philosophy of Science (March 1975) p.9

88. This point I suspect could also be made against A.G.N. Flew's contribution to New Essays in Philosophical Theology (1956) in which he argues that the central affirmations of the Christian faith are cognitively (or linguistically) meaningless because no empirical states of affairs are allowed in principle to falsify them. Flew never accords similar treatment to his own Humanist affirmations and nowhere specifies under what conditions - if they arose - he would abandon his Humanism as falsified.
89. Article entitled 'Reason' Encyclopaedia of Philosophy (ed. P. Edwards, Collier-Macmillan, New York & London, 1967)
See also Max Black's paper "Reasonableness" in Education and the Development of Reason (ed. R.F. Dearden, P.H. Hirst and R.S. Peters, Routledge and Kegan Paul, London 1975) pp.44-57

Paul Hirst's theory of reason and the forms of knowledge

Our first chapter sought to provide a historical sketch of English Educational ideas from the viewpoint that they constitute at their deepest level a struggle between Christianity and Humanism for primacy. This present chapter examines Paul Hirst's idea of liberal education and particularly the differentiated idea of reason on which it is based. An attempt is made to place Hirst's idea of reason in the history of rationalism and to provide some detailed criticism of his forms of knowledge. The chapter will conclude with a sketch of an alternative account of 'reason' and the 'forms of knowledge' which has been developed from a Christian rather than a rationalist Humanist perspective.

Hirst's first and major account of liberal education, reason and the forms of knowledge is found in his now famous paper 'Liberal education and the nature of knowledge' published in 1965. It begins with an account of the Greek conception of liberal education, then that of the Harvard Report General Education in a Free society (1945), followed by Hirst's own reassertion and re-interpretation of the idea of liberal education. For the Greeks liberal education culminating in the study of philosophy not only prepared freemen for the wise rule of the polis but was also the way to save one's rational soul (according to Plato)[1] and to approach, if not attain, divinity (according to Aristotle).[2] While Professor Hirst does not venture to suggest that the cultivation of reason by liberal education brings post-mortem benefits, the benefits for this life equal those proposed by pagan antiquity. He maintains that liberal education will enable one to know the criteria whereby ... "the true is distinguishable from the false, the good from the bad, the right from the wrong". Liberal education ".. frees the mind from error and illusion" and is ".. basic to freeing of human conduct from wrong .." and therefore is ".. in a very real sense the ultimate form of education." It is a ".. form of education knowing no limits other than those necessarily imposed by the nature of rational knowledge and thereby itself developing in man the final court of appeal in all human affairs."[3] This declaration of the autonomy of reason rests upon Hirst's view of man as a rational animal whose excellence and chief end consists in ".. developing

these rational capacities to the full."[4] In his latest book Moral Education in a Secular Society he gives concrete expression to his belief that reason should be "the final court of appeal in all human affairs." There he writes that what is required of the teacher ...

> ... is a total commitment to the development of rational autonomy in both thought and action. Teaching that begins to suggest that any belief cannot be rationally called into question, or seeks to develop dispositions against such questioning is not acceptable .. ... After all, there is no other basis than reason for meaningful human development. Both personal and social salvation may to the Christian have their source in God, but I can see no grounds for thinking that, even on that view, human reason can properly be put on one side. The secular society is supremely the product of reason, God given reason if you will. Its problems come not from the development of reason, but from our refusal on so many fronts actually to live accordingly ... What we shall have to do, if our society is not to become morally degenerate and return to control by force, is to re-fashion it so that reason can in fact prevail ... I am not altogether without hope, provided we can, Christian and non-Christian alike, stop seeking irrational solutions to our ills and produce education for rational autonomy. That alone is the form of moral education that can properly serve our secular society.[5]

In this passage Hirst makes it clear that there is nothing that cannot be arraigned before the tribunal of reason, for there is no higher authority. Secondly, in the company of the Enlightenment philosophe, he is therefore completely opposed to the Medieval view that human reason is limited[6] or the Reformation view that it is radically corrupted.[7] Both views necessitate a Divine revelation and grace to restore reason to its proper functioning. Hirst seems to have no time for such considerations, for he appears to regard obedience or disobedience to reason as of far greater moment than obedience or disobedience to Christ. He seeks a rational secular rather than a Christian social order and consequently proposes liberal education as a vital instrument in the creation of such an order and as the servant of it. In a paper rhetorically entitled "Christian Education: A Contradiction in Terms?" Professor Hirst maintains without reserve that ... "the whole idea of Christian education is one I am rejecting, for I wish to resist the suggestion that it should be conducted anywhere".[8] He wants Christian education to be excluded not only from state schools but from all schools, and from all homes and churches as well. He stigmatizes the idea of Christian education as potentially "dangerous"[9] as "primitive"[10] as "immoral"[11] and as "an anachronism"[12] Nor does he fail to make explicit the grounds for

his own conception of education. As far as he is concerned ...

> ... the character of education is not settled by any appeal to Christian, humanist or buddhist beliefs. Such an appeal is illegitimate, for the basis is logically more fundamental, being found in the canons of objectivity and reason, canons against which Christian, humanist and buddhist beliefs must, in their turn and in the appropriate way be assessed ... Indeed an education based on a concern with objectivity and reason, far from allying itself with any specific religious aims, must involve teaching the radically controversial character of all such claims. 13

Elsewhere Hirst seeks to make it clear why he is able only to accept a 'religion within the bounds of reason alone'[14] and how those who do not hold fast to reason must necessarily lose themselves in the outer darkness of irrationalism. Of those who maintain that religious truth can only be known in a revelation which is under no obligation to justify itself to man (i.e. authoritative revelation) Hirst says ...

> ... to reject reason in this radical way is to make religious claims a mixture of the incomprehensible and the purely dogmatic. What is more the thesis presupposes not only the existence of God but also certain quite specific beliefs about His nature and man's relationship to Him. Such assumptions at the outset of the pursuit and investigation of religious knowledge are quite unjustifiable. Indeed, the logically absurd call to reject reason in the name of reason is but an invitation to plunge into a morasse of irrationality where again truth cannot possibly be distinguished from error.

It is evident that Hirst profoundly believes that his canons of objectivity and reason, together with his programme of liberal education are by no means controversial, and indeed, is rather convinced of their universal validity. In other words, that they, by way of contrast, are comprehensible, non-dogmatic, justifiable and logically sound. In 'Liberal Education and the nature of knowledge' Hirst engages in a piece of rare self-examination concerning his basic orientation. Concerning the matter of justification Hirst writes:

> Justification is possible only if what is being justified is both intelligible under publicly rooted concepts and is assessable according to accepted criteria. It assumes a commitment to these two principles ... It is commitment to them that characterizes any rational activity as such. But the principles themselves have no such assessable status, for justification outside the use of the principles is not logically possible. This does not mean that rational pursuits in the end lack justification, for they could equally well be said to have their justification written into them. Nor is any form of viciously circular justification involved by assuming in the procedure what is being looked for.

> The situation is that we have reached here the ultimate point where the question of justification ceases to be significantly applicable. The apparent circularity is the result of the inter-relation of the concepts of rational justification and the pursuit of knowledge. 16

Here Professor Hirst has unearthed - rather unwittingly it seems - a serious structural problem which is intrinsic to rationalism. From the above passage the following inference may be made which is fundamentally inimical to Hirst's rationalism and his associated idea of liberal education. The inference could be put as follows: Hirst's principles of rational justification - his canons of reason and objectivity - are neither justifiable nor rational. Nor is this contingently the case, something which may be remedied - rather it is logically impossible to provide them with rational justification. As they are incapable of rational justification Professor Hirst has resorted to calling us to commit ourselves to them in which case he will call our commitment 'rational' and 'justified'. In doing so however he is violating one of his central principles of liberal education, namely that "Teaching that begins to suggest that any beliefs cannot be rationally called into question, or seeks to develop dispositions against such questioning is not acceptable ... After all there is no other basis than reason for meaningful human development."[17] Even worse is the fact that what Professor Hirst is calling us to commit ourselves to is literally meaningless in that his use of 'rational' and 'justified' to characterize such commitment has torn these terms from their context in public language and their connection with accepted criteria. Finally it seems quite intelligible to ask whether the pursuit of knowledge and liberal education (as Hirst defines them) is rationally justified.[18]

It is not without interest that Professor A.J. Ayer, an outstanding representitive of the British Humanist Association, found himself in the same dilemma and availed himself of the same stratagem in an attempt to maintain the rationality of science, in The Problem of Knowledge (1956) after a lucid account of the problem of induction and its centrality to all science. Like Hirst, Ayer maintains that the rational justification of one's basic philosophical (or epistemological) principles is impossible, that no proof is possible ... "that what we regard as rational procedure really is so;

that our conception of what constitutes good evidence is right."[19] Like Hirst he is desperately concerned to trivialise this admission so as to exclude giving ground to any type of non-rationalist epistemology. So he continues:

> This does not mean that the use of scientific method is irrational. It could be irrational only if there were a standard of rationality which it failed to meet; whereas in fact it goes to set the standard: arguments are judged to be rational or irrational by reference to it. 20

In other words Ayer has defined reason in terms of scientific method so that it is no longer possible - within such definitions - to ask whether scientific method is reasonable. If one accepts this definition then Ayer rightly maintains it will be ... "understood that there logically could be no court of superior jurisdiction, it hardly seems troubling that inductive reasoning should be left, as it were, to act as a judge in its own cause."[21] However, the acceptance of this definition involves one in uncritically commiting oneself to science (or inductive reasoning) as the highest court of appeal, as the final authority in all human affairs. Ayer similarly does not consider those for whom the use of scientific method does not go to set the standard of rationality. For Ayer, such exclude themselves - by definition - from the community of rational men, and consequently may be ignored.[22]

The general point I have sought to raise is that rationalism in general and, therefore, that of Hirst in particular, is involved in a situation of self-refutation: its rejection of pre-theoretical commitments must also involve the rejection of any pre-theoretical commitment to reason and hence rationalism. The assertion of rationalism without proper reference to its epistemological status as an ultimate commitment is dogmatic and critical, whilst such a reference renders it one commitment amongst others.[23]

However, proper criticism of Hirst's rationalism needs to proceed beyond this general problem of rationalism to the particular character of Hirst's view of reason. This necessitates however a brief review of the history of reason in Western thought as features of Hirst's view which he does not make explicit need to be set in this context to be properly appreciated.

Hirst is indeed conscious that his concept of reason is not identical with that of the Greek philosophers. For the latter reason apprehended Being,

conceived of by Plato and Aristotle as hierarchal and culminating in the Form of the Good or God ('thought thinking itself') respectively. It was ontology that was visibly central to pre-Hellenistic Greek philosophy. In Hellenistic philosophy we see a shift from ontology to epistemology, from cosmocentric to anthropocentric philosophising. The crisis of confidence in the existence of (or our knowledge of) a dependable structural order for man, society and the world (e.g. Plato's forms or Aristotle's hylomorphic cosmos) led to the conclusion that if such an order existed then it must be within man himself. In order to escape scepticism and nihilism ...

> "... the Hellenists finally founded existence in what has become known as the apriori. They were aware that our experience presupposes something which is more than that experience itself. In such a presupposition, they said, we find the certainty, the security, the reliability of our experience. And this certainty was asserted to be part of ourselves, was found in our mind, was some kind of knowledge. It was not the result of knowledge, but something inherently belonging to the mind. Thus, the universally valid law-order became a universally valid concept or judgment of our understanding. Not a mere concept but a valid concept, a universally valid concept preceeding all experience and at the same time constituting the order and validity of our experience. And the mind equipped with these "aprioris" came to be called reason, while the universally valid order of existence came to be known as a rational order. This fundamental change in outlook in Western civilization, this locating of conditions for existence within knowledge, was no less than a revolution of the first order. It was the first genuine step in placing man at the centre of the universe and in making him autonomous. [24]

The consequence of this revolution was restrained by the Christian faith for some 1,500 years. Modern rationalism re-introduced the Hellenistic concept of reason, interpreting the apriori concepts in mathematical-physical terms. Against this form of rationalism, maintained by Descartes, Spinoza, Leibnitz and Locke, came a reaction in the name of practical reason led by Hume, Voltaire and Rousseau in the Enlightenment period. It was Kant who sought to mediate by assigning these two forms of reason to their respective delimited fields. Scientific reason was to rule the realm of appearances whereas practical reason was to deliver the law for human conduct. Kant said that "I have found it necessary to deny knowledge in order to make way for faith,"[25] by which he meant that he had limited the 'science ideal' of humanism in order to make room for its ideal of autonomous human personality. Kant's 'Copernican revolution'[26] - a clear continuation of the Hellenistic

revolution - sets itself clearly against the Christian (Medieval and Reformation) view of God as Sovereign lawgiver. With respect to nature Kant writes that ...

> ... the order and regularity in the appearances, which we entitle nature, we introduce ourselves. We could never find them in appearances, had not we ourselves or the nature of our mind set them there ... Although we learn many laws through experience, they are still only special determinations of still higher laws, and the highest of these, under which all others stand, issue apriori from the understanding itself. They are not learned from experiences; on the contrary they have to confer upon appearances their conformity to law, and so make experience possible. Thus the understanding is something more than a power of formulating rules through a comparison of appearances; it is itself the lawgiver of nature. 27

In similar fashion, in the nome of man's autonomous practical reason he radically rejects the "theological concept which derives morality from a divine and supremely perfect will" for such a concept must involve "such characteristics as lust for glory and domination bound up with frightful ideas of power and vengefulness." Even worse it would ... "inevitably form the basis of a moral system which would be in direct opposition to morality."[28] In other words, that which not entirely submits to human practical reason as .. "sovereign authority, as the maker of law"[29] is necessarily immoral.

While both Hirst and Peters have acknowledged their indebtedness to Kant at least certain features of their position have been anticipated by Hegel, and there is good reason to believe that Hegel may have had at least an indirect influence mediated by various thinkers who have mostly been referred to as Neo-Kantians. Hirst's own writings do not evince any immediate dependence on Kant's writings, while Peters speaks well of Hegel's contribution to philosophy.[30] While not wishing to anticipate the arguments of the following chapter concerning the totalitarian (rather than pluralist) implications of liberal education, Hegel's epistemology and philosophy of education seem to anticipate that of Hirst and one may suppose that the former's political values may be difficult to avoid.[31]

Five features of Hegel's doctrine of reason are pertinent to our present study, all of which are reactions against Enlightenment ideas. In the first place he reacts against the individualism of the Enlightenment so that for him the weltgeist and at a higher level still objective spirit replace the

individual mind as the ultimate point of reference. Secondly, the critical spirit of the Enlightenment's revolutionary antipathy to what is, is replaced by a doctrine of the immanence of reason in the actual. This leaves philosophy the task of reflection and description, it can no longer go beyond the reasonableness of the actual, and consequently becomes an apologist for the status quo, as does indeed any philosophy which conceives of itself as a second-order activity. Thirdly, in opposition to the Enlightenment's atomistic tendency with its analytic destination in individuals (in the social world) and sensations (ideas, perceptions or impressions) in that of knowledge or consciousness, Hegel works in the opposite direction towards Spirit, with individuals and sensations doing little more than providing materials for higher and ever higher level syntheses. The fourth is Hegel's view of the historical character of reason which rejects any abstract standard of rationality. Indeed, he sees reason at work everywhere, although in an increasing degree as one approaches the present. This embodies a theory of progress in which reason is continually enriched, reaching ever higher levels of self-consciousness. Our fifth point is that Hegel eliminates the traditional Christian distinction between the human and the divine so that he is actually proposing a religion of humanity, a humanity whose life comes to expression in the life of nation-states, such that Hegel is able to pronounce the latter as the divine Idea on earth.[32]

These features of his doctrine of reason come together in Hegel's philosophy of education which he set forth in five addresses between 1809 and 1815 when he was Rector of the Nürnberg Gymnasium. Karl Löwith characterizes Hegel's educational viewpoint as political humanism because "... he thought it obvious that "humanistic" education was just what educated the individual for his life in the polis."[33] Lowith expounds Hegel's viewpoint as follows:

> (The school) ... mediates between life in the family and life in the world, which is common to all. The world to which the pupils must be educated is not a private world but is a res publica or polis. Man's place in it is not determined by his individual particularity, but by the extent of his contribution to one of its objective spheres. Thus the aim of education is to develop the individual through renunciation of his peculiarities and to incorporate him into the "objective element" of the common

> world ... The world in which the educated man achieves a "universal self-esteem" is characterized by Hegel as a "system of universality" in which individuals count only to the extent that they accommodate themselves to it. What is brought about by the schools is the capacity to participate in public life ... His feeling for reality repudiated the "eternal youths" who wanted to overthrow the existing order. They proclaim their 'lack of education" by their unwillingness to give up their personal selves and enter into reality. 34

Here we seem to have a clear anticipation of the idea of education as being the initiation into the public forms of knowledge with its almost inevitable assumption of the rightness of the public control of educational institutions. However, it is unlikely that Hegel's educational writings themselves have had any direct influence on contemporary British philosophy of education, if only for the reason that they have never been translated, while Hegel's translated writings contain hardly more than the odd sentence on education.[35] A very important clue to the relation of Hirst's philosophy of education to idealism is given by his co-worker R.S. Peters, when he writes:

> ... There is, of course, little that is "philosophically original" in Hirst's general thesis that such distinct forms of knowledge exist. Indeed it is almost a stock-in-trade of the idealist tradition. Modern examples are Michael Oakshott's Experience and its Modes, John MacMurray's Interpreting the Universe, and R.G. Collingwood's Speculum Mentis. Historically speaking such works attempt to place the emergence of history, psychology, and the biological sciences on a map of knowledge, which has become much more complicated than that for which Kant tried to provide a rational in his three critiques. This general thesis has support, too, from Wittgenstein's thesis about distinct 'language games'. Paul Hirst first came in contact with the thesis through Louis Arnaud Reid who 'discovered' him. Reid himself wrote a book called Ways of Knowledge and Experience. 36

Neither in his original paper 'liberal education and the nature of knowledge' nor subsequently has Hirst actually acknowledged these idealist works as his sources, although Wittgenstein certainly is mentioned. One neo-idealist philosopher to whom Peters and Hirst do refer to as further reading on the forms of knowledge issue (along with Reid, Oakshott and Phenix) is Ernst Cassirer.[37] The one work of Cassirer referred to is his Essay on Man. There are many references to that work in Reid's Ways of Knowledge and Experience where the idea of self-contained symbolic system plays a fundamental role in his epistemology.[38] In Philosophy and Education he seems to think of Wittgenstein's theory of language games as being broadly

supportive of such a pluralised anti-reductionistic conception.[39]

Professor R.S. Peters modestly fails to mention any influence he himself may have had on Hirst. In his short intellectual autobiography Peters mentions his early aversion to empiricist epistemologies (e.g. the sense data theorising of Ayer) and his attraction for Piaget whose neo-Kantian orientation he clearly recognised.[40] He also acknowledges the influence of L.A. Reid, Michael Oakshott and Israel Scheffler.[41] My suggestion is that Hirst's neo-idealism derives chiefly from later Wittgenstein and Cassirer, mediated to some degree by Peters and Reid, and that his appeal to the 'revolution in philosophy' as the central source of modern philosophy of education should be received with considerable caution. Two qualifications are in order here. In the first place the nature of 'the revolution in philosophy' can be seen as a retreat from basic philosophical concerns, yet it is more accurate to affirm that the traditional problems are still present but masked in a linguo-logical idiom. Secondly, the assimilation of Wittgenstein to the neo-Idealist tradition has in fact come close to locating him in a context in which he properly ought to be understood, as S. Morris Engel has made clear.[42] To a remarkable degree later Wittgenstein's philosophy has many of the features of that of Hegel replacing the metaphysical dialectic towards a completed comprehensive unified system with a more naturalistic view of culture throwing up a changing diversity of unco-ordinated 'language games' whose rules (or logic) is internal to themselves. Wittgenstein maintains that.. "this multiplicity is not something fixed, given once and for all; but new types of language, new language games, as we may say, come into existence, and others become obsolete and forgotten."[43]

Like Cassirer and Hirst Wittgenstein rejects the 'craving for generality' which seeks for a unified philosophical system, regarding the latter as inevitably reductionistic and so posits instead an unspecified (and unspecifiable?) plurality of (largely) self-contained sub-systems. It is not without interest that he connects these language games with what he calls forms of life. Wittgenstein's general position could be simplified as follows:

1. The forms of language are the forms of life.

2. What is given (i.e. experienced) are the forms of life.
3. Ordinary language is all right as it is.
4. The different modes of discourse which are distinctive forms of life all have a logic of their own.
5. Forms of life taken as a whole are not amenable to criticism - each form having its own criteria of intelligibility, rationality and reality.44

In the preface to the Philosophical Investigations Wittgenstein tells us that his new way of thinking can only be rightly understood "... by contrast with and against the background of my old way of thinking."[45] The latter in the Tractatus Logico Philosophicus had appeared to deny cognitive status to every form of knowledge except natural science.[46] A.J. Ayer's Language, Truth and Logic (1936) had exposed a similar viewpoint with the cognitive realm being that of a phenomenalistically interpreted 'unified science'. Ayer maintained that ...

> "... it is a mistake to conceive of the various "special sciences" as portraying different "aspects of reality". We have shown that all empirical hypothesis refer ultimately to our sense contents. They all function alike as "rules for the anticipation of future experience"; and it is seldom the case that, in making a particular prediction, we are guided by the hypothesis of only one science. What chiefly presents this unity being recognised at present is the unnecessary multiplicity of scientific terminologies. 47

From philosophies like Wittgenstein's Logical Atomism, Otto Neurath's Physicalism, Bertrand Russell's Neutral Monism and Ayer's Phenomenalism the prospect of developing any sort of philosophy of education must have seemed remote in the extreme. Apart from the exceedingly abstract conceptions of scientific knowledge the whole of human cultural life with its diverse dimensions is variously ignored, denied meaning or regarded as being in need of 'reduction' in terms of programatic visions yet to be elaborated. It is hardly surprising that philosophers of education in this period found the study of traditional philosophies far more amenable to educational interests. Clearly later Wittgenstein's philosophy was more attractive asserting as it did the irreducibility of diverse forms of life with their associated languages and denying philosophers the right to dispense with these sui generis realities in the interests of some general theory. The philosopher was not to criticise but describe, although Wittgenstein believed that the latter would indeed play a critical therapeutic role with respect to general philosophical theories. However, such a role for (anti-) philosophy was of ambiguous value

for the development of philosophy of education. One writer has put it thus:

> The trouble with Linguistic Philosophy is not, as is often supposed, that it is too restrictive, but on the contrary it is far too permissive. It issues blank cheques all round. It allows everything that "has a use", except perhaps philosophy proper.
>
> The strange conclusion, the omni-tolerance, the all-pervasiveness of truth, is in fact something which Linguistic Philosophy shares, curiously enough, with Hegelianism. There are indeed differences between the two functionalisms - Linguistic Philosophy is fragmentary in approach, naturalistic, fails to integrate its functional interpretations in a whole, concentrates on the linguistic expression - but nevertheless they are fundamentally similar. "Do not ask for the meaning ask for the use," says Wittgenstein; do not ask for the doctrine, as such, ask for the historic role, Hegelianism claims. But the trouble in ascribing uses to all kinds of expressions, or historic roles to all participants in historic dramas, is that from the viewpoint of such philosophy it is impossible to evaluate or take sides in conflicts. [48]

In that educational policies are said to be properly based on educational reasons it is generally assumed that these are to be found in the educational disciplines - history, sociology, psychology and philosophy. In that the first three are regarded as simply descriptive and explanatory then philosophy of education is expected to provide evaluation and direction on the basis of (normative) educational reasons. Gellner has made the suggestion that the implications of Linguistic Analysis for politics could be variously described as either neutralist or conservative or irrationalist.[49] As we shall see the same holds for educational philosophy in that these three strands are clearly present. It can be easily appreciated however that Wittgenstein's philosophy is simply too indeterminate to serve by itself as an orientation for philosophy of education and so it is hardly surprising that there was a turning to the neo-idealist tradition with its broad conception of reason and its diversified view of knowledge which could easily be connected with curriculum theory. A brief resume of Ernst Cassirer's philosophy will serve both to indicate the story of 'reason' in the idealist tradition from the time of Kant and Hegel and to indicate his profound affinities with present day philosophy of education.

Ernst Cassirer, a slightly older contemporary of Wittgenstein, started as a pupil of Cohen in the Neo-Kantian tradition of Marburg. However, his Neo-Kantianism is deeply influenced by Hegel's Phenomenology of Mind, Herder's Reflections on the Philosophy of the History of Mankind and Hertz's symbolic interpretation of physics. Cassirer's view of the development of physics is

fundamental to his philosophy, providing the ideal of knowledge. He maintained that ... "only in exact science - in its progress which, despite all vacillation, is continuous - does the harmonious concept of knowledge obtain its true accomplishment and verification."[50] This development, however, has involved a progress from crude realism to idealism.

> ... from a physics of literal pictures has come a physics of principles ... Instead of deriving a principle directly from experience we use it as a criterion of experience. Principles constitute the fixed points of the compass that are required for successful orientation in the world of phenomena. They are not so much assertions about empirical facts as maxims by which we interpret those facts in order to bring them together into a complete and coherent whole. 51

Cassirer maintained that once we abandon the naive assumption that physics gives us a unique access to 'reality' we will be more open to recognising the other symbolic forms of human culture - religion, art, myth and language.

Cassirer, like Kant, held that the 'objective world' results from the application of apriori principles to a manifold that can be apprehended only as differentiated and ordered by them. He differs from Kant in holding that (a) the apriori principles are not static but developing and (b) that their field of application is wider than Kant supposed - features which R.S. Peters used to characterise Oakshott, MacMurray, Collingwood and Reid. With respect to (a) Cassirer replaces Kant's absolute apriori for a relative apriori. He maintains that scientific theories contain, in addition to empirical concepts and propositions, concepts that are apriori and propositions that are synthetic apriori with respect to a given theoretical system. With respect to (b) Cassirer sought to extend Kant's critique of reason (his critique of the organising principles of natural science and morality) into a critique of culture i.e. of the organising principles of the human mind in all its aspects. Cassirer's Essay on Man is subtitled 'An introduction to philosophy of human culture'. In other words revisions (a) and (b) are Cassirer's attempt to update Kant in view of the advent of modern logic, non-Euclidean geometry, relativity theory and quantum mechanics on the one hand, and the scientific study of culture (Geisteswissenschaften) on the other which had developed subsequent to Kant. Consequently, Cassirer sought to correct and enlarge the classical definition of man as a rational animal. He writes:

> Reason is a very inadequate term with which to comprehend the forms of man's cultural life in all their richness and variety. But all these forms are symbolic forms. Hence, instead of defining man as an animale rationale we should define him as an animale symbolicum ... The principle of symbolism, with its universality, validity and general applicability, is the magic word, the Open Sesame! giving access to the specifically human world, to the world of human culture. 52

Symbolic representation is therefore the central function of human consciousness and has given rise to the various symbolic forms, which do not mirror the world but rather constitute it. The world, the human world, is an 'ideal' world. The symbolic forms are regarded as more linguistic than logical and the structures of the forms may be studied in terms of their expression in language. For Cassirer each of these forms is valid in its own right and each is seen as progressively unfolding in terms of both their mutual differentiation and their internal structure. The task of philosophy is to describe their general structure which means a "phenomenology of human culture."[53] These various ways in which man creates his world: ..

> ... cannot be reduced to a common denominator. They tend in different directions and obey different principles. But this multiplicity and disperateness do not denote discord or disharmony. All these functions complete and complement each other. Each one open up a new horizon and shows us a new aspect of humanity. 54

So far then we have considered Hirst's rational-secularist orientation and the self-contradiction which lies at the heart of rationalism. We have examined certain features of the development of rationalism from Kant and Hegel to Cassirer and Wittgenstein as the philosophy of Paul Hirst seems to be rooted in this tradition. Viewing this development within the framework of our first chapter, then, the central theme has been the attempt to consolidate Kant's Copernican revolution by progressively liberating knowledge and life from the Christian faith and re-introducing human reason as the supreme directive. In his latest writings Paul Hirst is adamant that not only must science, education, epistemology and ethics be based on exclusive rational secular grounds but that even theology must be based on the results of these autonomous disciplines or at least be consistent with them. Apart from repeating or underlining what is maintained by the other forms of knowledge it very much looks as if Hirst has left theology with no cognitive

content.[55] Elsewhere he had maintained that ... "as seems to be the case at present, there are no agreed public tests whereby true and false can be distinguished in religious claims, then we can hardly maintain that we have a domain of religious knowledge and truth."[56] Nor does Hirst in any way see this as a disaster - for him the exclusion of religious considerations from the fields of knowledge and education is simply the exclusion of what is irrelevent. Secular reason must everywhere be sovereign, must be made the basis of human life and of our hope for a better society. Hirst seems to fear that there may be some irrational Christians who would seek to obstruct the development and implementation of such a vision in education, so he wishes to persuade them to co-operate, suggesting that opposition is un-intelligent and futile. So he writes:

> Just as intelligent Christians have come to recognise that justifiable scientific claims are autonomous and do not, logically cannot, rest on religious beliefs, so also, it seems to me, justifiable educational principles are autonomous. That is to say that any attempt to justify educational principles by an appeal to religious claims is invalid. I am anxious that the terrible story of the long battle which Christians waged and lost over science and religion be no longer repeated in the area of education and religion. 57

Nor will the concession of education and knowledge to the rule of secular reason, mean nemesis as Pusey had predicted concerning the de-Christianisation of Oxford. No educational or cultural disaster is to be feared, Hirst wishes to assure us, if our thoughts and understandings are organised and grounded in reason.

> The loss of religious categories must not be thought to entail the loss as well of all other non-scientific categories, say the aesthetic, mental, moral and metaphysical. What it does mean is that science and all other categories are regarded as functioning in their own right, independently of any religious considerations, and having a status that means that religious considerations can be ignored. To areas of secular thought, all religious thought and determination is irrevelent. It is notanecessary part of such areas that all religious beliefs can be shown to be un-intelligible or false. It is rather that the latter come to be seen as of no consequence; having nothing to contribute in our efforts to understand ourselves and our world and to determine how we are to live. 58

Having seen the centrality of reason in the perspective of Professor Hirst it is now necessary to try to identify more precisely what he understands reason to be. It has become clear already that he rejects not only the assumption of a divinely ordered cosmos, but also Plato's

metaphysical realism and of Aristotle's objectivistic metaphysics of immanent forms. What remains then is to identify the type of assumed subjectivism which gives 'reason' its content.[59] Three rather lengthy quotations from Hirst's writings are particularly valuable in this respect. In 'Liberal education and the nature of knowledge' he writes:

> Whatever else is implied in the phrase, to have 'a rational mind' certainly implies experience structured under some form of conceptual scheme. The various manifestations of consciousness, in, for instance, different sense perceptions, different emotions, or different elements of intellectual understanding, are intelligible only by virtue of the conceptual apparatus by which they are articulated. Further, whatever private forms of awareness there may be, it is by means of symbols, particularly in language, that conceptual articulation becomes objectified, for the symbols give public embodiment to the concept. The result of this is that men are able to understand both the external world and their own private states of mind in common ways, sharing the same conceptual schemata by learning to use symbols in the same manner.
>
> ... it is important to realise that this progressive attainment of a cognitive framework with a public criteria has significance not merely for knowledge itself, for it is by its terms that the life of man in every particular is patterned and ordered. Without its structure all other forms of consciousness ... would seem unintelligible. For the analysis of them reveals that they lack independent intelligibility structure in themselves ... They can be understood only be means of the objective features with which they are associated, round which they come to be organised and built. The forms of knowledge are thus the basic articulations whereby the whole of experience has become intelligible to man, they are the fundamental achievement of mind. 60

A 'form of knowledge' then is a "...distinct way in which our experience becomes structured round the use of accepted public symbols." It performs, therefore, the role of the apriori discussed earlier in that it puts intelligibility, objectivity, meaning, structure, pattern and order into human experience. Hirst re-assures us that Kant's'Copernicum revolution' is both implied by the phrase to have 'a rational mind' and revealed by analysis, although for this central feature of his epistemology Hirst provides us no evidence or explanation whatever. In a later passage Hirst makes it clear that he rejects the static forms of both Plato and Kant. He writes:

> I see no grounds for accepting that being rational in any sphere is adherence to a set of principles that are of their character invariant, nor do I see why formal systems of a mathematical kind should be regarded as providing any necessary ideal of rationality against which all other

> forms must be assessed. Being rational I see rather as a matter of developing conceptual schemes by means of public language in which words are related to our form of life, so that we make objective judgments in relation to some aspect of that form of life ... The Capacity of man for linguistic development, like his sensory apparatus, is an evolutionary product ... Even the notions of reason, intelligibility and objectivity are within this situation. Nothing can any more be supposed fixed eternally. Yet none of this means that we cannot discern certain necessary features of intelligibility and reason as we have them ... Those limits may change, but right now intelligibility is what it is. To ignore 'the bounds of sense' is to produce not a higher sense but nonsense. 61

In this passage after a formal bow to historical, indeed evolutionary relativism, Hirst with remarkable resemblance to Hegel, announces the unquestionability of reason and intelligibility as we have them now. While acknowledging the theoretical possibility of change in the future he disallows the possibility of actively promoting change through criticism. At the same time the present supplies - or rather is - the standard in terms of which the past is found to be lacking. The positive elements in the past are those which have contributed to the present. Furthermore, the picture is of a progressive evolution in the field of knowledge marked by the differentiation of the forms of knowledge. Again the present is seen as the apex of the process. Both reaction and criticism are irrational. The game is played! Indeed, this seems to be the reason Hirst gives for regarding Christian education as a contradiction in terms. In one place he writes:

> At present the concept of education in our society is moving clearly towards my second sense, a sense so valuable in its central demarcatory function, that it would seem to me most important to hang on to this notion. In so far as we do that there can be no such thing as Christian education .. .. we have now reached a stage in the development of our grasp of what education might or might not, ought or ought not to include, that the notion of Christian education is properly regarded as an anachronism. 62

By itself this passage leaves it ambiguous as to whether the present concept of education in our society" is normative because it is the present concept or because it happens to co-incide with a concept of education which Hirst deems to be valuable on other grounds. Hirst's writings appear to provide abundant support for both readings. There can be no such thing as Christian education because the conjunction of these terms is not possible on the basis of the present concept of education as it was in terms of the 'primitive' concept. The juxtaposition of 'contradiction in terms' with 'anachronism' meaning

something out of harmony with the present, appears to identify the real with the rational. At the same time Hirst does resort to some (independent) epistemological arguments to support affirmation of the (alledged) present concept of education. Hirst's philosophical method, of course, assumes - or rather requires that there is a present concept of education - and that conceptual analysis is able to univocally grasp it. And in the present context it also assumes that Hirst has in fact done this, so as to be able to judge that Christian education is 'a contradiction in terms' or an 'anachronism'. The identification of the 'logical' with the actual appears to be based on a theory of language darkly hinted at in the foregoing quotations of Hirst, but made more explicit in R.S. Peters' pioneering Ethics and Education. As the appreciation of this view of language is vital to a correct interpretation of Hirst's epistemology and theory of forms, and as the view was jointly developed by Hirst and Peters (with the latter as the senior partner), some attention needs to be paid to this account. Peters writes:

> In the history of philosophy Kant rightly achieved fame by outlining this structure of concepts and categories by means of which order is imposed on the flux of experience; this he attributed to an active reason at work in the experience of all individuals. Later on, in the early part of the twentieth century, the pyschologist Piaget, much influenced by Kant, laboriously mapped the stages at which these concepts and categories develop. But neither of these thinkers speculated about the extent to which the development of mind is the product of an initiation into public traditions enshrined in public language. Hegel, perhaps, with his notion of 'objective mind' articulated in institutions and Marx, with his stress on the social determinants of individual consciousness, were vividly aware of this social development of mind ... The objects of consciousness are first and foremost objects in a public world that are marked out and differentiated by a public language into which the individual is initiated ... His consciousness, as well as his individuality is neither intelligible nor genetically explicable without the public world of which he is conscious, in relation to which he develops, and on which he imprints his own individual style and pattern of being ... the child has to adapt himself to the multitude of rules and customs that are going to mark forever the channels of his individual life. For the social world, as Durkheim put it, comforts the child comme les choses. To live at ease he has to get on the inside of it, to incorporate it into his own mental structure. This he does mainly by learning a language; for a people's language is the key to the form of life they enjoy. By means of it they pick out and create the public world peculiar to them. The working class man, for instance, who has access only to a limited vocabulary and to a limited set of symbolic structures, literally lives in a different world ... It is a grave error to regard the

> learning of a language as a purely instrumental matter, as a tool in the service of purposes, standards, feelings and beliefs. For in a language is distilled a view of the world which is constituted by them. 63

From such a position it is hardly surprising that Peters is able to assert:

> ... the central fact that education consists essentially in the initiation of others into a public world picked out by the language and concepts of a people and structured by rules governing their purposes and interactions with each other ... (The teachers) function is ... to act as a guide in helping them to explore and share a public world whose contours have been marked out by generations which have preceeded both of them. 64

We should note here that for Peters this is what education actually is, ought to be and indeed necessarily must be. In a similar fashion his linguistic idealism simultaneously rejects and absorbs all revolt against the tradition. It rejects whatever it sees as putting the tradition in question on the ground that the tradition itself is the basis of all knowledge and understanding, and that all meaningful questions necessarily pre-suppose the tradition. Consequently, intellectual revolt is meaningless, impossible and self-destructive. At the same time it absorbs all protest as being a contribution to the one ongoing conversation whose value and meaning is determined by that conversation. In the words of Michael Oakshott, which Hirst approvingly quotes at the end of 'Liberal Education and the nature of knowledge':

> As civilised human beings, we are the inheritors, neither of an inquiry about ourselves and the world, nor of an accumulating body of information, begun in the primeaval forests and extended and made more articulate in the course of centuries ... Education, properly speaking, is an initiation into the skill and partnership of this conversation in which we learn to recognise the voices, to distinguish the proper occasions of utterance, and in which we acquire the intellectual and moral habits appropriate to conversation. And it is this conversation which, in the end, gives place and character to every human activity and utterance. 65

The unfolding of culture, therefore, is the final point of reference for human life. Everything worthwhile from the past has been absorbed into the present and that which has not been absorbed shows itself to be unworthy, incoherent, obsolete and irrational. Error is, therefore, to be identified as that which has fallen under the judgment of history and which has ceased to be part of contemporary culture. Elsewhere R.S. Peters writes:

> There was a time, of course, when forms of awareness were comparatively undifferentiated and when the religious one, in the form of various brands of Christianity, provided some kind of unifying ideal of man against which a man's development could be roughly measured. But those times have passed. We now live in a pluralistic type of society without any such unifying ideal, and as educators we must come to terms with this. 66

Any proposal for Christian education which necessarily points in the direction of a Christian ideal for individual and social life and which would pursue the integration of knowledge in a Christian framework simply fails to come to terms with that which for Hirst and Peters are the very actualisations of reason and progress.[67] To any who might be concerned about their compartmentalisation of knowledge, Peters responds:

> Are we suggesting that philosophers since the seventeenth century have been wrong about such matters? Are we to go back and maintain that religion is indistinguishable from science and that morals is similar to geometrical demonstration? Surely one of the great achievements of our civilisation is to have gradually separated out and got clearer about the types of concepts and truth criteria involved in the different forms of thought. 68

This point constitutes what I referred to earlier as Hirst's specific epistemological argument against the idea of Christian education. Hirst's response to those who would question his account of the development of knowledge as the differentiation of autonomous forms of knowledge is highly instructive. In 'Christian Education: A Contradiction in Terms?' he writes:

> It might be objected by some that my whole argument is based on the thesis that there exist vast areas of knowledge and understanding using concepts and canons of thought, objective in character and in no way connected with religious beliefs. This they would deny, insisting in all areas of knowledge one is necessarily involved in pre-supposition of a religious nature. In history, literature or even science one cannot, it is said, escape these elements, and certainly in teaching these matters one's commitment necessarily infects all one does. To argue thus is indeed to deny the whole autonomy thesis on which my case rests, but such a denial seems so patently false that I find it hard to understand what is being maintained. In what way is mathematics supposed to depend on Christian principles? Its concepts and forms of argument seem to me totally devoid of religious reference. Nor do I understand what is meant by saying that science rests on Christian pre-suppositions, when the test for its claims are ultimately matters of sense observation. Scientific terms have meaning and criteria of application which are not connected with religious concepts of any sort. They are in this sense autonomous and scientific understanding is therefore, of its nature autonomous. To maintain that it was only in the context of Christian belief that science did in fact arise, even if true, does not affect the nature of the activity of science at all. The pursuit is quite compatible with quite other beliefs, as is

> obvious in the present day, and nothing by way of historical, sociological or pyschological analysis can in any way deny the claim that the concepts and principles of science are in no sense logically connected with Christian Beliefs. That there is here an autonomous domain of knowledge and understanding seems to me indisputable. And surely this is why what matters in science, as in any other pursuit, is the mastery of its own logical and methodological principles, not holding any particular religious beliefs.
>
> It might be objected that if science is autonomous, historical studies are not ... Yet surely even this is an unacceptable claim if it is intended to deny the objectivity of contemporary historical scholarship. What matters is truth of the evidence, irrespective of the particular beliefs of the scholar - indeed these are nowadays recognised as an irrelevance, it is justice to the historical data that counts. The idea of coming to a situation and interpreting it from a set of beliefs to which one subscribes is to reject the demands of historical scholarship. What is true of historical studies, is I suggest, also true of literary and even religious studies. I see no reason why there should not be, and indeed there is already being practised an objective study of religion in which the particular religious beliefs of students are an irrelevent consideration.69

Here it seems to me Hirst has thrown down the gauntlet to any proponent of Christian scholarship and education. He acknowledges that his main argument against Christian education would founder if it could be shown that there is a necessary relation between religion and the various forms of knowledge. As his position relates to "the forms of knowledge as we have them"[70] rather than merely an epistemological ideal he is committed to the view that in fact no religious beliefs have any effect on contemporary scholarship e.g. that the 'objective' study of religion really is that. Finally, Hirst's curriculum theory and ideal of liberal education is untenable if it could be shown that some of his forms of knowledge have either an actual or even worse a necessary relation to religion.

In the remainder of this chapter I wish to specify certain fundamental problems with Hirst's theory of the forms of knowledge before considering the possibility of a response to his challenge concerning the relation of religion to knowledge. Already I have attempted to show that rationalism cannot avoid 'irrational' commitment and, therefore, lacks integrity. I have also suggested that the diverse content of the various rationalisms can only be accounted for in terms of diverse pre-theoretical commitments. Any attempt, therefore, to maintain the rationalist tradition must therefore engage, I suggest in some desperate measures to avoid the appearance of crisis. Hirst uses the term

reason (and its cognates) not only in conjunction with his forms of knowledge but also to cover almost everything from deductive inference to selected linguistic connotations and conceptual implications revealed, we are told, by philosophical analysis.[71] In this context I wish to concern myself exclusively with Hirst's doctrine of reason in relation to the forms of knowledge. The acceptance of Kant's Copernican revolution does not, of course, commit one to any specific account of whether there is one or more forms of knowledge nor their specific characteristics. The first problem one encounters with Hirst's account is that having initially defined a form of knowledge not all their distinguishing features seem consistent with his linguistic idealism. A form of knowledge Hirst maintains is "... a distinct way in which our experiences become structured around the use of accepted public symbols," thereby playing the role of the apriori of which we spoke earlier i.e. putting intelligibility, objectivity, structure, pattern and order into human expereince. At the same time Hirst maintains that forms of knowledge have the following related distinguishing features (1) They each involve certain central concepts which are peculiar in character to the form. (2) They denote "certain aspects of experience, form a network of possible relationships in which experience can be understood" consequently the "form has a distinctive logical structure." (3) Each form has expressions or statements which are "testable against experience". (4) Each form involves "... particular techniques and skills for exploring experience and for testing their expressions."[72] Already in the lengthy passage from Learning for Living we find Hirst using a positivistic rhetoric of sense observation, data and objectivity. If the forms of knowledge are as defined above then the language of positivism and talking about denoting certain aspects of experience, testing against experience or exploring experience makes no sense. These locutions assume that experience (or the world) has some structure, meaning and intelligibility prior to the forms of knowledge, which can be denoted, explored and used to test claims against. Alternatively if Hirst takes his idealism seriously and by experience means experience structured by the forms of knowledge then a vicious circularity seems to result. Feature (3) would have to read 'Each form has expressions and

statements that are testable against experience which has been constituted by those expressions and statements or the concepts pre-supposed by them.[73] likewise when Hirst spoke earlier of forms of knowledge "... using concept and canons of thought, objective in character and in no way connected with religious beliefs," a similar ambivalence appears. Hirst's whole point rests upon a polarity between what is objective and subjective beliefs. However, while Hirst trades on this polarity both his general position and his actual characterisations of objectivity imply the rejection of this polarity, for objective appears to mean inter-subjective, or, more broadly, in keeping with the contemporary scholarly consensus. In terms of the latter account of objectivity it is quite possible for religious beliefs to be objective i.e. for there to be objective religious knowledge. In the one case objective relates to how reality is and in the other to what people think about reality, or perhaps more strictly how they constitute it - by thinking about it. That Hirst's deepest meaning is clearly the latter is made most explicit in a paper entitled 'Literature and the fine arts as a unique form of knowledge'. Whether such a form of knowledge exists depends for Hirst on whether there is objective artistic knowledge. He writes:

> The confusions of the art world offer no clear answer. Certainly the existence of objective judgments would be perfectly compatible with the present state of affairs. That the man in the street cannot begin to make any significant artistic judgments that could be called objective may just show most men's total lack of understanding of the language that is art. Why should we expect anything else? On most scientific matters the man in the street can make no significant judgments either. That even the specialists in the arts are in dispute over contemporary works is certainly paralleled in the sciences too, and once the distancing of time has occurred, specialists in the arts, as in other areas, do show considerable agreement in their assessments. But whether there are objective judgments here, I am not in a position to say. 74

Under the constraint of his epistemology Hirst in this paper attempts to put forward the view that 'art is a language' otherwise it would not constitute a form of knowledge and would consequently be deprived of a place in the curriculum of his liberal education. The passage quoted is somewhat ambiguous, in that it is not clear whether the specialists in the arts are artists or art critics. Consequently, it is not clear whether the considerable agreement to which he is referring is a matter of consensus of contemporary art works 'saying' the same thing or artists (as art critics?) agreeing or

art critics agreeing on the artistic merits of various works,(or what the art works are saying). Leaving aside the important issue of who is to count as an expert and as to why agreement might exist, let us imagine a situation where the arts are all 'saying' that human life is absurd, that the artists say that that is what they are saying in their art and that the critics all agree that that is what is being 'said'.[75] Does that make the idea of the absurdity of human life a piece of objective artistic knowledge. Or would Hirst wish to now introduce the notion of false objective knowledge, in spite of the fact that the experts agree. Or does their expertise only extend to the manner in which artists speak in their work and not in what they say. But if what they say is sui generis - the idea of a form of knowledge requires that - then can such a distinction be made?

Leaving this matter aside it seems curious that Hirst in the end does not seem to want to commit himself as to whether there is an artistic form of knowledge. One of his problems seems to be that Wittgenstein's idea of a language game leads to the question: Is there an established language game here or not? Alternatively phrased this seems to imply that there should be either unanimity or radical controversy. All we have to do is to decide which there is. If the latter then there is no form of knowledge here. To be fair to Hirst he does in his theory of the differentiation of the forms of knowledge allow for the coming into being of a form of knowledge but he nowhere avails himself of the notion of a half-developed game. Indeed Wittgenstein's whole analogy seems to depend on the existence of determinate or comprehensive 'rules' or 'logical grammar' as indeed does the possibility of philosophy as conceptual analysis. Hirst's idea of a form of knowledge with its social definition of objectivity appears to require two things. In the first place, as we have mentioned, it needs to be specified what degree of inter-subjective consensus is required and which subjects are to be regarded as qualified. Secondly, whether or not in fact these requirements are met. My first point virtually phrased in the language of voting and the franchise ill accords with the idea of a language game. However it cannot be avoided for the problem stems from the fact that the notion of a language game ill accords

with human reality. Hirst's intelligence however seems so bewitched by the idea of the language game being the key to every problem that he does not seriously try to meet the two requirements, perhaps for the reason that he had sensed that to attempt to do so would show the untenability of his whole position. Even to attempt to meet the first requirement, apart from the sheer complexity, would inescapably involve an abandonment of the language game view which pre-supposes human agreement to the extent of unanimity. With respect to the second requirement - the meeting of which logically depends on the criteria laid down by the first - the actual situation in most disciplines is neither that of virtual unanimity nor that of complete intellectual anarchy. Unanimity concerning concepts and canons of thought in most, if not all, disciplines seems to be conspicuously absent. Indeed no discipline seems to be without its schools of thought which characteristically differ over which are the proper concepts and canons of thought. Hirst is clearly unable to take this seriously for in terms of his definition of objectivity one would have to conclude that there are therefore no forms of knowledge because there is no objective knowledge. Hirst's (and Peters) most frequent examples of paradigmatic forms of knowledge are mathematics and natural science. However, they never elaborate upon their understanding of these disciplines. They appear to be appealing to the popular image of these disciplines, which is at great variance with most contemporary history and philosophy of science. Hirst's own references to mathematics and natural science seem to indicate that he has not advanced much beyond the Logical Positivist theories of the 1930's.

Before we move on to Hirst's highly problematic selection of his forms of knowledge one final general point with important educational implications needs to be made. The difficulty is revealed in the fact that Hirst's four characteristics of a form of knowledge cannot be assimilated to his linguistic-idealist definition of it. I have already commented on the vicious circle in his concept of experience simultaneously given and constituted. The following passages make clear Hirst's view of meaning, truth and knowledge.

> ... errors stem from taking the symbols of language in ordinary discourse to have meaning because they either name or refer to objects or states of affairs which exist independently of the symbols and which are intelligible, or known quite independently of these symbols ... The central point on this view is that symbols name or refer to things outside us or to states of mind. They are the communication means for what we see, are aware of, or know already ... The thought, the meaning is not something there in the outside world, understood before language gets off the ground, in some wordless, symbol-less confrontation. Nor is it an idea in the mind formed without symbols or language. Meaning and understanding exist in the use of language, are built up in the public use of symbols ... an area of experience arises with the development of the concept it employs and they in their turn develop in the use of the appropriate public language ... The type of experience concerned and the type of discourse necessarily go together as they share the same concepts. 76

From these passages it seems that Hirst is maintaining that there can be no perception, awareness of knowledge prior to concepts and the conceptualisation of experience. Additionally, he appears to link objectivity with the forms of (theoretical) knowledge. The consequence seems to be that unless one has been initiated into the forms of knowledge i.e. unless one's experience has been theoretically deepened then one is virtually without human experience and knowledge. Indeed his colleague Peters, at one point suggests that unless one is versed in the form of knowledge one's awareness is at the level of "... the mind of a child or preliterate man - indeed perhaps to that of a pre-seventeenth century man."[77] Hirst, as we have seen is similarly disparaging about the man in the street. Theoretical knowledge it seems is the only real knowledge and the theoretician alone, the one who has been initiated into the forms of knowledge, is the ideal man, is fully man. Pre-theoretical everyday awareness and knowledge is accordingly regarded as confused and fragmentary or at best as primitive theoretical knowledge.[78] Hirst's failure to recognise the sui generis character of pre-theoretical knowledge makes the possibility of theoretical knowledge very puzzling. For example if genuine aesthetic perception, awareness, experience and knowledge pre-suppose aesthetic theoretic-conceptualisation, then it could hardly have occurred prior to the rise of the science of aesthetics in the mid-eighteenth century. This would have made both aesthetic appreciation and the production of aesthetically qualified objects prior to that time quite impossible. Furthermore, it becomes utterly baffling as to why aesthetics should have ever arisen at all in the absence of aesthetic awareness and knowledge. Without

the latter aesthetics would have no subject matter - nothing to analyse and nothing against which to test its theories. Furthermore, it easily leads to the failure to recognise that the arts don't exist for the sake of aesthetics but that the latter exists to provide a certain limited type of theoretic-systematic illumination for the former. However, Hirst, is so obsessed with the idea of the priority and autonomy of theoretical knowledge that he actually attempts to suggest that our direct knowledge of both art works and persons pre-supposes propositional knowledge i.e. theoretical concepts.[79] This same neo-Kantian perspective mediated by Piaget has been, of course, very influentially applied to the field of religious education by Ronald Goldman. Goldman's recommendations rest principally on the confusion of religious awareness and knowledge with abstract theoretical theological articulation.[80] J.W. Reeves, for example, in Thinking about Thinking, senses the inadequacy of this Kantian heritage when he writes:

> Piaget's restriction of 'conceptual thoughts' to what Price regards as full-dress, symbolic, logical thinking seems less happy ... the possibility of there being at least two types of thought process ... remains a burning question at the core not only of experimental and genetic psychology but of current speculation in many fields. 81

One final comment in this context is to underline the anti-Christian implications which one would well expect to flow from the Kantian idolisation of theoretical thinking as the source of meaning and structure in reality. One Christian writer has put it colourfully thus:

> The teachers proceeded to force concepts into the heads of little children, concepts that could be hooked together in a logical fashion. The concept began to dominate the thing. Live leghorns were brought into class to illustrate the concept "chicken". The producer of cackleberries was then analysed in terms of bones, muscles, fat and feathers to yield the further notion of "bird". You see what happened. Children were not introduced into God's highly diversified world of fascinating creatures; but God's creatures were used to illustrate the abstract classifications of men. It was human thought that was being glorified. It was the human power of conceptualisation, the children were being asked to adore, not God's big creation. 82

Such science education meant that the child was isolated and alienated from the world by education having its focus in abstract concepts and principles to be memorised. Within the dialectical structure of Humanism this lead to a swing from the pride of human reason to that of human freedom. Educational theorists came forward to champion the freedom of the child and child-centered

education. To some degree this liberated the child's natural curiosity. However, discovery methods, for example, were not infrequently used as means towards the same end. Furthermore, the freedom ideal of humanism, as expressions of it as existentialism made clear, involves a similar alienation from the creation-order, maintaining that it is essentially contingent and meaningless in the absence of human meaning giving.

These general problems of Hirst's philosophical position carry over into his account of "... the forms of knowledge as we have them"[83] making it very confused and confusing. The extent of the confusion seems to have been little realised. For example we find that Hirst accounts of the domains of knowledge in various publications show remarkable differences.

Hirst (in Archambault 1965)		Hirst (in Tibble 1966)		Hirst & Peters (1970)
Mathematics	-	Mathematics	-	Formal logic, Maths
Physical Science	-	Science	-	Physical Sciences
Human Science	-	?	-	Personal Knowledge
History	-	History	-	?
Literature & Fine Arts	-	Aesthetics	-	Aesthetic Experience
Religion	-	Religion	-	Religion
Philosophy	-	Philosophy	-	Philosophy
		Morals	-	Ethics
Field of knowledge:				
Theoretical	-	Fields of knowledge	-	?
Practical	-	Practical theories	-	?

Yet he does not refer to the differences or account for the changes. Are we to assume that the forms of knowledge as we have them have changed? Or have Hirst's criteria of a form changed? Or has he corrected previously erroneous accounts of the forms of knowledge as we have them? Or a mixture of these? Nor does the matter end there for in addition to the initial division between fields and forms we find a division of forms into first and second order and sub-divisions of each of these. Both fields and second order forms appear to pre-suppose first order forms of knowledge, the former two being parasitic upon them.

One preliminary point to which we have already addressed ourselves is whether Hirst's account of the forms of knowledge is descriptive or normative. The answer is <u>both</u> thereby enabling philosophy which alone has access to them - following Hegel and Wittgenstein - to be both purely descriptive and normative

KANT

Practical Reason

Transcend. Ideal-Logical categories

Transcendental unity of apperception

Ethics

Physics

Thing an sich

Pure Reason

'Logical' order imposed on chaos.

CASSIRER

Symbolic forms

Animale Symbolicum

Science
Myth & Religion
Language
Art
History

sensation?

Creation of the symbolic universe

FIRST

Linguo-rational animal

Forms of knowledge

Morality
(Religion?)
Literature & Fine Arts
Philosophy
History
Human Sciences
Physical Sciences
Mathematics

sensation?

Meaning given by conceptualisation

DOOYEWEERD

Law of God which holds for both subjects and objects. Knowledge as an inescapably 'religious' response to Divinely structured cosmos.

Modal aspects of man & world

Man as a religious creature called to be the image of God. Man's identity not to be found in some or all of his functioning.

Confessional
Ethical
Jural
Aesthetic
Economic
Social
Linguistic
Historical
Logical
Sensory
Biotic
Physical
Kinematic
Spatial
Numerical

Law-ordered cosmos.

simultaneously. Philosophy alone has access to what is apriori, what is necessary, to the conditions of the possibility of all meaning and knowledge, yet at the same time these logico-lingual foundations rest on human agreement required by our form of life. The apriori for knowledge is, therefore, simultaneously ambiguously 'formal-logical' and 'social'. This puts Hirst in a highly problematic situation with respect to both sociology and logic. Having identified the actual with the rational in the idea of the public forms of knowledge Hirst is immediately threatened by the sociologists of knowledge whose descriptions of the organisation of knowledge as we have it bears little resemblance to Hirst's forms. The sociologists of knowledge appear to encounter great change, variability and conflict in the framing and classification of knowledge ... and not the progressive evolutionary differentiation to necessity and universality Hirst seems to assume. Having himself often closely identified forms with disciplines Hirst tries desperately to disqualify the sociologists. He writes:

> ... it must be recognised that the sociology of the curriculum is the sociology of certain secondary, non-fundamental organisations of knowledge that have developed in schools. The radical diversity of curricula organisations is in no sense evidence for the social variability of fundamental categories of knowledge ... Nor is an examination of the organisation of knowledge in other institutions, even universities, of itself going to get at changes in these categories of their diversity between societies. If sociologists are to be able to make any valid comments here, they must surely distinguish those categories from secondary ones by means of careful conceptual analysis. Only then can we see whether, underlying all the diversity of secondary organisation, the fundamental categories of knowledge are as relative as so often implied. 84

Hirst leaves it unclear as to whether the sociologists of knowledge have simply been inept by focusing on non-fundamental features of knowledge or whether they are, qua sociologists, debarred from the fundamental categories which are accessible to conceptual analysis alone. At this point one begins to wonder whether Hirst has identification of actual and normative because in his view the actual is a pale reflection of what is normative or universally valid. One is reminded of Plato's view of those who do not see beyond the appearances. Indeed the Platonic analogy can be pushed a little further. Hirst feels that underlying knowledge there must be something more than tradition, convention or decision - for he shies away from relativism at this

fundamental level. Having closely linked meaning, justification and logic with social agreement any investigation of the latter threatens to put the 'universal validity' of the former (as required by rationalism) into question. Indeed the notion of such validity can no longer be maintained. However, rationalist conviction requires that it must be maintained so he simply asserts that it is so. Knowledge must contain something a priori which he refers to as "... an inescapable, fundamental, necessary organisation" or as "... some logical structure which is what it is."[85] This must be the case for unless this were so, according to Hirst, experience, knowledge and reality would lack all structure. Structure is taken to be something logical or rather linguo-logical (or conceptual) in origin. The structural order of creation, as I wish to argue later, has many sorts of structure (besides logical structure), so the notion of what is 'logical' has to be stretched in order to make the thesis look at all plausible. In actuality, we have ontology carried out in a 'logico-linguistic' idiom, concerning what can and cannot properly be said as if the norm for this were internal to language, some 'logical grammar'.[86] This stretching Hirst acknowledges when he writes that "... recent philosophical work has had to so extend the notions of meaning, statement, truth, concept, logical relation, knowledge, that previous paradigms can no longer be regarded as settling when these terms are to be applied and when withheld."[87] But in terms of what paradigm does Hirst use the notion of logical relation for example? Careful examination of his writing discloses that his logical analysis is governed by his linguistic idealism and that frequently he uses logical terms (logically impossible, implication, etc.) to refer to what is required or excluded by his linguistic idealism.[88]

While his position is indeed free from realist metaphysics as he claims in 'Liberal education and the nature of knowledge' it has simply been replaced by a variety of subjectivist metaphysics instead.[89] By failing to make explicit the manner in which his metaphysical commitments control his analysis Hirst appears to wish us to accept his position as the deliverance of 'reason' or 'conceptual analysis'.[90] Our suggestion is that the actual content given to these latter terms derives from his metaphysical commitments which are

themselves part of his humanist orientation. It seems that when Hirst first presented his position in 1965 he believed that he had formulated a fruitful research program for relating philosophy and curriculum theory. Indeed he even promised a book in 1966 entitled Philosophical Foundations of the Curriculum.[91] However, both philosophically and educationally his position has increasingly manifested itself as sterile. He fails to account for how he has arrived at his results while dismissing the investigations of others as misguided for the principle reason that they do not conform to his results.[92] He simply assumes his forms of knowledge doctrine but as to what the doctrine actually asserts becomes a matter of increasing puzzlement. What one wonders especially is what he would regard as putting the doctrine in doubt. As time continues it is hard not to feel that one is encountering a piece of dogmatic idealist metaphysics now in the process of dying the death of a thousand qualifications. In his defence of the forms of knowledge Hirst has made them 'wholly other' in order to put them beyond criticism. This has meant that the educational relevance of his theory of forms has become more and more attenuated as time has gone on. He had bravely begun by speaking of his liberal education as one "... that is determined in scope and content by knowledge itself." He spoke of conceptual analysis laying bare "... the general structure of those categories which in fact characterise contemporary knowledge and it is this framework with which curriculum planners must work."[93] What his theory of forms actually offered to curriculum theory was meagre in the extreme. It provided no clear principle to distinguish the various areas of knowledge. It provided no direction concerning the internal structure of a discipline like geography, nor did it clarify the relationships between the disciplines, e.g. between history and geography.[94] Latterly, Hirst himself seems to have largely withdrawn the claims earlier put forward for his differentiated theory of reason. In one place he writes: "... from none of this does it follow that a curriculum must or ought to be divided into subjects that mirror distinctions between the forms of knowledge."[95] Whether this amounts to a small strategic retreat or a complete abandonment of liberal education or something else again, turns on the meaning given to the word 'mirror' concerning which Hirst not untypically, fails to inform us.

So far then in this chapter we have attempted to make clear Paul Hirst's position in the history of rationalism and have suggested that his own theory of reason and the forms of knowledge is deeply problematic. However, the Hirst-Peters perspective in philosophy of education has served to professionalise the subject by providing it with a paradigm. In practice this paradigm has served merely to label most of the inherited educational status quo as 'rational' and 'justified' and has led to little by way of innovation. With respect to our major theme - the struggle between Christianity and Humanism for the control of education - it has served the cause of the latter and has provided a philosophical imprimatur for further secularisation. The Hirst-Peters philosophy of education appeared to put an end to the war-time dream that Christianity could play a vital role in scholarship and education. They seemed to exclude the big questions about God, man and the world from philosophy and education so that they ceased to be fundamental. Indeed Christianity was to be restricted to that dubious form of knowledge called 'religion'. Hirst's theory of education further required that it should not be taught as true but as radically controversial. Most Christians in education (whether liberal or orthodox) assented to the major features of the Hirst-Peters viewpoint, partly out of commitment to it and partly perhaps for lack of any developed alternative. This was particularly the case with respect to R.E. for Religious education in secondary schools (Schools Council Working Paper 36, 1971) is dominated by the Hirst-Peters perspective. For the most part their philosophy simply articulated the assumptions embodied in the 1944 Education Act that the point of contact between Christianity and education was solely in the field of religious education.[96] For the greater part both Christians and Humanists had shared that assumption with the latter showing increasing concern to weaken or eliminate even that remaining point of contact. There was no conflict between Christians and Humanists concerning the remainder of the curriculum because the former assumed that it had nothing to do with religion or was neutral (or both) while the latter regarded it as neutral or fully consistent with the Humanist worldview (or both). In terms of the acceptance of this assumption of the neutrality of all (or almost all) knowledge it is clear that the possibility of developing a Christian philosophy

of education was excluded because to introduce the Christian faith anywhere into the field of Knowledge would be to introduce bias and prejudice and to destroy the possibility of objectivity and truth. Indeed even the notion of a "Christian philosophy" on this assumption was a contradiction in terms. Nor did there exist, in the words of Hirst "... anything of substance that deserves to be labelled a Christian view of education"[97] and that "... what one is offered under this label is often very dubious from both an educational and a Christian point of view."[98] Having looked in vain for any actual Christian view of education and knowledge Hirst under the influence of the philosophical currents we have discussed, came to conclude that such an undertaking was impossible in principle.

However, we have now reached the situation when a considerable number of things are putting the Hirst-Peters paradigm in question. Some of the main ones we could enumerate as follows:

1. The widespread and increasing frustration amongst pupils, students, teachers and lecturers with contemporary education.
2. The growing recognition that analytic philosophy is not neutral.
3. Whereas for Hirst and Peters natural science provided their most paradigmatic form of knowledge, the nature of science has now become highly controversial and some of the most influential accounts of what it is and should be, have abandoned the neutralist positivist image. (Polanyi, Kuhn, Feyerabend).
4. The Hirst-Peters paradigm being very distant from the actualities and relativities of modern knowledge provides little or no guidance to curriculum planning and particularly no help whatsoever towards any sort of integrated curricula. In more general terms it provides no general guidance for the future nor does it really attempt to.

However, it does remain the paradigm of normal philosophy of education so that those who are concerned about any sort of alternative are faced with what J.E. Colbeck has described as follows:

> The current orthodoxy has acquired great power by constant repetition, elaboration and reinforcement in book after book, thesis after thesis. The interlocking, value-laden concepts of

> 'the educated man', knowledge and understanding and liberal education - even emotion being characterised in cognitive terms - constitutes a fortress of full blown 'theory' which can probably only be assailed with the aid of an alternative, equally well developed theory. Who has the resources in time, academic staff or students to develop such a theory. 99

In our British context the one equally well developed theory which does not lack committed supporters is of course Neo-Marxism. Indeed the latter has a considerable foothold in sociology, history and sociology of education and sociology of knowledge, and is intent on developing its perspective in every field of human knowledge and activity. Having earlier commented on the strongly Hegelian elements of the Hirst-Peters view it is hard not to be reminded of the division of Hegel's own disciples in this context. John Passmore described the situation as follows:

> Hegel's more faithful, 'right-wing', disciples devoted themselves either to expounding his ideas or to detailed work in the history of philosophy. In politics they were conservative. And they took Hegel's word for it that his philosophy was a defence of Christianity. The left-wing Hegelians, in contrast, were not to be persuaded that the Prussian State was the ideal outcome of history, or that Christianity had at last been rationally defended. Hegel's own attitude to religion had been by no means consistent; like Fichte he became more pious in later years. He never ceased to criticise, however, the God of traditional theology... The left-wing Hegelians ... hoped wholly to destroy the supernatural and to describe man's growth to perfection in purely secular terms. So far they were carrying to its extreme limits the spirit of the Enlightenment ... "We want to remove everything" Engels writes, "that calls itself supernatural and superhuman and thus remove untruthfulness. For the pretences of the human and natural to become supernatural are the root of all lies." "To see the glory of human nature, to understand the development of the human species in history and its irrestible evolution, to realise its always certain victory over the unreasonableness of the individual" he tells us, "we do not have to call in the abstractions of a God to whom we attribute all that is beautiful, great, sublime and truly human." 100

Hegel remained a Lutheran, while Peters is a Quaker and Hirst a member of the Christian Brethren. Peters' extremely attenuated Christianity does not appear to resolve for him what he calls the ultimate pointlessness of life.[101] Likewise, in many places Hirst insists that he does not believe his views are anti-Christian. But it is equally evident that the only type of Christianity which his philosophical views do not exclude is a completely individualistic privatised pietism having no point of contact with 'public' life including education and scholarship. If 'Christianity' is conceived of in such terms then clearly some other source of direction is needed to direct the affairs

of life and it is here that Hirst repeatedly affirms his faith in secular reason, in the 'actual-and-ideal' autonomy and neutrality of human knowledge, values and education. Hirst's neo-Hegelianism clearly provides minimal resistance to the secularising spirit of the Enlightenment - indeed the profound affinity of the two is the major feature. There is indeed little to choose between Hirst's declaration of human reason .. "as the final court of appeal in all human affairs,"[102] and Marx's acknowledgement of ".. the consciousness of man as the supreme divinity. There must be no God on a level with it."[103] The difference is that being more singlehearted Marx saw clearly the radical and exclusive humanist religion that such a view of reason was rooted in.[104] Working within the remains of a synthetic nature-grace dualism Hirst appears to maintain that it is not impossible to add on to the public religion of reason a private devotion to Christ. He signally fails to mention that such a Christ can hardly be the Christ of cosmic significance portrayed in the New Testament, who bears little resemblance to the exemplary ideal educated man of Hirst's philosophy.

This short digression into continental European intellectual history has the purpose of setting the context for the introduction on "an alternative equally well developed theory" (in Colbeck's phrase) which unlike Idealism and Marxism stems from the Reformation rather than the Enlightenment. Indeed, Hirst's failure to find a substantial Christian theory of education in England and why such a theory has been developed, as we shall see, in Holland is closely tied to intellectual history. England had seen little of the radical theocentricity of continental Calvinism nor had it much experience of the radically anthropocentric character of the French Revolution. Indeed here in England we have maintained and perpetuated a Christian-Humanist synthesis especially in education even into the present time, dividing the school-timetable between Christian R.E. and assembly, and ostensibly neutral other subjects. By contrast early in the nineteenth century Dutch Christian leaders had perceived in the Revolution the inauguration of a new religion whose principles were coming to dominate the life of the Dutch nation, a religion of reason, systematically opposed to the Christian religion and bent on its eradication. (Indeed it is remarkable how timid and conservative

was English secularist intellectual life by way of comparison, as if haunted by a bad conscience.)[105]

In our first chapter we indicated that although the Reformation caught sight of the idea of an alternative intellectual tradition it never in fact decisively broke free from a dualistic scholasticism and subsequently succumbed to synthesis with modern humanistic philosophies,e.g. Rationalism, Empiricism, Kantianism, Hegelianism, Evolutionism, Individualism, Socialism, Existentialism, etc. This meant a loss of cultural initiative for in such a situation Christian leaders found themselves endlessly (and always behind the times!) adjusting to or reacting against humanist scholarship which set the pace and central direction. While adjustment was easy, genuine opposition as opposed to mere reaction (with piecemeal criticism and mere apologetics) was next to impossible in the absence of a genuine alternative of one's own. This serious lack of a systematic philosophy rooted in its own deepest convictions was clearly recognised by Abraham Kuyper (1837-1920) leader of the Neo-Calvinist revival in nineteenth century Holland.[106] In the few remaining pages of this chapter I wish to briefly relate how the Kuyperian Calvinist tradition is able to respond to Paul Hirst's challenge to Christian scholarship and education. It will be remembered that Hirst rested his case on the religious neutrality and autonomy of the various forms of knowledge. Kuyper in direct opposition insisted that - in Hirst's words - "in all areas of knowledge one is necessarily involved in pre-suppositions of a religious nature."[107] At the onset we should mention that Hirst and Kuyper mean something different by religion. For Hirst it is one (possible) form of knowledge of man who is essentially (actually and ideally) rational, while for Kuyper man is essentially a religious creature whose thinking everywhere bears the marks of this. In the following passage Kuyper questions both the neutrality and autonomy of the various forms of knowledge. He writes that ...

> ... theology is only one of the many sciences that demand Calvinistic treatment. Philosophy, psychology, aesthetics, jurisprudence, the social sciences, literature, and even the medical and natural sciences, each and all of these when philosophically conceived, go back to principles, and of necessity even the question must be put with much more penetrating seriousness than hitherto, whether the ontological and anthropological principles that reign supreme in the

present method of the sciences are in agreement with the principles of Calvinism, or at variance with their very essence. 108

Having described the contemporary conflicting schools of thought amongst philosophers, jurists, medical men, natural scientists, linguists and philologists Kuyper concludes:

> Everywhere contention, conflict, struggle, sometimes vehement and keen, not seldom mixed with personal asperity. And yet, although the energy of the difference of principle lies at the root of all these disputes, these subordinate conflicts are entirely put in the shade by the principal conflict which in all countries perplexes the mind most vehemently, the powerful conflict between those who cling to the confession of the triune God and His Word, and those who seek the solution of the world-problem in Deism, Pantheism and Naturalism. 109

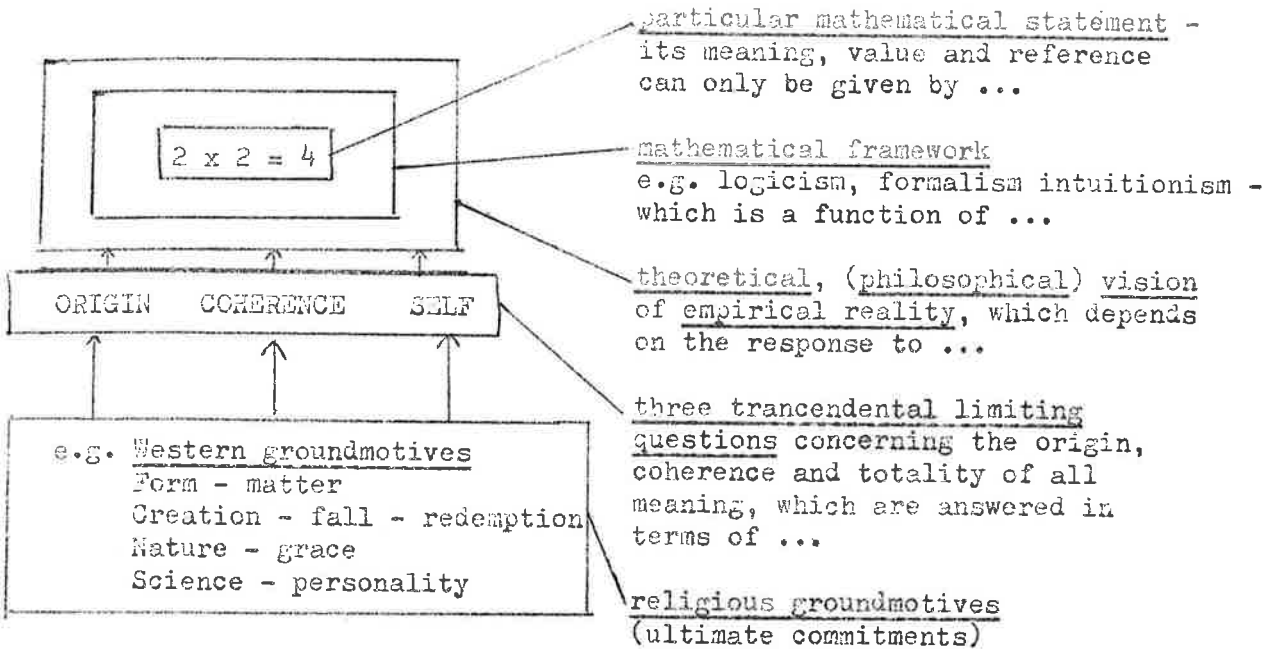
In our modern context Kuyper speaks of the principal conflict as between Christianity and Modernism. These he sees as two mutually exclusive totality views "about the origin, interconnection and destiny of everything that exists."[110] In the light of this he views the situation of scholarship in the following terms, using we should note the term science in the sense of wissenschaft:

> Not faith and science therefore, but two scientific systems or if you choose, two scientific elaborations, are opposed to each other, each having its own faith. Nor may it be said that it is here science which opposes theology, for we have to do with two absolute forms of science, both of which claim the whole domain of human knowledge, and both of which have a suggestion about the supreme Being of their own as the point of departure for their world-view. And finally, these two scientific systems ... are not relative opponents, walking together half way, and, further on, peaceably suffering oneanother to choose different paths, but they are both in earnest, disputing with one another the whole domain of life, and they cannot desist from the constant endeavour to pull down to the ground the entire edifice of their respective controverted assertions, all the supports included, upon which their assertions rest. If they did not try this, they would thereby show on both sides that they did not honestly believe in their point of departure, that they were no serious combatants, and that they did not understand the primordial demand of science, which of course claims unity of conception. 111

For Kuyper the two totality views were connected with two kinds of human consciousness, two kinds of self-understanding, one regenerated by the Spirit of God and the other not:

> If, therefore, it be true that man's own consciousness is his primum-verum, and hence must be also the starting point for every scientist, then the logical conclusion is that it is an impossibility that both should agree, and that every endeavour to make them agree must be doomed to failure... We do not assail the liberty of the (Modernists) .. to build a well-construed science from the premises of his own consciousness, but our right and

theoretical commitments. In a schematic manner the following diagram indicates something of what Dooyeweerd takes to be the relation between mathematics and ultimate (religious) commitments. Dooyeweerd has himself, attempted to develop a Christianly based philosophical vision of empirical reality which indeed lies behind his criticism of the reductionistic character of the schools of mathematics to which he refers.



He further develops an alternative mathematical framework as well as seeking to uncover the humanistic religious groundmotives of those schools of mathematics.[119] In that mathematical education for the last decade has been dominated largely by logicist and formalist accounts of mathematics then a Christian critique is clearly possible.[120] However, mathematical education is not, of course, solely the product of a view of mathematics but also reflects a number of other assumptions concerning, for example, human learning, the aims and control of education. Likewise, if Dooyeweerd's account holds then detailed Christian criticism and alternatives are again real possibilities. Indeed, even if mathematics were neutral the moment we face the issue of mathematical education the hope of neutrality appears quite hopeless. Perhaps one can add in this context that the character of an education in a particular discipline often provides very concrete evidence of the view of the discipline of those teaching it, e.g. in terms of what content, methods,

concepts or whatever they feel that it is vital for the child to grasp. The change from 'old' to 'new' mathematics and geography would perhaps provide instructive examples, as would the shift from national and European history to contemporary and local history.

To conclude this chapter we will briefly consider Dooyeweerd's alternative to the forms of knowledge proposed by the idealist tradition of Kant, Cassirer, and Hirst. We shall do this by looking at the different responses to what in diagram I we referred to as the three transcendental questions concerning the origin and coherence of meaning in relation to the human selfhood.[121a] Some features of this situation are indicated by diagram II overleaf. In the first place concerning the origin of meaning both Kant and Cassirer stand with Hirst when he maintains that it is "... only be virtue of conceptualisation that there is anything we can call meaning at all."[121b] It is the human self that inter-subjectively confers meaning, structure and law on experience. Man gives form to a formless chaos. The 'matter' of knowledge which is given is not clearly characterised in these accounts - indeed it cannot be for it is essentially unknowable like Aristotelian prime matter. The divine principle is obviously that of form which is thought of as (transcendental, symbolic or conceptual) 'logic'.[122] What is unmistakable here is that the origin of meaning is identified with the human self - something which is required by, and is only consistent with, the Humanist groundmotive. By contrast, the Christian groundmotive requires that God is recognised as the origin of all meaning in the sense of Creatio ex nihil. Consequently, Dooyeweerd rejects the idea of human knowing as constituative of the world. Nor does he accept the passive account of human knowledge found in classical British empiricism. Indeed he argues in detail that empiricism dissolves the world of experience into atomistic sensory elements and that in terms of such dubious psychological abstractions it is not possible to account for any human knowledge whatever. Hume made this latter point clear in his Treatise of Human Nature.[123] Kant essentially took over Hume's chaotic psychologistic view of what is given in experience. However, in that he took Newtonian physics and moral freedom also to be given he proceeded by means of transcendental arguments to account for their possibility.

Hume's view of experience assumed that the origin of meaning was neither God nor the world. Kant accepted that assumption and concluded, as we have seen earlier, that human reason must be the source of structure in experience.

By way of contrast Dooyeweerd suggests that our everyday integral experience is of God's richly diversified creation which is subject to His law-order. The Divine law is the structure-for the structure-of creation. Humanist thought persistently rejects this everyday integral experience and takes its point of departure in what is actually an abstraction from it, treating the abstraction as given. (Descartes' program of doubt is an example of the former, and the sense data (impressions, sensations, etc.) of empiricism are clear examples of the latter). When the attempt is then made to reconstitute the world from these theoretical abstractions the inevitable conclusion is that our everyday knowledge is found wanting, that it is largely appearance, while theory reveals reality. At best everyday knowledge is regarded as primitive theoretical knowledge. By raising the question how are the various types of theoretical abstraction possible, he points back to everyday experience as its unavoidable datum.

If we turn to the question of the nature of the human self in the philosophies of Kant, Cassirer and Hirst then we encounter nothing less than growing identity crisis. For Kant man is split as simultaneously homo noumenon and homo phenomenon subject to the physical and moral laws of his own creation.[124] Cassirer, deeply dissatisfied with what he regards as the radically reductionistic accounts of man Nietzsche, Marx and Freud wants to stress the irreducible diversity of both man and knowledge. Yet what of man's identity? For Cassirer "Man cannot find himself, he cannot become aware of his individuality, save through the medium of social life."[125] This social life for Cassirer is the ideal world constituted by the symbolic forms which "have a life of their own, a sort of eternity by which they survive man's individual and ephemeral existence."[126] This implies that man's identity can be no more that a "functional unity",[127] amounting to no more, it seems, than participation in the diverse symbolic forms. Yet he continues:

> Philosophy cannot give up its search for a fundamental unity in this ideal world. But it does not confound this unity with simplicity. It does not overlook the tensions and frictions, the strong contrasts and deep conflicts between the various powers of man. These cannot be reduced to a common denominator. They tend in different directions and obey different principles. 128

While he anxiously adds that "this multiplicity does not denote discord or disharmony. All these functions complete and complement each other,"[129] he fails to go beyond the conflict of the mutually excluding monistic accounts for he neither provides an alternative unity nor does he explain the inter-relation of the different forms. Neither for that matter does he adequately explain or justify his choice of symbolic forms or their own identities. The crisis of knowledge and self-knowledge which he had so graphically portrayed as "not merely a grave theoretical problem but an immanent threat to the whole extent of our ethical and cultural life ..."[130] his philosophy of symbolic forms struggles in vain to resolve.

Cassirer's image of modern man shows a remarkable correspondence to the sociological image of man as the one who plays various social roles and who is either identical with these roles or is alienated from them following, as it were Durkheim or Marx.[131] Hirst clearly looks for identity in terms of identity with existing society. It is doubtless not accidental that Hirst (with Peters) instances Gauguin - a man deeply alienated from European culture - as not being an educated and hence not being an ideal man. The tentative sketch they give of an educated-ideal man is the very image of English middle-class actuality:

> He might have achieved a fair mastery of the different forms of experience without having developed any human excellences in them. He might live a life that was morally impeccable, have a developed aesthetic sense, and understand the second law of thermodynamics as well as the causes of the decline of Roman civilisation. He might be sensitive in his personal relationships and not without some kind of religious awe at man's predicament in the universe - a quiet man, working a humble job, living in a suburb in which he cultivated his garden with love and a sound understanding of the nicer points of horticulture. 132

Hirst's liberal education is essentially an initiation into an eminently 'balanced' life lacking all focus. One cannot ask for more for there is no more. The rational man, Professor Peters, sadly reflects:

> ... must grasp the ultimate pointlessness of life, that it cannot, as a whole, be given meaning in the way in which meaning is given to events and actions within life; but he must also strive to discern point within it. For life, like works of art, can exhibit values that are self-contained, that define a quality of life. 133.

For those who look for some integration Hirst replies that as knowledge consists of a number of distinct autonomous forms then the "... maximum unity of consciousness a person can ever legitimately have is limited by the unity to be found in the structure of human knowledge and understanding."[134] Nor can we change this situation, for even if these structures ".. are in a process of change, they now have the character they have and not another ... right now intelligibility is what it is ... maybe new forms are at present being slowly differentiated out. We can do little but wait and see."[135] Nor can we transcend this situation for "Outside such structures freedom is, in general, only the freedom to be irrational."[136] (So 'freedom of thought' can be no more and no other than the freedom to think within the publicly accepted framework of knowledge according to public criteria). Indeed, unable like Cassirer to provide an account of man's identity or any integration of knowledge Hirst becomes unclear as to "... why any such unity should always be thought valuable. Indeed discontinuities in consciousness would seem to be as much a mark of a sophisticated mind as a sustained involvment in any one form of experience."[137] Having maintained that such complacent intellectual schizophrenia is the mark of a "sophisticated mind" we have little difficulty in understanding why philosophy, namely Hirst's philosophy "is not the great integrator of all human understanding into a unified view of man, God and the Universe."[138]

But why is a unified view of man not possible? Within the Humanist framework one is confronted with a choice between a unified theory of man which is radically reductionistic or the recognition of the diversity of human life which excludes any encompassing theory. To attempt work on such a theory presupposes faith in the possibility of such a theory, which in turn depends on a conviction concerning the nature of human identity at the pre-theoretical level. In that most secular streams of twentieth century philosophy pride themselves on their metaphysical and religious neutrality

and pretend to engage in some form of purely logical clarification or pre-suppositionless description then any attempt in the direction of a serious philosophical anthropology would show the alleged neutrality to be spurious. Furthermore, most academic philosophers are aware that the contemporary secular sense of human identity as it manifests itself in everyday life, in art and literature is one of alienation, frustration and frequently angst which ill accords with liberal rationalist expectations.[139] The American philosopher Herbert Kohl, from within the Humanist tradition, has given an account of this situation in his significantly entitled book The Age of Complexity. In his introduction he maintains that:

> To be "modern" in Europe and America is to give up simple explanations of man and the world, to embrace complexity once and for all, and to try, somehow, to manage it ... Modern philosophy is a philosophy of complexity and disillusionment. Yet it is also a philosophy of discovery; for as modern philosophers accepted the fact that they couldn't say "it all", that "it all" was, in fact, not to be said, they discovered a new richness in the world. When they realised that there never again could be a simple system of thought, they were able to begin orientating themselves in a world of newly discovered complexity. [140]

In his conclusion Kohl reiterates:

> There is no single explanation of all phenomena, no single characterisation of language, and most of all, no one point of view from which man "must" be considered. Throughout *my* text there has been no mention of God or religion ... Philosophy insofar as it considers the actual lives men lead these days must consider life as lived without divine guidance or grace. Life has become too complex for simple answers; hence philosophy insofar as it is modern does not consider religion an issue ... Life does not have a single great question with a single answer but questions and answers. [141]

A number of important general points emerge from these two passages. In the first place while a recognition of the complexity and richness of the creation marks a refreshing break from radical reductionism of various sorts, in that Kohl provides us with no way to embrace this complexity either in life or theory his note of optimism seems at least premature. With respect to the latter - a theory of man - Cassirer's comment is salutory:

> Such is the situation in which modern philosophy finds itself. No former age was ever in such a favourable position with regard to the sources of our knowledge of human nature. Psychology, ethnology, anthropology and history have amassed an astoundingly rich and constantly

> increasing body of facts. Our technical instruments for observation and experimentation have been immensely improved, and our analyses have become sharper and more penetrating. We appear nevertheless, not yet to have found a method for the mastery and organisation of this material. When compared with our own abundance the past may seem very poor. But our wealth of facts is not necessarily a wealth of thoughts. Unless we succeed in finding a clue of Ariadne to lead us out of this labyrinth we can have no real insight into the general character of human culture; we shall remain lost in a maze of disconnected and disintegrated data which seems to lack all conceptual unity. [142]

Secondly, Kohl, while maintaining that there is no one point of view from which man must be considered, is actually dogmatically excluding alternatives to his own 'modern' view from which alone must man be considered. Similarly, the pronouncement that "Life does not have a single great question with a single answer but questions and answers" itself pre-supposes and insinuates a certain general view of life. Furthermore, it obscures the fact that the lower level questions and answers themselves pre-suppose answers to the higher level questions. The pretence that the low level questions and answers (in philosophy and the various special sciences) can continue in a manner which is neutral or indifferent to the big - transcendental - questions has been both extremely destructive to scholarship and without justification.[143] However, it is not difficult to understand why contemporary Humanism wishes to cover up the crisis of its dialectical religious groundmotive of personality and science. Nor is it difficult to understand that it wishes to minimise that religious and philosophic crisis by suggesting that philosophy if suitably re-defined can take its place alongside the other disciplines conceived of as autonomous forms of knowledge, with their universally valid neutral techniques and procedures. Consequently, philosophy instead of recognising its own lack of neutrality and its task of investigating the foundations and inter-relations of the disciplines, has largely lost both its 'self-knowledge' and its calling, with the result that to the extent that it functions at all it does so both deceptively and ineptly. Even though man is the central reality of Humanism this failure to develop a philosophical anthropology to co-ordinate the various pure and applied sciences dealing with man does not lead Cassirer or Hirst or Kohl to question their Humanist commitment.[144] Indeed, this "philosophy of complexity and disillusionment"

as Kohl calls it, he clearly regards as infinitely superior to any simple explanation of man and the world which sees man as the creature of God finding his life through divine grace and guidance. Likewise, as we have seen earlier, Hirst was evidently shocked that someone should assume at the outset of an investigation "... not only the existence of God but also some quite specific beliefs about His nature and man's relationship with Him."[145] However, he found it entirely natural and indeed essential to make the opposite assumption that all such beliefs "... have nothing to contribute in our efforts to understand ourselves and our world and to determine how we are to live."[146]

We began this section by outlining the problem of Humanism concerning the identity of man. The problem came in the form of a dilemma offering either unity at the price of diversity (reductionism) or diversity at the price of unity (pluralistic fragmentation). We have seen how Cassirer and Hirst have, at one level, chosen the latter. At the same time it has become evident that the question of the coherence of the creation is closely linked with that of human identity for we have seen how man's identity is fragmented according to the symbolic forms of Cassirer and the forms of knowledge of Hirst. Dooyeweerd's suggestion is that true self-knowledge is dependent on the true knowledge of God and that in turn makes possible insight into the unity and diversity of the creation order. If a man does not understand himself in terms of his relation to God, then he will understand himself in relation to something else, some aspect or structure of the creation order. For example, a man sees himself as fundamentally biological or logical or social or historical or linguistic and all his other ways of functioning are reduced to modes of that function. Sometimes a dualistic position is espoused. Descartes, for example, thought of man as *res cogitans* plus *res extensa* finding in the functions of thought and extension that to which all else could be reduced. In this context perhaps we should mention that behind Hirst's diverse form of knowledge there stands man the logico-linguistic conceptualiser. However, under inquiry this identity tends to dissolve in various directions for were not human thought and language something basically biological or cultural and did not authentic thought and language find its

home in one of the autonomous forms. As Hirst continued to make concessions to the various relativities his philosophical position becomes ever more slippery, ever more hard to grasp in its precise significance. Indeed the same thing can be seen on the broader scale of the history of philosophy with the materialist being explained by the historicist who is explained by the Marxist who in turn is explained by the Freudian. In each case too each position can be explained in terms of the principles it explains the other positions. Dooyeweerd's suggestion is that while the various sciences which study man can give much interesting information yet when one asks 'What is man himself in the central unity of his existence?' then these sciences have no answer. He continues:

> But all these (modal) aspects of our experience and existence within the order of time are related to the central unity of our consciousness, which we call our I, our ego. I experience, and I exist, and I surpass this diversity of aspects, which human life displays within the temporal order. The ego is not to be determined by any aspect of our temporal experience, since it is the central point of reference of all of them. If man would lack this central I, he would not have any experience at all. 147

Dooyeweerd then proceeds to give his own account:

> This central I ... remains a veritable mystery. As soon as we try to grasp it in a concept of definition, it recedes as a phantom and resolves itself into nothingness. Is it really a nothing as some philosophers have said?
>
> The mystery of the human I is, that it is, indeed, nothing in itself; that is to say, it is nothing as long as we try to conceive it apart from the three central relations which alone give it meaning.
>
> First, our human ego is related to our whole temporal existence and to our entire experience of the temporal world as the central reference point of the latter. Second, it finds itself, indeed, in an essential communal relation to the egos of its fellow-men. Third, it points beyond itself to its central relation to its divine Origin in Whose image man was created. 148

Lacking this central relation which depends on revelation the Humanist desperately tries to find himself in terms of himself, his fellow man or in relation to nature, giving rise to a whole array of mutually exclusive philosophical positions. Dooyeweerd maintains that the self-revelation of the true God liberates us from the absolutising (or deifying) the aspects or structures of the creation order which lies behind these philosophies and equally penetrates all the other branches of scholarship. It also saves us

from the inevitable ravages of relativism concluding in nihilism which ensues when the relativity of each aspect of the creation and indeed the contingency of the whole creation is recognised.

So far then we have looked at the ideas of the origin of meaning of the human selfhood. We have also considered at some length both Cassirer's and Hirst's idea of the coherence of meaning as it expressed itself in their theories of symbolic forms and forms of knowledge. We turn now to the alternative account of the coherence of creation and knowledge proposed by Dooyeweerd. Perhaps the most striking feature of his account is that it - like Cassirer's but unlike Hirst's - stands in an intimate, if frequently critical, relation to an encyclopedic range of past and contemporary scholarship. Furthermore, since the publication of the first edition of the New Critique of Theoretical Thought in 1936 scholars from literally every field of academic work have found stimulating insights and have been impressed by the manner in which this philosophy has related to the fundamental issues of their disciplines.[1] We turn now to Dooyeweerd's ontology which is the "equivalent" of Hirst's form of knowledge, for Dooyeweerd's idea of the unity and diversity of knowledge rests on his idea of the unity and diversity of the creation-order. Then we will even more briefly consider his view of philosophy as the discipline which directs itself to the totality of creational meaning and serves to ground and integrate the disciplines dealing with limited aspects and structures of the creation order.

Already we have contrasted Dooyeweerd's basic view of knowledge with that of the neo-idealist tradition. We finally turn now to consider briefly his "equivalent" to Hirst's forms of knowledge. Dooyeweerd has developed a general theory of modal spheres which are the irreducible transcendental modal aspects of empirical reality.[150] These modalities are the fundamental ways or modes by means of which man experiences temporal reality. Their irreducibility Dooyeweerd speaks of as sphere sovereignty e.g. the irreducibility of the physical aspect, or logical aspect or economic aspect. He has developed what he has called a principle for the exclusion of antinomies for the detection of reductionism.[151] He suggests for example, that the paradox of the hare and the tortoise derives from the attempt to account for motion purely in terms of

the addition of spatial units. Motion pre-supposes space but is not reducible to it. This notion of pre-supposition involves Dooyeweerd's idea that the modalities are hierarchically ordered. Biotic functions pre-suppose a physical-chemical substratum while sensory feeling pre-supposes both. A further principle is that of sphere universality. Each sphere mirrors all the aspects of reality by means of 'analogical moments' which are either of a retrocipatory or anticipatory character, depending on whether they refer to the modes 'below' or 'above' them. These analogical moments are the basis of analogical concepts which are ubiquitous in natural and theoretical languages. Examples of retrocipations are aesthetic unity, social space or historical power, while logical economy is an anticipation. The failure to specify the modal qualification of a concept e.g. power, leaves one in the dark as to whether the reference is to original power (or energy) or is e.g. historical or social or economic or legal power. (Likewise, a concept like causality can bear many different qualifications, e.g. the differences between physical and legal causality).[152] We should also mention Dooyeweerd's distinction between subject and object functions. A stone functions as a subject in the first four modalities, a plant in the first five, an animal in the first six and a man in all. At the same time subjects can function as objects in other law spheres. A stone cannot think but it can be an analysable object or an economic object or an ethical object (as a present) or a legal object (in a law-suit). If a stone had no function above the physical then it would be invisible, unthinkable and unnamable.

In addition to his theory of modalities, Dooyeweerd has a theory of individuality structures and societal structures. Both individuality structures and societal structures are "traversed" by the modal aspects. Indeed the leading modal function of a structure serves to characterise and differentiate that structure. With respect to societal structures too Dooyeweerd has developed an account of the sphere sovereignty of the various societal spheres. Each sphere (e.g. family, church, state, business, education) has its own proper task and its own delimited delegated authority. If any of these spheres claims to be the origin of authority and therefore in principle to wield unlimited authority (as happens when, for example, the

church institution or the state or business move in this direction) then society is distorted. However, we shall return to Dooyeweerd's pluralist sociology in the next chapter. The recognition of both individuality and modality leads to the recognition of both individuality and modal sciences. For example, biology, psychology and jurisprudence are properly modal sciences dealing with three aspects of reality, while botany, zoology and political science deal with the structure of plants, animals and the state. We should note that the logical (or analytical) modality pre-supposes the physical, biotic and sensory modalities and itself is the foundation of the subsequent ones. As the same time the unfolding of the latter aspects makes possible the further development of analytic activities. However, it should be noted that it is always the human self that thinks and that thinking activity should never be thought of as the self i.e. as reason. Moreover, the modal norms for thinking which we formulate as the laws of logic properly go no further than to tell us to distinguish what is different and to identify that which is the same. Dooyeweerd suggests that in order to proceed one needs to pre-suppose a worldview at the concrete everyday level and a philosophical perspective on empirical reality for all theoretical analysis. Such perspective he maintains is always rooted in a religious groundmotive.

This framework then seems to us to open the way to fruitful inter-disciplinary co-operation which has been liberated from the non-Christian religious motives behind reductionism, which leads to the eventual break-down of academic communication. We turn now to consider Dooyeweerd's critique of what he regards as the essentially baseless alienation between philosophy and the special sciences (modal and individuality, etc.) which has been an especially recurrent feature of western intellectual life since the Enlightenment. Philosophical imperialism often using some form of 'appearance-reality' distinction trivialised the special sciences while the latter replied with a 'fact-speculation' distinction aimed at the philosophers. The Idealism of the early nineteenth century offers plentiful examples of the former attitude. Fichte typically maintained that "The philosopher must deduce from the unity of his pre-supposed principle all the possible phenomena of experience."[153] In reaction arose the conviction that philosophy

must remain strictly separate in order to safeguard the 'objectivity' of the latter. Dooyeweerd has seen this matter as follows:

> In the positivistic period of the second half of the last century, speculative philosophy was completely discredited. It has been extremely difficult for philosophy to regain general recognition. Therefore Humanist thought now seeks to guard against its old errors and grants complete autonomy to the special sciences within their own sphere. 154

The consequence of this reaction has been the view that:

> The universal validity and autarchy of scientific theory must .. be accepted apriori, since in rationalistic immanence philosophy, natural scientific thought occupies the same position .. as the divine world-order has in Christian philosophy. Epistemology has simply to follow in the footsteps of the special sciences and is thus safe from being in conflict with scientific progress. Philosophy does not guide or give advice but merely reflects upon the course which the special science has followed. It is consequently assured of the good graces of the latter. And the special sciences need take no cognisance of the way in which philosophy seeks to explain epistemologically the course of scientific investigation. The special sciences think they can remain philosophically and religiously neutral ... Nowadays, such conceptions are so deeply rooted in philosophical and scientific circles that very often any divergent opinion is quickly branded as an unscientific return to an antiquated conception of the task of philosophy. Yet we must not be frightened to criticise the current distinction between philosophical and special scientific thought, when it appears to be incompatible with a really critical standpoint. 155

It has been clearly evident from our present study that both Linguistic Philosophy and Neo-Kantianism have largely lost any independent critical role - which they properly should have if the special sciences do indeed rest upon philosophical conceptions of reality as Dooyeweerd suggests. Furthermore, from within the Humanist tradition it is not hard to share Cassirer's lament that the "era of the great constructive programs in which philosophy might hope to systematise and organise all knowledge, is past and gone."[156] This may well be true within the Humanist framework and where the resulting fragmentation of knowledge has been firmly institutionalised. Indeed, as we have seen Humanist philosophy has had to redefine philosophy from being critical, explicit, synoptic thought into being something essentially dogmatic, implicit and piecemeal in order to obscure its poverty. As we have also seen orthodox Protestantism has lacked a philosophical tradition unlike Roman Catholicism which proclaims Aquinas as the church's official philosopher. Similarly liberal Protestants have recognised the need for philosophy and have indeed

affiliated in an eclectic manner with a whole series of philosophies including process philosophy, existentialism, analytic philosophy and neo-Marxism in our own day. It seems that this new philosophy of Dooyeweerd, working in the line of Augustine, Calvin and Kuyper promises at last a way to radically break with scholastic dualism so as to make possible an integral Christian reformation of learning and education.[157]

Footnotes: Chapter II

1. "I want to explain to you how it seems natural that a man who has really devoted his life to philosophy should be cheerful in the face of death, and confident of finding the greatest blessing in the next world when his life is finished." Phaedo 63e - 64a

"No, this soul secures immunity from its desires by following reason and abiding always in her company, and by contemplating the true, and divine and unconjecturable, and drawing inspiration from it, because such a soul believes that this is the right way to live while life endures, and that after death it reaches a place which is kindred and similar to its own nature, and there is rid forever of human ills." Phaedo 84a (See also 114e) The Collected Dialogues of Plato (edited by Edith Hamilton and Huntington Cairns) Pantheon Books, New York, 1961.

2. ".. the activity of our intelligence constitutes the complete happiness of man ... a man who would live it would do so not in so far as he is human, but because there is a divine element in him ... a life guided by intelligence is divine in comparison with human life ... In other words, a life guided by intelligence is the best and most pleasant for man, inasmuch as intelligence above all, is man." (1177b - 1178a)

"A man whose activity is guided by intelligence, who cultivates his intelligence and keeps it in good condition, seems to be most beloved by the gods." (1179a)
Nicomachean Ethics (translated by M. Ostwald)
Bobbs-Merrill Company, New York, 1962

3. Knowledge and the Curriculum (Routledge and Kegan Paul, London, 1974) page 42-3
4. Logic of Education (Routledge and Kegan Paul, London, 1970) p.53
5. Moral Education in a Secular Society p.114-5
"No matter what the ability of the child may be, the heart of all his development as a rational being is, I am saying, intellectual, and we must never lose sight of these ends on which so much else, nearly everything else, depends." Knowledge and the Curriculum p.28
6. "Hence it was necessary for the salvation of man that certain truths which exceed human reason should be made known to him by divine revelation." Summa Theologica q.1 Article 1.
7. Institutes of the Christian Religion II ii 12 (ch.II ii 12-14, 18,20)
J. Klapwijk's 'Calvin and Neo-Calvinism on non-Christian philosophy' in The Idea of a Christian Philosophy (Wedge Publishing Foundation, Toronto, 1973)
8. Christian Education: A Contradiction in terms? p.10
Learning for Living (March 1972)
9. Ibid. p.7
10. Ibid. p.8
11. Ibid. p.10
12. Ibid. p.11
13. Ibid. p.8-9
14. Nicholas Wolterstorff has made an interesting case for Christian scholarship in his recent small volume entitled Reason within the bounds of Religion (W.B. Eerdmans, Grand Rapids, U.S.A. 1976)
15. Knowledge and the curriculum p.184-5
16. Ibid. p.42 ch. Moral Education in a Secular Society p.32
17. Moral Education in a Secular Society. p.114-115
18. From within a certain philosophical perspective one can choose to interrelate certain concepts and not to relate others. One may or may not be able to base this on our ordinary understanding of the terms. Usually the latter is both rich and diffuse often reflecting the superimposition of a number of philosophical ~~powerful~~ powerful elements in the culture. Consequently, one may wish to underline certain stands and discount others as confused or mistaken. Professor Hirst

appears to believe that our ordinary understanding of terms can serve as an unequivocal standard of judgment. For example, this is his ground for rejecting any Christian conceptual inter-relation between goodness and the will of God. The latter is regarded as worthless by Hirst in that all that is achieved is a stipulated definition or tautology. While I believe Hirst's criticism is mistaken, if it is regarded as valid it can be directed equally at his own efforts. It seems strange that contemporary analytic philosophy has largely ignored the complex problem of definition even though prima facie it is so vital to their approach.
Of the article "Definition" in the Encyclopedia of Philosophy (ed. Paul Edwards)
19. The Problem of Knowledge (Penguin Books, London 1956) p.74
20. Ibid. In his introduction to The Humanist Outlook he speaks of the Humanist contributors adhering not so much to "a given set of doctrines as approach" (p.3) "They (Humanists) put their trust in scientific method, with its implication that every theory is liable to revision. This open, critical spirit has continued to be the distinctive mark of humanism" (p.4). Later Ayer speaks of ".. their fidelity to the natural sciences (p.4). Terms like adhere, trust, fidelity indicate that we are in the presence of ultimate commitment, in this case to an intellectual approach which involves commitment to a scientific method. In terms of commitment to the latter everything else is regarded as open to criticism and revision. One is 'open' to whatever 'scientific method' requires; such openness Ayer terms 'critical'. This by definition radically excludes criticism of commitment to scientific method and openness to other commitments. Other commitments will be termed dogmatic when for example Ayer writes "The hostility of the rationalists to religious dogmatism was not evinced only in their fidelity to the natural sciences." (p.4) Here we see systematic re-definition carried out from the prospective of a particular commitment.
21. Ibid. p.75. Ayer acknowledges that science cannot supply him with values (The Humanist Outlook p.5) Having refused to define goodness in terms of God's will he acknowledges that all moral decisions pre-suppose the acceptance of some moral standpoint. He continues "For instance, in very many cases, a sufficient reason for concluding that one ought not to pursue a certain course of action is that it will cause suffering to other people: but the reason is sufficient only against a moral background in which it is assumed that, other things being equal, suffering is evil and one has a duty to consider the interests of others besides oneself. These are assumptions from which very few people would dissent, at least in theory, but they are not susceptible to proof, or, for that matter of disproof. If they are to be criticised, it can only be on the basis of a different moral outlook, which will equally operate as a judge in its own cause. This is not a ground for scepticism, still less for moral nihilism. It is just that when it comes to the conduct of life each of us has to decide what ends he thinks it right to presume and what principles he is prepared to stand by .. Even those who surrender their independence of judgment, or those who merely go by current fashion, are tacitly making a fundamental moral choice." (p.7) It is hard then to know why one cannot decide to recognise the will of God as the ultimate moral standard and to evaluate all evaluation in the light of that. However, it could be that Ayer wishes to suggest that it is our choice and decision - following the existentialists - that confers validity. This would mean that whatever we decide is right because we have decided it and that there is nothing beyond our decision to which appeal might be made. (Ultimate trust in God has here been replaced by ultimate trust in man). Structurally the two positions are identical and Ayer's arguments against the first tell equally against his own position. This structural identity - the recognition of Christianity and Humanism as all-embracing perspectives - is however inconsistent with Ayer's rationalist humanism although concordant with Christian identification of man as a religious creature rather than a rational one and of the dependence of thought upon prior commitment.
22. See the discussion of this point in W.W. Bartley's Retreat to Commitment (Alfred A. Knopf: New York 1962) pp.124-133. See also the discussion of Bartley's own position in Roger Trigg Reason and Commitment (Cambridge University Press, Cambridge 1973) pp.145-150 and the articles by J.W.N. Watkins in Philosophy, January 1971.

38. Ways of Knowledge and Experience (Allen and Unwin, London 1961) p.21
39. Philosophy and Education (Heinemann, London 1962) pp.7-9
40. Psychology and Ethical Development (Allen and Unwin, London 1974)
41. Ibid. p.15
42. Wittgenstein's Doctrine of the Tyranny of Language which discusses Wittgenstein's great dependence on the European Kantian tradition. See especially the chapters on Kant and Schopenhauer. Right from the beginning one finds Wittgenstein's pre-occupation with Kantian themes "The great problem mind which everything I write turns is: Is there an order in the world apriori; and if so what does it consist in." Wittgenstein's Notebooks 1914-16 (ed. G.E.M. Anscombe Blackwell, Oxford 1961) p.53
43. Philosophical Investigations (trans. G.E.M. Anscombe) (Basil Blackwell, Oxford 1963) para.23
44. This summary is Keith Dixon's from Philosophy of Education and the Curriculum (ed. Keith Dixon, Pergamon Press, Oxford 1972) p.2
45. Philosophical Investigations p.viii
46. Tractatus Logico-Philosophicus 6.53
47. Language, Truth and Logic (Victor Gollancz, London 1946) p.151
48. Ernest Gellner Words and Things (Victor Gollancz, London 1963) p.222
49. Ibid.p.253
50. Quoted by C.W. Hendel in his preface to Cassirer's The Problem of Knowledge: Philosophy, Science and History since Hegel (Yale University Press, New Haven and London 1969) p.xi
51. Ibid. p.110-111
52. An Essay on Man (Doubleday and Co. New York 1953) pp.44 and 55
53. Ibid. p.75 The emphasis on pure description reflects the influence of Hegel's Phenomenology of Mind and Husserl's phenomenology and is not without parallel's in the Philosophical Investigations See C.A. Van Peursen Phenomenology and Analytic Philosophy
54. Ibid. p.286 See Calvin Seerveld's analysis of Cassirer in his paper 'The Pedagogical Strength of a Christain Methodology in Philosophical Historiography' in Social Theory and Practice (Koers Jaargang XL. NR 4,5,6 1975) pp.269-313
55. 'Religious Beliefs and Educational Principles' Learning for Living (July 1976)
56. Knowledge and the Curriculum p.181
57. 'Religious Beliefs and Educational Principles' p.155
58. Moral Education in a Secular Society p.2
59. I am using these terms in Prof. D.H.Th. Vollenhoven's meanings. See Calvin Seerveld's 'Biblical Wisdom underneath Vollenhoven's categories for philosophical historiography' in The Idea of a Christian Philosophy (Wedge Publishing Foundation, Toronto 1973) pp.127-143
60. Knowledge and the Curriculum pp.39-40
61. Ibid. p. 92-3
62. 'Christian education: a contradiction in terms?' Learning for Living (March 1972) p.11
63. Ethics and Education p.49, 52-3. It is easy to see Émile Durkheim as a transitional figure between Kant and Hegel and Peter's position. In spite of its title Durkheim's The Elementary forms of the Religious Life (George Allen and Unwin, London 1971) is centrally concerned with the social origin of categories and concepts. Durkheim - working to a large degree in the neo-idealist tradition- appears to have anticipated a great number of both later Wittgenstein's and R.S. Peters ideas. See especially pp.1-20, 415-447
64. The philosophy of Education (ed. R.S. Peters, Oxford University Press, 1973) p.26
65. Knowledge and the curriculum pp.52-3, quoting Michael Oakshott's Rationalism in Politics (1962) pp.198-9
66. Perspectives on Plowden (ed. R.S. Peters, Routledge & Kegan Paul, London 1969) p.6-7. There is a profound and dangerous ambiguity in the idea that we must come to terms with living in a certain sort of society. In the obvious sense we must but a great deal of educational writing goes far beyond this. The description of the nature of present society is regarded as the central norm for the nature of education. The description is at the same

time a prescription as to what society ought to be like and, therefore, as to what education must be to facilitate this. Education is, therefore, ambiguously conceived of as socialisation and the tool of a socio-political ideal. There are many such doctrines about Society (we are becoming - ought to be - a secular society, a pluralist society, a multi-faith society, a democratic society, an industrial society, a technological society, an open society, etc, etc.) In every case Society (capital S) is taken as the normative point of departure for reflection about education reminding us of the similar role of the Polis for Plato and Aristotle's educational thought. The statements of Durkheim assert and clarify the pre-supposition of this prospective. "Between God and society lies the choice .. I, myself, am quite indifferent to this choice, since I see in the Divinity only society transfigured and symbolically expressed". (Sociology and Philosophy Cohen and West Ltd., London 1953) p.52. "At bottom, the concept of totality, that of society and that of divinity are very probably only different aspects of the same notion". (The Elementary Forms of the Religious Life 442) It is especially instructive to view the debates about religious education as being increasingly determined by this pre-supposition. See also Jacques Ellul's valuable comments on education in The Technological Society (Vintage Books, New York 1964) pp.344-349

67. Ethics and Education p.319

68. Perspectives on Plowden p.14 It is difficult to know quite what to make of this claim. Many thinkers in the 17th century had highly differentiated views of knowledge, e.g. the Cambridge Platonists. The inherited medieval idea of the great chain of being was a very effective anti-reductionist principle in many ways. While there has been much subsequent differentiation of knowledge as the rise of many new disciplines witness this has taken the form of either disintegrations or radical reductionisms in order to provide some type of unity to knowledge. It is a moot point as to whether we really are ".. clearer about the types of concepts and truth criteria involved in the different forms of thought" and even more as to whether Hirst's theory of the forms of knowledge is any evidence of this. For some alternative views see Ernst Cassirer's An Essay on Man pp.39-41 and Marjorie Grene's 'Hobbes and the Modern Mind', The Anatomy of Knowledge (ed. M. Grene, University of Massachusets Press, Amherst 1969) pp.1-27

69. 'Christian Education: A Contradiction in Terms?' (Learning for Living, March 1972) p.9

70. Knowledge and the Curriculum p.46

71. Within the space of a few sentences Hirst acknowledges being involved in extending our concepts without redefining them! He writes that ...

> recent philosophical work has led to so extend the notions of meaning, statement, truth, concept, logical relation, knowledge, that previous paradigms can no longer be regarded as settling when these terms are to be applied and when withheld ... I am not arguing that we should redefine our notions of statement, truth, concept, knowledge, etc., so as to let art into the charmed circle where these terms are used.
>
> Knowledge and the Curriculum pp.160-161

Similarly when R.S. Peters was required to give a clear account of the nature of a 'conceptual connection' (i.e. his theory of logic) he said no more than that it was somewhere between tautology and a de facto connection and stigmatised the request as 'purist'. He is aware that the possibility of conceptual analysis depends upon the existence of conceptual connections and realises that their non-existence or problematic character threatens to put the whole programme in jeopardy. He writes ... "Such a purist view, I suggest, would stop most works in ethics, philosophy of mind, epistemology, political philosophy, aesthetics and the philosophy of education. And that would be a pity." (Philosophy of Education p.49; but see also pp.44-45) Rather similarly, as we shall see, early Karl Popper tried to stick to a largely deductivist view of reason which led to some highly sceptical and irrationalist consequences. Latterly (post 1960) rationality has become a matter of critical discussion while the narrow view is also still maintained in a manner which has not been adequately accounted for.

72. Knowledge and the Curriculum p.44
73. This circularity (or idealism) Hirst makes most explicit in his paper 'Language and Thought' when he writes.

> "But this is not to say that the symbolic expression is tested against the world which is understood independently of any symbolic structure. It is to test one symbolic expression by an awareness that is itself implicitly symbolic. This being so it is logically impossible to give an account of the relationship between language and the world as if this were an account of how symbols relate to the totally non-symbolic."
> (Knowledge and the Curriculum p.[illegible])

As for Hirst the human subject through the use of symbols is the ultimate source of all meaning linguistic and non-linguistic (Ibid. p.64) a non-symbolic world would, therefore, necessarily be devoid of all structure and meaning ... without form and void. Consequently no concept, assertion or theory could be tested against such a world which would be literally unexperienciable, unknowable and meaningless. Consequently, we can only know about a world which we have through some use of symbols (however widely defined, however implicit) constituted. (Working from not dissimilar humanist assumptions Popper has difficulty in accounting for the possibility of testing (falsifying) theories as all observations he claims to be theory laden. Of this more anon). It is R.S. Peters who has sensed that if this view is correct then the basic human problem is coping with nihilism. Hence the need for ritual "... to mitigate the feeling any rational being must have about the triviality and transcience of his life upon earth" (Ethics and Education p.519). Elsewhere he writes "Our basic predicament in life is to learn to live with its ultimate pointlessness. We are monotonously reminded that education must be for life, so obviously the most important dimension of education is that which we learn to come to terms with the pointlessness of life." (London Educational Review Autumn 1973, p.1). It is not without interest that the contemporary British painter Francis Bacon has ascribed a similar role to art ... as a distraction. He has written:

> "Also man now realises that he is an accident, that he is a completely futile being, that he has to play out the game without reason. I think that even when Velasquez was painting, even when Rembrandt was painting, there were still, whatever their attitude to life, slightly conditioned by certain types of religious possibilities, which man now, you could say, has had cancelled out for him. Man now can only attempt to beguile himself for a time, by prolonging his life - by buying a kind of immortality through the doctors. You see, painting has become - all art has become - a game by which man distracts himself. And you may say that it always has been like that, but now its entirely a game. What is fascinating is that it is going to become much more difficult for the artist, because he must really deepen the game to be any good at all, so that he can make life a bit more exciting."
> (quoted from J. Russell Francis Bacon Methuen London 1965, p.1).

74. Knowledge and the Curriculum p. 161-2.
75. See quotation from Francis Bacon in footnote 73.
76. Knowledge and the Curriculum pp.154-5, 157, 162.
77. Ethics and education p.50
78. The sui generis character of everyday knowledge, its irreducibility and irreplacability by theoretical-scientific knowledge has been a growing theme of twentieth century philosophy. It is evidenced by the interest in ordinary language, commonsense and lebensweit. See for example Gilbert Ryle's Dilemmas (Cambridge University Press 1964) chapter V 'The World of Science and the Everyday World', chapter VI 'Technical and Untechnical Concepts' and chapter VIII 'Formal and Informal Logic'.
79. Knowledge and the Curriculum p.154

80. See Dooyeweerd's important distinction between the knowledge of God and theology in In the Twilight of Western Thought pp.113-172. See also R.G. Howkins Religious Thinking and Religious Education (Tyndale Press, London, 1968)
81. Thinking about thinking (Secker & Warburg, London 1965) pp.295,36.
82. John Vriend To Prod the Slumbering Giant (Wedge Publishing Foundation, Toronto 1972) p.1-2.
83. Knowledge and the Curriculum p.51.
84. Ibid. p.139
85. Ibid. p.135
86. There is far more content to 'logical grammar' than could possibly be derived from genuinely logical or grammatical norms alone. Many things which cannot be said (= cannot be) violate neither logical nor grammatical rules as these are ordinarily understood. See P.F. Strawson's Introduction to Logical Theory (Methuen, London 1960).
87. Knowledge and the Curriculum p.160-1. In footnote 71 we have referred to the problem of the nature of conceptual analysis and conceptual implication. Consider the following passage of R.S. Peters:

> "Could a man be educated whose knowledge and understanding is confined to one sphere - mathematics, for instance? There is a strong inclination to deny that we would call a man 'educated' who had only developed his awareness and understanding in such a limited way; for 'educated' suggests a more all round type of development. 'Education is of the whole man' might well be a conceptual truth in the sense that 'educated' rules out merely specialist training ... It is not altogether clear, however, whether this is due to the concept of 'education' itself or to our refusal to grant that what is worthwhile could be confined to one form of awareness. 'Education is of the whole man' might therefore be an expression of our moral evaluations about what is worthwhile rather than a purely conceptual truth."
> The Study of Education (ed. J.W. Tibble, Routledge and Kegan Paul, London 1966) p.74.

Peters does nothing towards defining what a conceptual truth is, what its epistemological status is or criteria by which we can identify it. However, he leaves it in no doubt that it is both our concept and that it has a determinate character for he straightway speaks of the "close knit family of criteria built into 'education'" (Ibid. 9.74). The forms have come down to earth and are embodied in our ordinary speech habits it seems! But see also Peters' later acknowledgement that the "concept of 'education' is a very fluid one" and what even amounts to the concession that there are a number of concepts of education in circulation!
The Philosophy of Education p. 55
88. My complaint here is that Hirst does not make it explicit that his understanding of logic presupposes his philosophical orientation. Bertrand Russell, for example, is much more explicit when he writes:

> 'Ultimately, the controversy between those who base logic on "truth" and those who base it upon "inquiry" arises from a difference of values, and cannot be argued without, at some point begging the question. I cannot hope, therefore, that anything in the above pages has validity except for those whose bias resembles my own, while those whose bias resembles Dr. Dewey's will find in his book just such an exposition as the subject seems to them to require.'
> "Dewey's New Logic" in The philosophy of John Dewey (ed. P.A. Schilpp, Library of Living Philosophers, New York 1951) p.156.

89. Having rejected the classical realist doctrines of mind, knowledge and reality as "at best too speculative a basis for educational planning" Knowledge and the Curriculum p.33, Hirst rather covertly introduces his replacement. His own subjectivist metaphysics proceeds from the following assumption - "And if knowledge is no longer seen as the understanding of reality but merely as the understanding of experience, what is to replace the harmonious hierarchical scheme of knowledge that gave pattern and order to the education?" (Ibid. p.33). All that is needed Hirst believes he can

provide without a metaphysical basis, something "based directly on an explication of the concepts of 'mind' and 'knowledge' and their relationships." (Ibid. p.35). As we have seen Hirst has 'explicated' a whole complex neo-Kantian epistemology from such concepts. One is reminded of conjurers explicating rabbits out of hats!

Stephan Korner's comment seems pertinent here:

> "The manner in which a person classifies the objects of his experience into highest classes or categories, the standards of intelligibility which he applies, and the metaphysical beliefs which he holds are intimately related."
> Categorial Frameworks, (Basil Blackwell, Oxford 1974) p.IX

On the relation of classical and modern epistemology see also H. Dooyeweerd A new Critique of Theoretical Thought Vol. II p.432.

90. Hirst appears to believe in the metaphysical neutrality of philosophical analysis even in areas where many would feel very doubtful. In one place he writes:

> "For is it my concern to argue either for or from a humanist or religious position in these matters. Rather I wish to look at them in the light of the philosophical character of moral judgments and religious propositions and I see no reason why the arguments and conclusions of this discussion should not be acceptable to both say Christians and Humanists alike."
> Knowledge and the Curriculum p.173.

Hirst should have spoken of the "assumptions, arguments and conclusions" for the acceptability of the latter two depends on whether Christians and Humanists share Hirst's neo-Kantian assumptions. This would exclude some Humanists and should exclude all Christians. Professor R.S. Peters shows occasional signs of losing confidence in the metaphysical neutrality which philosophical analysis had pretended to possess. In his introduction to The Philosophy of Education he concedingly writes:

> "Most of the articles in the collection present a point of view. They are not just a neutral map of the possible contours of concepts. This is as it should be; for what is the point of conceptual analysis unless it is connected with further questions that require answers? And can analysis be neutral? Is it separable from arguable assumptions and deep-seated pre-suppositions? ... philosophy of education is, at the moment, suffering from too little fundamental divergence in points of view." (p.4)

91. The Study of Education p.75
92. See his treatment of P.H. Phenix in Knowledge and the Curriculum pp.54-68.
93. Knowledge and the Curriculum
94. See for example the fascinating epistemological problems opening up in contemporary geography concerning the various disciplines and their inter-relations. See J.A. May's Kant's Concept of Geography and its relation to recent geographical thought (University of Toronto Press, Toronto 1970) S. De Jong's Chorological Differentiation as the Fundamental Principle of Geography (J.B. Walters, Groningen 1962) and Roger Minshull The Changing Nature of Geography (Hutchinson's University Library, London 1970).
95. Knowledge and the Curriculum
96. Evidenced e.g. by the fact that the National Society has come to define its concerns largely in terms of R.E. as does the Christian Education Movement.
97. Learning for Living (March 1972) p.7
98. Ibid. p.6
99. 'The Vulgar Component in Philosophy' Education for Teaching (Spring 1976, Number 99) p.22
100. The Perfectability of Man pp.234-6
101. See note 73
102. Knowledge and the Curriculum p.43
103. Ch. I Note 67
104. See Bernard Zylstra's 'The Post-Christian Humanism of Karl Marx" in Reformasie en Revolusie (I.R.O. Potchefstroom 1974, ed. S.U.W. Duvenage) pp.362-376.

105. See Nietzsche's telling comments on this in 'Twilight of the Idols' (The Portable Nietzche ed. W. Kaufmann, Viking Press, New York 1965) pp.515-516
106. Brief accounts of Kuyper's ideas and influence are found in Michael Fogarty's Christian Democracy in Western Europe 1820-1953 (Routledge and Kegan Paul, London 1957) and in A.E.J. Taylor's The Christian Philosophy of Law, Politics and the State (Craig Press, Nutley, New Jersey 1966). Numerous further references can be found in the extensive bibliography of L. Kalsbeek's Contours of a Christian Philosophy (Wedge Publishing Foundation, Toronto 1975)
107. Learning for Living (March 1972) p.9
108. Lectures on Calvinism (W.B. Eerdmans, Grand Rapids 1970) p.194
109. Ibid. p.131
110. Ibid. p.113
111. Ibid. p. 133
112. Ibid. p.137-8
113. Learning for Living (March 1972) p.6. As an aside it seems that Hirst's reference to the principles of farming are simplistic in the extreme. His one example of bad farming is the creation of a dust bowl. John Passmore's Man's Responsibility for Nature; Ecological Problems and Western Traditions (Duckworth, London 1974) is an attempt to uncover the "fundamental moral, metaphysical and political assumptions which so often underlie .. (the ecologists') arguments." (p.X). If Hirst's suggestion is that good farming is amongst other things ecologically responsible then it seems that one could have Christian (or other) moral, metaphysical and political assumptions underlying ones ecological norms. I suggest that something similar holds for engineering. Gellner remarks that analytic philosophers often attempt to give the appearance of neutrality in the following ways"These philosophers" he writes "either conduct their reasoning at a level so abstract that all social reality is out of sight, or concentrate on minutiae so microscopic that exactly the same effect is achieved." ('The Crisis in the Humanities and the Mainstream of Philosophy' in Crisis in the Humanities ed. J.H. Plumb, Penguin, Harmondsworth 1964) p.72
114. Quoted by Friedrich Waismann in Introduction to Mathematical Thinking (1951)
115. A New Critique of Theoretical Thought Vol. I p.47-8
116. Ibid. p.49
117. A New Critique of Theoretical Thought Vol. I p. 47-8

Professor H.G. Stoker largely shares Professor Dooyeweerd's viewpoint when he writes:

> Imagine two paintings, each having an identical patch of blue, identical in form and size as well as in quality and intensity. Let us analogically equate this particular colour patch with the particular mathematical truth that 2 + 2 = 4. However, as soon as each of the patches is seen in its aesthetically functional relations to the whole of the painting concerned, these patches look different. Analogically, in the same way "2 + 2 = 4" may have an identical meaning for all mathematicians, but viewed in its relations to the theoretical mathematical framework (theoretic "paintings") of e.g. formalism, logicism, intuitionism, neo- positivism and pragmatism, etc., " 2 + 2 = 4" acquires in each of these cases a (mathematically significant!) different meaning as well. In other words: the particular truth of "2 + 2 = 4" is neither an isolated nor an absolute truth, but has a relevantly selective meaning within a more embracing meaningful context or perspective, in the light of which its specific meaning should be investigated. This holds, mutatis mutandis, good universally for all problems or sets of problems and for all fields of research as well as for science as such within the whole of human pre-scientific knowledge and life. This state of affairs imposes on every scientist the task of not only pursuing his specific research, but also of ascertaining the significance of every more embracing perspectives for his specific investigation.

> Even the scientist who is guilty of methodistic abstracting isolating and absoluting approach in his researches, cannot escape the necessity of embracing perspectiveness, because his isolating and absolutising approach forms its own (although reductionistic) perspective. An intriguing example of this is, for instance, Comte's isolation of empirical facts from philosophical principles and religious beliefs, an isolation (and absolutism) that as such is a principial (philosophical) decision in itself and involves a positivistic conception of religion (as was elaborated by Comte himself). Philosophic as well as religious perspectives were implicitly present in Comte's a priori view of positive (positivistic) science.

118. Op cit. Vol I p.49
119. See also D.F.M. Strauss's "Number-concept and Number-idea" Philosophia Reformata 35 (1970) pp.156-177 and 36 (1971) pp.13-42. W. Kuyk "The Irreducibility of the Number Concept" Philosophia Reformata 31 (1965) pp.37-50
120. See H. Van Brummelen's "The place of Mathematics in the Curriculum" (Christian Studies Unit, Derby 1976) and Calvin Jongsma's "Second Thoughts on the New Maths" (Christian Studies Unit, Derby 1976)
121a. An especially lucid illustration of this is Julian Huxley's evolutionism. Consider the following passage:

> Evolution - or to spell it out, the idea of evolutionary process - is the most powerful and most comprehensive idea that has arisen on earth. It helps us to understand our origins, our own nature, and our relations with the rest of nature. It shows us the major trends of evolution in the past and indicates a direction for our evolutionary course in the future ... Thus the evolutionary idea must provide the main unifying approach for a humanist educational system, and evolutionary biology could and should be a central or key subject in its curriculum.
> "Education and Humanism" Essays of a Humanist (Penguin Books, Harmondsworth, 1966) p. 130-1

If we interpret Huxley's evolutionism within the epistemological framework Dooyeweerd has suggested then the continuities between Huxley's commitment to a particular interpretation of the humanist groundmotive and the way he interprets every particular becomes clear. What also becomes clear is that curriculum integration between disciplines which are structured by different articulations of the humanist groundmotive becomes virtually impossible as the different disciplines will be pre-supposing different theoretical visions of empirical reality. Each such vision requires a typically different structuring and interrelating of the disciplines. Attempts at integration without a common theoretical foundation lead to mere electicism. Such failure strengthens the belief in a rigid separation of autonomous disciplines each working from its own assumed theoretical account of empirical reality. The result is a frightening fragmentation of consciousness at the level of disciplines plus a further fragmentation of disciplines into (examinable) positivistic facts. Indeed the widely assimilated positivistic epistemology with its central myth of the various disciplines liberating themselves from philosophy and religion has been a major factor in the situation.

121b. Knowledge and the Curriculum p.64
122. A New Critique of Theoretical Thought Vol. II pp.429-598 'The Epistemological Problem in the light of the cosmonomic idea.'
123. Ibid. Vol I pp. 262-313
124. See Robert Tucker's: Myth and Philosophy in Karl Marx (Cambridge University Press, Cambridge 1967) pp. 33-39
125. An Essay on Man p. 280
126. Ibid. p.281
127. Ibid. p. 279
128. Ibid. p. 286
129. Ibid. p.286
130. Ibid. p. 40

131. See Kenneth Keniston's The Uncommitted: Alienated Youth in American Society pp. 184-9. Anton C. Zijderveld writes of Marx:

> Sociologically speaking, Marx tried to think the unthinkable. He yearned for a society without institutions, for human praxis without limiting structures, freedom without alienation, human action without institutional rules and norms. In the final analysis, Marx did not protest simply against capitalism and bourgeois society. He rejected any form of society and societal control. He longed for pure and absolute praxis. He wanted the end of man's social ambiguity. In Marx we encounter at bottom a romantic and gnostic revolt against the social condition of man.
>
> The Abstract Society: A Cultural Analysis of our Time (Penguin Books, Harmondsworth 1972) p. 30

132. The Logic of Education p. 76
133. Reason and Compassion (Routledge and Kegan Paul, London 1973) p. 125
134. Knowledge and the Curriculum p. 146
135. Ibid. pp. 93 and 95
136. Ibid. p. 146
137. Ibid. p. 147
138. Ibid. p. 1
139. E.g. H.R. Rookmaaker's Modern Art and the Death of a Culture (Inter-Varsity Press, London 1970) Ruth Etchells Unafraid to Be (Inter-Varsity Press, London 1969) and Hans Sedlmayr's Art in Crisis (Hollis and Carter, London 1957)
140. The Age of Complexity (Mentor Books, New York 1965) pp. 15-6
141. Ibid. p. 271
142. An Essay on Man pp. 40-1
143. This pretence has been widespread in contemporary analytic philosophy of education. For example, R.S. Peters writes:

> "There was a time when the philosopher was thought of in Platonic terms as 'the spectator of all time and all existence.' It was not surprising, therefore, that he felt competent, qua philosopher to pronounce on matters to do with education and politics as well as on God, freedom and immortality. Nowadays the philosopher feels competent, qua philosopher, only to tackle limited questions about such topics or to give voice to omnibus pronouncements, for the main characteristic of the 'revolution in philosophy' has been an increasing awareness of what philosophy is."
>
> The Study of Education (ed. J.W. Tibble, Routledge and Kegan Paul, London 1970) p.59

My suggestion is that by retreating from an explicit treatment of the large questions then answers to those questions are built into the more limited questions. The pretence is then that these lower questions and answers are neutral. The real situation is that those who would give different answers to the big questions are charged with failing to be aware of what philosophy really is. I have, as it were, correlated questions and answers for as Susanne Langer has put it: "A philosophy is characterised more by the formulation of its problems than by its solution to them "because" in our questions lie our principles of analysis, and our answers may express, whatever those principles are able to yield."
Philosophy in a New Key (Mentor Books, New York 1953) p.2
144. See chapter I quotation 68. For the humanist his Humanism is the very ground of understanding so that what cannot be achieved from that basis cannot be achieved simpliciter and to think otherwise is to engage in fantasy.
145. Knowledge and the Curriculum pp. 184-9
146. Moral Education in a Secular Society p.2
147. In the Twilight of Western Thought (Craig Press, Nutley, New Jersey 1960) p.180
148. Ibid. p.181-2

149. A New Critique of Theoretical Thought is the name of the second edition published in English between 1953-8. The first edition which was in Dutch was entitled De Wijsbegeerte Der Wetsidee literally 'the philosophy of the law idea.'

150. The following account is a summary of some five hundred pages on modalities and even more on individuality structures in volumes II and III of the New Critique so it is a quite inadequate sketch, though in this context better than mere references.

151. A New Critique of Theoretical Thought Vol.II pp.55-79

152. A New Critique of Theoretical Thought Vol.II p.37-49

153. 'The Characteristics of the Present Age' in Fichte's Popular Works (trans. W. Smith, London 1889) Vol.II lecture 1, p.5 quoted by J. Passmore in The Perfectability of Man p.229

154. New Critique Vol.I p.546

155. Ibid. p.547-8

156. The Problem of Knowledge: Philosophy, Science and History since Hegel p.19

157. See David H. Freeman's 'The Neo-Augustinianism of Herman Dooyeweerd' Recent Studies in Philosophy and Theology (Presbyterian and Reformed Publishing Company, Philadelphia 1962) pp.33-63 for the strong elements of historical continuity.

Democracy, the Open Society & Education

The concern of this chapter is to add some further features to our account of the struggle between Christianity and Humanism with respect to education. Our last chapter was chiefly concerned with the secularisation of knowledge and the subsequent crisis in epistemology, knowledge and curriculum theory. We suggested that the roots of the crisis lay in the Humanist concept of the autonomy of reason. However reason was not merely important as the only reliable road to knowledge. It was also seen as the road to liberty, equality and fraternity in social life. The two were linked together in the messianic expectations of the Enlightenment concerning education. Indeed the secularisation of epistemology and politics of which modern education is a confluence went hand in hand. The secularisation of epistemology and politics involved an inversion of the medieval scholastic dualism which had never seen the possibility of an integrally Christian epistemology and politics. In epistemology 'faith' was made subject to the requirements of 'reason' while the church became the instrument of the state. Reason would provide man with a method to gain insight and understanding, while man was to be regarded as the source of all authority. Reason promised to bring unity to the divided factions in the field of knowledge as it promised to bring unity to a divided humanity. Reason would produce agreement and so agreement became an indication of reason. The forging of the link between reason and the state, both of which were declared divine, culminates in the philosophy of Hegel. Reason has the power, for Hegel, to reconcile all differences and to synthesise all oppositions into a common agreement concerning the truth. The man who refuses to have his viewpoint assimilated:

> ... tramples the roots of humanity underfoot. For the nature of humanity is to impel men to agree with one another, and its very existence lies simply in the explicit realisation of a community of conscious life. What is anti-human, the condition of mere animals, consists in keeping within the sphere of feeling pure and simple, and in being able to communicate only by way of feeling states. 1

Culture or education Hegel maintains is a liberation from such a sub-human, sub-rational condition. Indeed:

> In the process we pass upward from the direct and natural existence to what is spiritual and has the form of the universal. In the individual agent this liberation involves a struggle against mere subjectivity, immediate

> When Jesus made his appearance, bent on establishing a spiritual kingdom on earth - an enterprise which forced a wedge between the political system and the theological system, and so undermined the unity of the state. Hence the internal divisions that - as we are about to see - have never ceased to plague the Christian peoples. 8

He then proceeds to congratulate Hobbes who alone

> ... has clearly perceived both the disease and the remedy. He also has dared to propose that the eagle's two heads be reunited, i.e. that everything <u>else</u> be subordinated to political unity - in the absence of which there will never be a well-constituted state of government. 9

Rousseau's principle is that "Anything that impairs social unity ... is unwholesome."[10] While Rousseau maintains that the power of the sovereign does not "extend beyond what public interest requires,"[11] it becomes quite evident that having defined freedom in terms of compliance with the general will, toleration is defined in similar terms. Not only is failure to believe the social creed punishable by banishment and behaviour inconsistent with it punishable by death, but toleration itself is defined in terms of the social creed.[12] Only religions which are consistent with the social creed are to be tolerated. Rousseau writes:

> We should therefore tolerate all religions that are themselves tolerant of all religions - in so far as their dogmas contain nothing at variance with the obligation of the citizen ... the man who makes bold to say 'Outside the Church there is no salvation' should be driven from the state. 13

The concern of this present chapter is with the educational implications of these political ideas which are clearly rooted in Humanist assumptions and which have found expression in the idea of state education. The state school justifies its activities in terms of public consensus while the practical and theoretical crisis of Enlightenment critical rationalism has led to a variety of "Hegelian" epistemologies which regard public consensus as the foundation of reason and objectivity. Indeed almost all modern philosophy of education - virtually in state-philosopher Hegel's footsteps - has set itself the task of providing a (publicly-acceptable) rationale and program for the <u>state school</u>. The ever present justification is an actual (or assumed) public consensus, or that one is working to produce such a consensus

desire, subjective vanity and capricious liberty. 2

Likewise:

> Uneducated men delight in surface-reasoning and fault findings. Fault finding is an easy matter but hard it is to know the Good and its inner necessity. Education always begins with fault finding, but when full and complete always sees everything in the positive. 3

The one who maintains that it is difficult to find the normative universal in the endless differences of opinion Hegel regards as having failed to see the wood for the trees. Indeed he maintains that such a failure shows that such a one is not sincere:

> If they were at pains to find that out, and refused to busy themselves with empty opinion and minute detail, they would act in accordance with substantive right, namely the command of the state and the claims of society. 4

The underlying assumption of these passages is the identification of the rational and universal with the public, and the identification of dissent as unstable opinion, wandering fancy and mere feelings of the individual.[5] This assumption becomes quite explicit when Hegel contrasts philosophy which is critical of established order and law seeking its authority in the Biblical revelation. He writes:

> Still less is it a surprise that the Government has at last turned its attention to this false philosophising. With us philosophy is not practised as a private art, as it was by the Greeks, but has a public place, and should therefore be employed only in the service of the state.6

This identification of the <u>rational</u> with the <u>public</u> points us back to the totalitarian <u>polis</u> of Ancient Greece as much as it points forward to the modern national state. The suggestion of the present chapter is that the latter is by no means free of totalitarian tendencies, even if it styles itself democratic. This is especially the case when it comes to its toleration for religious and cultural pluralism in the field of education. Indeed it is hardly surprising that democracy, which quite literally implies the sovereignty of the people, should wish to curtail the influence of those who believe neither in the sovereignty of the people and indeed insist on propagating beliefs which divide the very source of sovereignty. This is luminously clear in Rousseau's advocacy of the general will[7] and a civic religion in the <u>Social Contract</u> over against the historic claims of Christianity. Indeed

in the next generation. Such a quest for certain values, religious and medieval concern for orthodoxy, has spread from Germany and Italy to dominate education almost everywhere. One line of influence runs to Marx and from there to the socialist concern for the nationalisation of education. Similarly one finds it in fascist regimes. It is no less present in the ideology of the American public school and it is increasingly being accepted and advocated in Britain. The remainder of this chapter will examine some examples of this collectivist way of thinking and then consider first some individualist and then some pluralist political and epistemological alternatives.

In his paper "Liberal Education and the Nature of Knowledge" Paul Hirst makes a fairly extensive reference to the Harvard Report "General Education in a Free Society (1945)." He takes it to be a typical modern statement of the ideal of liberal education. General (or liberal) education has a twofold concern the Report maintains "... at one time looking to the good of man in society and at another time as dictated by the nature of knowledge itself."[14] Hirst regards the Report to be rightly dominated by the latter concern.[15] Doubtless it is mainly the latter which attracted Hirst to the Report, particularly as he felt he possessed a much better account of knowledge and thinking in terms of his theory of the forms of knowledge. However this fact in combination with his 'apolitical' conservatism seems to have eclipsed from him the fact that for the writers of the Report the concern for "... the good of man in society" was at very least an equal concern. While Hirst gives no explicit affirmation of this concern neither does he in any way attempt to dissociate it from the idea of liberal education in general or his in particular. He does, of course, wish to substitute his idealist epistemology for classical realism but he does not, either in the Greek or Modern context, criticise the idea of the state control of education. Indeed, it seems that his appeal to what is "publicly describable and publicly testable"[16] to tests that are "publicly agreed and accepted"[17] to "publicly rooted conceptual organisations"[18] to "the publicly accepted framework of knowledge"[19] "public criteria"[20] and "public language"[21] is not only congruent with the state control of all education, but is quite compatible with and indeed requires a (totalitarian)

elimination of cultural (and conscious) minorities ... [illegible] the public interest. The political analogue of Hirst's "public or monolithic" would seem to be 'public or anarchic'. The appeal in both cases is to the idea that there must be some common (i.e. public) basis of communication and an ordered society to be possible. Indeed, paradoxically, Hirst's language often gives the impression that we already live in such a society with but one "publicly accepted framework of knowledge'. Hirst gives every indication of accepting and defending such a situation, although by the side of what is 'public' he wants to insist on respect for what is 'private'.

Hirst never defines or elaborates this vitally important distinction and as we are concerned with the general idea of what is public then an examination of his fellow liberal educators - the Greeks and the people behind the Harvard Report - should prove illuminating. This will serve to clarify the relations which may exist between the idea of liberal education and totalitarianism. With respect to the Greeks, Werner Jaeger writes in Paideia that:

> The polis is the sum of all its citizens and of all the aspects of their lives. It gives each citizen much, but it can demand all in return. Relentless and powerful, it imposes its way of life on each individual, and marks him for its own. From it are derived all the norms which govern the life of its citizens. Conduct that injures it is bad, conduct that helps it is good ... both he (Plato) and Aristotle claim that all education should, in the perfect state, bear the imprint of that state ... To establish a legal standard by written law was for the Greeks an educational act ... The polis gives each individual his due place in its political cosmos, and thereby gives him, besides his private life, a sort of second life, his bios politikos. Now every citizen belongs to two orders of existence; and there is a sharp distinction in his life between what is his own (idion) and what is communal (koinon).22

It is clear that what was communal took clear priority; individual persons might die but the political community continued to exist forever. Immortality came to mean being remembered by the city-state after one had died. The function of education was to lead the young to find their identity in the political community. The duality of public and private which Jaeger mentions Dooyeweerd has interpreted in terms of the underlying religious dialectic of Greek society. The motive of "form" (measure, harmony), was the culture religion of the polis especially associated with the cult of Apollo the legislator; while on the other hand the "matter" motive, associated with the

cult of Dionysus had grown out of the older pharmy religions with their concern with change, life and death. For many Greeks their lives were divided between the public cults of the polis and the private cults of the mystery religions.[23] It is not without interest that Paul Hirst sees Christianity being reduced to the status of a private cult in the face of secularisation, a process with which he appears to affirm. In Moral Education in a Secular Society he writes:

> The development of secularisation viewed in these terms must inevitably mean that where religious beliefs and practices are maintained, they are progressively 'privatized' ... In so far as religious and non-religious people can agree about social principles, religious questions can be regarded as a private, personal matter ... Such firm privatization is increasingly the mark of our own secular society, in which the widest range of attitudes to religious beliefs is acceptable, provided they are never allowed to determine public issues. Public life and public institutions are thus becoming totally profane even though some public display of religion may remain. At best, this can be seen as a way of affirming shared values previously associated with religion, if now held by many independently of that. 24

Hirst has been highly ambivalent and guarded as to whether religion is a form of knowledge, usually speaking of "religious claims" rather than "religious knowledge". Indeed in terms of his own criteria it seems that he should deny that there is such a form. In his paper "Morals, religion and the maintained school" he actually does this. He writes:

> If, in fact, as seems to be the case at present, there are no agreed public tests whereby true and false can be distinguished in religious claims, then we can hardly maintain that we have a domain of religious knowledge and truth. All that we can claim therein is a domain of beliefs and the acceptance of any one set of these must be recognised as a matter of personal decision. 25

While Hirst never explains what he means by 'public' or how he distinguishes between 'public' and 'private' one possible interpretation could be exemplified in the following diagram. For Hirst public and rational seem to entail each other with sometimes one and sometimes the other dominant. The Hegelian element is usually dominant, such that something is rational because it is public, while the Enlightenment element tends to be restricted to eliminating religion for the most part ... or the sort of religion that Hirst dislikes (e.g. Barthianism) which has severe doubts about rationalism. While Hirst appears to be proposing a culturally relative notion of reason, his cultural anthropology (or sociology of knowledge?) of our society seems much more his

own projected rationalist utopia [illegible]

PUBLIC =	RATIONAL	Mathematics Physical Sciences Human Sciences History Literature and Fine Arts Philosophy Morality
PRIVATE =	IRRATIONAL	Religion

One wonders if the changes in his forms of knowledge since 1965 are supposed to reflect changes in public criteria ... or changes in Hirst's own normative blueprint. More sinister and trading upon the Greek tradition is the identification of the public/private distinction with a distinction between state/individual such that apart from that which is exclusively private (if anything is) everything is regarded as being properly within the realm of state control. The result is that the state comes to hold a central place in society (or the two are identified) and minority views are denied any public expression or at best starved of resources. There seems to be no reason why that which is not individual should be in the control of the state. Furthermore it is one thing for the state to provide a legal framework for various social institutions and their relations, and another for the state to control these institutions. The totalitarian implications of the public/private distinction seems to have a growing role in contemporary educational discussions and developments. H.G. Good and J.D. Teller in their A History of Western Education conclude:

> Perhaps the most significant event in the whole history of education is the evolution of the public school systems including national education. After two thousand years there is a trend towards Plato's proposal in the Republic. Is history repeating itself? Many efforts have been made by individuals, societies, business and especially the Church to establish schools to achieve their own purposes. Today the all powerful state is more and more directing the school to accomplish national aims. Although the Church and private efforts are still strong, especially in the United States, the state is stronger and gradually adapting education to its own ends. 26

The Harvard Report seems to substantiate this claim in considerable measure. Indeed in the preface James Bryant Conant urges us to drop our

"educational prejudices" and "proceed with them (the authors) sympathetically as they consider ways and means by which a great instrument of American democracy can both change the future and secure the foundations of our free society."[27] Such a view runs throughout the Report. While declaring opposition to direct political control they nevertheless maintain "No doubt the ultimate control of education must be political."[28] High school teaching is called "the floor and foundation of democracy" while the heart of education is said to be "in a common tradition and for a common citizenship". Indeed ... "the high school is and must increasingly become the centre of young people's lives ..."[29] More explicitly:

> ... there are truths which none can be free to ignore, if one is to have that wisdom through which life can become useful. These are the truths concerning the structure of the good life and concerning the factual conditions by which it may be achieved, truths comprising the goals of the free society. 30

Democracy is defined as "a community of free men"[31] while freedom "is submission to the best and fullest truth that can be known; yet it is also recognition that truth is not fully known".[32] The Report acknowledges that ... "our account of education in its bearings on the entire human being presupposes a general theory of human nature and human values."[33] It should be evident that the Report takes democracy to be something much more than a method of working in the political sector of life; it is much rather a whole way of life. Indeed this fact too is made explicit when it is said that:

> ... a successful democracy (successful, that is, not merely as a system of government, but as democracy must be, in part as a spiritual ideal) demands that these traits and outlooks (of our national life and culture) be shaped as far as possible amongst all people, not merely a privileged few. 34

The American sociologist Peter Berger wrote in 1961 that:

> ... a good case could be made for seeing in the public school the principal agency in our society representing our politically established cultural religion in almost pure form. What is more, as any element of 'sectarian' religion is increasingly removed from the curriculum by court actions or merely by social pressures, the cultural religion appears in ever clearer form. This fact has actually made its appearance in some Catholics' defense of their position on parochial schools. Catholics will argue that the public schools do, in fact, teach religious ideas and these ideas are at variance with the Catholic faith. We would agree with them here ... Actually, the

> public schools teach the religious ideas that are embodied in the political order. American values and American democracy take on the nature of a religious cult here ... The ritual aspect of this religious instruction is easily located in the ceremonies of saluting the flag, the reciting of the oath of allegiance in its new explicitly religious form, and other religious-patriotic ceremonies ... If one is to look for a catechism that states these religious suppositions of the public school John Dewey's A Common Faith will probably be the best choice. 35

In our context this mention of Dewey is highly significant, for not only does the Harvard Report show itself to be profoundly influenced by Dewey, but also there seems to be considerable affinities between Dewey's and Hirst's ideas of public verification.[36] Dewey, however differently he sees the matter referred to by the Catholics mentioned is in full agreement with them and Berger. He writes in the book named:

> It is impossible to ignore the fact that historic Christianity has been committed to a separation of sheep and goats; the saved and the lost; the elect and the mass ... I cannot understand how any realisation of the democratic ideal as a vital moral and spiritual ideal in human affairs is possible without surrender of the conception of a basic division to which supernatural Christianity is committed. 37

The book ends with these words:

> The things in civilisation we most prize are not of ourselves. They exist by grace of the doings and sufferings of the continuous human community in which we are a link. Ours is the responsibility of conserving, transmitting, rectifying and expanding the heritage of values we have received that those who come after us may receive it more solid and secure, more widely accessible and more generously shared than we have received it. Here are all the elements for a religious faith that shall not be confined to sect, class or race. Such a faith has always been implicitly the common faith of mankind. It remains to make it explicit and militant. 38

Such then is Dewey's Humanist faith. Christianity is not to be tolerated because it is incompatible with two related ultimates for Dewey which are found in the phrase "public verification". Christianity <u>divides</u> the 'public' which is humanity, and ideally the Great Community, Dewey's equivalent of the Church Universal. If truth, validity and value depends upon public verification and validation, then these will disappear if the public is divided. Progress means the rallying around a common truth, a common faith and a common method. These conceptions tie together in Dewey's view that the method of science is

essentially democratic. He writes:

> Faith in the continued [illegible] of truth through directed co-operative endeavour is more religious in quality than faith in any completed revelation ... It trusts that the natural interactions between man and his environment will breed more intelligence and more knowledge provided the scientific methods that define intelligence in operation are pushed further into the mysteries of the world, being themselves promoted and improved in the operation. There is such a thing as faith in intelligence becoming religious in quality - a fact that perhaps explains the efforts of some religionists to disparage the possibilities of intelligence as a force. They properly feel such a faith to be a dangerous rival. 39

Dewey has no doubts or hesitancy about recognising that Christianity and Humansim are two mutually exclusive totality visions of the way, the truth and the life; and that the integrity of both is lost in any attempt at synthesis. He writes:

> What is not realised - although perhaps it is more definitely seen by fundamentalists than by liberals - is that the issue does not concern this and that piecemeal item of belief, but centres in the questions of the method by which any and every item of intellectual belief is to be arrived at and justified. 40

While the Harvard Report at roots shows Dewey's Humanism it attempts to disguise somewhat the fact that there are two mutually exclusive visions by mostly referring to highly 'liberalised' (i.e. converted into American cultural religion à la Berger) versions of Christianity. Nevertheless anything distinctly Christian (i.e. 'sectarian' in Dewey's and Berger's usage) is firmly rejected. In a section entitled "The Search for Unity" it speaks of the need of ...

> some over-all logic, some strong, not easily broken frame within which both the college and school may fulfil their at once diversifying and uniting tasks. This logic must be wide enough to embrace the actual richness and variegation of modern life - a richness partly, if not wholly, reflected in the complexity of our present educational system. It must also be strong enough to give goal and direction to this system ... 41

The Report acknowledges that education lacked such unity and direction and surveys the proposals which had been made. "We are" the Report maintains "faced with a diversity of education which, if it has many virtues, nevertheless works against the good of society by helping to destroy the common ground of training and outlook on which any society depends." 42 The first proposal which it considers is that of Christianity:

Sectarian, particularly [illegible] of course their solution, [illegible] college until [illegible] gives meaning and ultimate unity to all parts of the curriculum, indeed to the whole life of the college. Yet this solution is out of the question in publicly supported colleges, and is practically, if not legally, impossible in most others. I do think it the Achilles' heel of democracy that, by its very nature, it cannot foster general agreement on ultimates and perhaps must foster the contrary. But whatever one's view, religion is not now for most colleges a practicable source of intellectual unity. 43

In this passage we find the public versus sectarian distinction at work again, not without however an ambivalence concerning the meaning of 'public' and 'democracy'. Do these refer to a whole way of life or to a legal-political framework which permits and indeed encourages a plurality of ways of life? Are these terms to have a totalitarian or a pluralist meaning? There is an incisive discussion of this matter by the American sociologist Will Herberg in his paper 'Religion, Democracy and Public Education'. He begins by suggesting that:

> there are two philosophies of public education competing for the allegiance of American educators, and the conflict between them is of the utmost significance. 44

He calls them the 'Anglo-American' philosophy and the 'Continental' philosophy. The former holds to the principle of subsidiarity which is that ...

> The government is justified in taking over of general social function only if it is a function that must be performed in the common interest but cannot be adequately performed by individuals or voluntary non-governmental agencies. According to this conception, the governmental operation of schools is not something inherent in the very notion of democracy; it is rather a function assumed by the government to meet a great and urgent public need where non-governmental effort obviously does not suffice. But the government has not pre-empted the field and was never intended to pre-empt it. On the contrary, the parents (or whatever agency they choose to represent them) retained their original prior right to educate their children and to determine the kind of education they are to receive. 45

The Continental philosophy does not see the role of the state in education as compensatory but rather as a

> .....'natural' and intrinsic activity of the state, designed primarily to inculcate a common doctrine and create a uniform mentality among the citizens. The people are wards of the state, and forming the mind of the younger generation is one of the state's most important responsibilities and prerogatives. The state is in its nature a teaching institution, and public education is its proper and legitimate function. 46

Herberg traces the Continental philosophy of education from [illegible]. Its first modern appearance was in 17th century France in [illegible] idea of l'etat enseignant, the state as a teaching institution. By the 18th century many of the philosophers of the Enlightenment were proposing l'école unique - a single school system operated by the state. After the French Revolution these ideas began to receive institutional embodiment, e.g. in the Napoleonic program of national education.[47] While stressing that in actual fact the outworkings of these two philosophies have been blurred and mitigated he sets out the principles at stake as follows:

> Here we have a confrontation of two irreconcilible points of view; one committed to pluralism and the idea of subsidiarity; the other to a uniformitarian statism with totalistic pretensions. 48

Herberg maintains that the Anglo-American philosophy has been the traditional American view and that now the Continental philosophy is threatening it increasingly. He argues that these two philosophies lead to quite opposed conceptions of what is a public school and consequently to quite opposed policies. He suggests that in the light of the Anglo-American philosophy that the 'private' or 'parochial' or 'religious' school ...

> ... must be regarded as essentially a public institution, though it is not governmentally sponsored and operated. If it performs a public function, supplying large numbers of children with an education that is everywhere taken as the equivalent of the education supplied in the public schools. It has full public recognition as an educational agency; its credits, diplomas and certificates have exactly the same validity as those issued by governmental establishments. It is, in fact, part of the nation's educational system, side by side with the public school.
>
> If this be the case, if the independent school is indeed a publicly recognised educational institution, performing a public educational service, why should it not receive public support? ... Every non-profit-making educational institution, properly accredited, would fall within the scope of my argument. 49

This argument - which has my full support - soon links back to the Harvard Report and is worth quoting at length. Herberg continues ...

> The only ground on which the independent school can consistently be denied public recognition and public support is the contention that it is undemocratic and un-American because it withdraws children from the school system operated by the Government. This is the

line taken by J.B. Conant, former president of Harvard, in his influential book, Education and Liberty. 'The greater the proportion of our youth who fail to attend our public schools and who receive their education elsewhere', Mr Conant asserts 'the greater the threat to our democratic unity. To use taxpayers' money to assist private schools is to suggest that American society use its own hands to destroy itself.' Mr Conant does not carry his logic far enough; if private schools are really such a menace to American democratic society, they should not merely be denied public funds, they should be outlawed. Perhaps that is what Mr Conant would like, although somehow he cannot bring himself to say so. His whole argument, however, points in that direction and rests on a conception of democracy far closer to a monolithic state totalitarianism, where no rivals are tolerated in any field which the state chooses to enter, than to the pluralistic system established by the Foundling Fathers and reiterated, so far as education is concerned, in the classic Supreme Court decisions I have cited. 50

The mention of J.B. Conant returns us to the Harvard Report. The Report having dismissed Christianity as an unacceptable frame of reference mentions three other possibilities -(i) the traditions of Western culture; (ii) a focus on contemporary social problems and (iii) the scientific outlook.[51] In the most general terms the Report combines (i) and (ii). The characterisation of the great books of western culture program is especially significant:

> There is a sense in which education in the great books can be looked at as a secular continuation of the spirit of Protestantism. As early Protestantism, rejecting the authority and philosophy of the medieval church, placed reliance on each man's personal reading of the Scriptures, so this present movement, rejecting the unique authority of the Scriptures, places reliance on the reading of those books which are taken to represent the fullest revelation of the Western mind. 52

The Report is anxious to insist that this sense of heritage is important in an "education for modern democratic life" in that history (and American history in particular) ought to be taught with "those presuppositions that democracy is meaningful and right."[53] If the "Western mind" bears some slight resemblance to Hegel's Absolute Spirit, this resemblance is not, I think, entirely incidental. Consider the following passage:

> To study either past or present is to confront, in some form or another, the philosophic and religious fact of man in history and to recognise the huge continuing influence alike on past and present of the stream of Jewish and Greek thought through Christianity. There is doubtless a sense in which religious education,

> education in the great books, and education in modern democracy may be mutually exclusive. But there is a far more important sense in which they work together to the same end, which is belief in the idea of man and society that we inherit, adapt and pass on. 54

And so "Christianity" is phased into the Western traditions whose central idea is declared to be that of "the dignity of man", said to be equally compatible with humanism and a religious view of life. However, it is quite clear, as we have seen, that it is not the Christian revelation which is taken to be the norm for thought, education and society. The modern idea of the dignity of man is the core of Humanism which necessarily excludes the Christian Faith. As Peter Berger had maintained American education in general (and the Harvard Report in particular) looks for its norm, its unity, its direction and its goal "in the character of American society ... (in) the American spirit ... in the worth and meaning of the human spirit ..."[55] And so "given the American scene with its varieties of faith and even unfaith, we did not feel justified in proposing religious instruction as part of the curriculum ... We must perforce speak in purely humanistic terms, confining ourselves to the obligations of man to himself and to society."[56]

Such then is an education taken to be beneficent and liberal. The nature of the opposite is made clear enough:

> Our argument ... is that knowledge is dangerous and illiberal if it does not embrace as fully as possible the mainsprings of our culture. We do not believe, for example, that education can be safely left with those who see our culture solely through the eyes of formal religion. 57

Here then in American educational thinking we see the two totalitarian tendencies at work. The first that the state should control most if not all education, and on the other that such education has the task of transmitting common (national) values. We have already mentioned the modern origins of this way of thinking in Rousseau and Hegel, which itself is a return to Graeco-Roman ways of thought. We could sum up the situation in the formula "Rational - Common - Public - Democratic - State controlled." This formula - Hegel's 'Continental' philosophy of education is proving increasingly influential in Britain. We have already examined Hirst's equation of rational and public. Consider the following passage from Schools Council Working

> Education presupposes a common field of agreement about what constitutes knowledge and what is truly an opinion. At the present time Christianity, in the view of the majority, falls in the second category. The beliefs of Christians (and those of other faiths and ideologies) can only, in these conditions, be presented as 'what some people believe'. We cannot present a religious belief as if all who do not accept it are knaves or fools ... In a secular education system he (the Christian teacher) must stand on the side of education; his task is to educate children ... From the educational angle the objection, if the aim is to make children Christians, is the familiar one of indoctrination; or, put more bluntly, that what is only opinion is being taught as truth ... the criterion of truth and knowledge by which we normally operate is the criterion of what is open to human reason and thus equally open to all. 58

In this passage the links between majority, truth, education, education system and reason are transparent. It is equally clear that if one refuses to be incorporated into this way then one is guided by mere opinions, guilty of indoctrination, regard the majority as fools and knaves ... the very epitome of unreason. One of the chief objectives of public education is to "promote mutual understanding"[59] to provide a "common background to all."[60] Social unity and the eventual hope of a common faith seems to drive the writers of the Paper. Diversity must be replaced by unity. They affirm:

> We believe that in a multi-racial and pluralistic society there must be dialogue between those holding different beliefs and growth in mutual understanding, not the widening of inherited divisions. 61

The end of the dialogue - Hegelian dialectic - is the overcoming of differences, ecumenical consensus. All that is not common is to be rejected as sectarian and divisive. The idea that a group refuses to join in such a dialogue-unto-conformity is found alarming and disturbing. A group which provides schools of its own for its own children, i.e. for them not to attend state schools, is said to "withdraw from society" which implies an identification of state with society. Such a policy or the legal possibility of such a policy - it is not clear - the Paper does not commend in view of "the record of human bigotry and inter-group hostility through the ages ..."[62]

The latest report of the Religious Educational Council runs along similar lines. It proposes that an official national body would "... provide guidelines for teachers in their method of approach concerning the balance between the

different elements treated, and concerning the [illegible] isation of particular religions [illegible] range of types of religion and other studies that is available for study."[63] Such an official definition of religious education will assure teachers that "what they are doing has a measure of public support to safeguard them against unreasonable criticism from a parent or a partisan section of society."[64] The insinuation here is that any criticism of the official view of religion promulgated by the national body would be necessarily irrational. Indeed the report looks forward to the abolition of the right of parents to withdraw their child from such religious education for "withdrawal ultimately represents the antithesis of this approach to learning and encourages the perpetuation of a sectarian spirit."[65] Once religious education has been defined in a "publicly acceptable manner"[66] then the presumption is that any dissent is prompted by nothing more worthy than sectional interest and sectarian spirit. Nor would it be right to suggest that there will be no place for criticism. "Critical examination will be of "fringe" religions and ideologies ... regarded by some as irrational, immoral or anti-social,"[67] with the confidence that "such study will lead to sensible conclusions, and a better understanding of the social and moral implications of those beliefs."[68]

If we now turn from religious education to contemporary thought about the whole curriculum then the important writings of Denis Lawton display the same tendencies. The task of education is to produce a "democratic egalitarian society".[69] Such a transformation of society requires a transformation of education in terms of what Lawton calls a common culture curriculum. He makes it clear that all schools should be common schools and "common schools are meaningless unless they transmit a common culture and provide an adequate means for individual development within the general framework of that culture."[70] He assures us that there is "enough in common between most members of our society to justify the term common culture and to justify our attempting to plan a common curriculum. Class and regional differences should not direct our attention away from knowledge as the basis of culture."[71] Social unity again seems to be the driving force. His choice of class and regional differences seem to be minor differences in comparison with the differences between

humanists, Marxists, Jews, Christians, Catholics, agnostics, Hindus. What do these diverse ways of life [illegible] Lawton's common culture must exclude whatever is not common which means excluding all the really vital concerns on which men are divided. Can education based upon such a 'culture' - which is probably no-one's culture - avoid irrelevance and sterility?[72] Or again Lawton speaks of most members of society. What of those - and their children - who are not included in that supposed majority? Lawton finds himself in the ambiguous situation of both trying to justify his proposals in terms of the idea that they fit present society, and at the same time maintaining that our society ought to be transformed by his educational proposals. Having regarded class, regional and sub-cultural differences as divisive, (and, paradoxically, not as real as some people make out!) he turns to knowledge as the basis of culture. When he encounters further divisions in the views of curriculum theorists on the question of disciplines and forms of knowledge he is at pains to assure us that there is really a great deal of consensus, even though their answers range from three to eight or more categories. In the last analysis Lawton's real concern seems to be that all share a common framework of knowledge. Which framework is a matter of relative indifference, although he does in fact - without giving reasons - opt for Hirst's forms of knowledge.[73]

> The extent to which these forms of knowledge are objectively 'real' or are social constructs (in so far as this is a meaningful distinction) is less important than the fact of their usefulness in the learning process. The exact boundaries of disciplines that should be included, or where the boundaries happen to be drawn is of less importance than the necessity for pupils to be given some kind of structure in the learning process. [74]

The vitally important thing is to make "a basic common understanding possible."[75] While Lawton's concern is ostensibly that of social justice, in the sense of egalitarianism, it is hard to see how that principle alone could account for his educational proposals. Fraternity (or social unity) appears to be a further unspoken assumption. Consider the following passage:

> Problems of knowledge and meaning become particularly acute in pluralistic societies where a multiplicity of groups have different perspectives and theories of the world and knowledge. This is unavoidable, but unless

> some idea of commonality [illegible] there is a danger that society will tend to break up [illegible] In such situations education has a key role to play, and the problems of curriculum construction or reform will be enormous. 76

The key role Lawton appears to have in mind is the replacement of the plurality of views of reality by a single view. "This will not be a programme for socialisation and conformity" writes Lawton, "but a means of making individuals aware of the variety and choices available <u>within the culture</u>".[77] In other words the aim of such an education is that everyone shares the same world-view, but within that general framework "individual capacities, interests, and choice should be given as much freedom as possible."[78] Though Lawton proceeds in a matter-of-fact manner, his proposals seem to amount to nothing less than a totalitarian democracy to be implemented by education.[79]

So far then we have briefly examined a variety of collectivist (or universalist) forms of Humanism. We turn now to the individualistic (or liberal) Humanism of firstly Karl Popper and then Paul Feyerabend. The differences these two thinkers have with those we have already discussed are within Humanism. Both of them would have little difficulty in subscribing to Hegel's declaration:

> Man is an end in himself only by virtue of the divine in him - that which we designated at the outset as Reason, or, insofar as it has activity and power of self determination, as Freedom. 80

However, the content that Popper and Feyerabend give to the terms reason and freedom is diametrically opposed to that of Hegel, as Hegel's was to the liberal individualistic tradition in which they stand.

In his intellectual autobiography Popper states that The Poverty of Historicism and The Open Society and its Enemies both

> ... grew out of the theory of knowledge of Logik der Forschung and out of my conviction that our often unconscious views on the theory of knowledge and its central problems ("What can we know?", "How certain is our knowledge?") are decisive for our attitude towards ourselves and towards politics ... In The Open Society I stressed that the critical method, though it will use tests wherever possible and preferably practical tests, can be generalised into what I described as the critical or rational attitude.

> I argued that one of the best senses of "rational" and "reasonableness" was openness to criticism - readiness to be criticised and eagerness to criticise oneself; and I tried to argue that this critical attitude of reasonableness should be extended as far as possible. I suggested that the demand that we extend the critical attitude as far as possible might be called "critical rationalism"...81

Let us briefly consider some of the features of Popper's critical method as we find it in The Logic of Scientific Discovery. First of all concerning the results of critical method in natural science Popper writes:

> I think we shall have to get accustomed to the idea that we must not look upon science as a 'body of knowledge', but rather as a system of hypotheses; that is to say a system of guesses or anticipations which in principle cannot be justified, but with which we work as long as they stand up to tests, and of which we are never justified in saying that we know they are 'true' or 'more or less certain' or even 'probable'. 82

However it is not as if just the theories have, and will continue to have this precarious status, for in Popper's view the data and scientific method itself equally lack any sort of rational certitude. With respect to the former Popper writes:

> The empirical basis of objective science has nothing absolute about it. Science does not rest upon a solid bedrock. The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or 'given' base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being. 83

With respect to scientific method Popper maintains any reply to the question of its nature is unavoidably normative. Any attempt to avoid this normativity by means of a 'naturalistic' theory of scientific method (i.e. study of the actual behaviour of scientists, or of the actual procedure of science) does not in Popper's view settle controversial questions about science (e.g. whether science uses induction) particularly because "... what is to be called a 'science' and who is to be called a 'scientist' must always remain a matter of convention or decision."[84] Consequently Popper admits that his own criterion of demarcation between science and non-science

> will accordingly have to be regarded as a proposal for

> an agreement or convention. As to the rationality of any such convention opinions may differ; and a reasonable discussion of these questions is only possible between parties having some purpose in common. The choice of the purpose must, of course, be ultimately a matter of decision, going beyond rational argument ... This I freely admit that in arriving at my proposals I have been guided, in the last analysis, by value judgments and predelictions. But I hope that my proposals may be valued by those who value not only logical vigour but also freedom from dogmatism. 85

This search for logical vigour plus freedom from dogmatism is indeed basic to the whole approach of Popper's critical rationalism which everywhere wishes to make explicit what is assumed and make clear the possibility of alternatives. For Popper rational argument means essentially deductive inference.[86] Consequently he is aware of the diminuitive role that reason plays in his own proposals for scientific methodology. On the one hand:

> There is no such thing as a logical method of having new ideas, or a logical reconstruction of the process. My view may be expressed by saying that every discovery contains 'an irrational element', or 'a creative intuition' in Bergson's sense. 87

On the other Popper recognises that in his proposed deductive method of testing the actual role of logical deduction is very limited; namely that of deducing empirical consequences from the conjunction of a proposed theory and initial conditions. He admits that "no conclusive disproof of a theory can ever be produced"[88] as the conventionalist view of science had maintained. Concerning conventionalism he writes:

> I regard conventionalism as a system which is self-contained and defensible. Attempts to detect inconsistencies in it are not likely to succeed. Yet in spite of all this I find it quite unacceptable. Underlying it is an idea of science, of its aims and purposes, which is entirely different from mine ... my conflict with the conventionalists is not one that can be ultimately settled by a detached theoretical discussion. 89

Popper proposes that a theory is not to be regarded as a part of empirical science if conventionalist methods are utilised to defend it. The decision that Popper recommends is that "... if our system is threatened we will never save it by any kind of conventionalist strategem."[90] The guiding principle for Popper's scientific methodology (i.e. proposed norms for science and for identifying proper science) is that of the growth of knowledge. He believes that conventionalism by its ability to defend any theory may lose the opportunity to make new discoveries.[91] For Popper any such presumption of

absolute knowledge means an end of growth. "With the fall of [illegible] (including that of degrees of imperfect certainty or probability), there falls one of the defences of obscurantism which bar the way to scientific advance."[92] Before proceeding to examine what Popper takes to be the political implications of his epistemology and the significance he sees in the growth of knowledge let us consider briefly his estimation of his own 'critical rationalism'.

Having acknowledged that any uncritical or comprehensive rationalism is bound to be inconsistent[93] Popper concludes that:

> ... whoever adopts the rationalist attitude does so because he has adopted, consciously or unconsciously some proposal, decision, or belief or behaviour; an adoption which may be called "irrational". Whether this adoption is tentative or leads to a settled habit, we may describe it as an irrational faith in reason ... Accordingly our choice is open. We may choose some form of irrationalism, even some radical and comprehensive form. But we are also free to choose a critical form of rationalism, one which frankly admits its origins in an irrational decision (and which, to that extent, admits a certain priority of irrationalism).[94]

For Popper one of the consequences of critical rationalism he maintains is the following:

> The nineteenth century conflict between science and religion appears to me to be superceded. Since an 'uncritical' rationalism is inconsistent, the problem cannot be the choice between knowledge and faith, but only between two kinds of faith. The new problem is: which is the right faith and which is the wrong faith?[95]

The true faith for Popper, following John Stuart Mill, is the faith that proclaims that "Over himself, over his own body and mind, the individual is sovereign"[96] Popper's deepest concern with the growth of scientific knowledge has little to do with the ideal of mastery over nature or technological possibilities. Rather it is the "ideal of our self-emancipation through knowledge ... a spiritual self-liberation from error, from superstition, and from false idols ... It is the idea of one's own spiritual self-emancipation and growth."[97] Popper is adamant in his Enlightenment faith that "... only through the growth of knowledge can we liberate our minds from their spiritual enslavement; enslavement by prejudices, idols and avoidable errors."[98] The central human calling of self-emancipation through knowledge is "a task demanding of every man immediate action here and now and always."[99] The

recognition of this High calling will [illegible] spiritual unity of mankind".[100] Individuals are spiritually enslaved and men are divided over against each other because of their bondage to idols. The driving force of Popper's whole philosophy is the relativizing everything which could be seen as something to which man is subject, i.e. any form of heteronomy. He urges us to turn from the false gods to the true, that is to recognise the divinity, the (potential) rational autonomy of ourselves and our fellow men. The thought is exactly that of Kant when he wrote:

> It follows of itself that, in the order of ends, Man (and every rational being) is an end-in-himself, i.e. he is never to be used merely as a means for someone (even for God) without at the same time being himself an end, and ... thus humanity in our own person must itself be holy to us ...101

Whereas man's holiness consisted in the moral autonomy of his will, for Popper the autonomy of thought constitutes the deepest foundation of his philosophy and fundamentally determines for him both his account of what is and what ought to be. This autonomy of thought is endangered if one believes oneself to possess the truth for one becomes enslaved to that truth. Not only so but the conviction of the certain possession of the truth inevitably leads to intolerance and fanaticism. Such belief that one has the truth, and such intolerance, restricts the growth of knowledge. Man's self-emancipation is the continuous transcendence of his own thought by negation, the restless pursuit of the self-contradictory goal of absolute knowledge, an ever receding mirage whose illusionary character is recognised, an ideal limit arrived at which must by all means be arrested.[102] From this brief sketch of Popper's epistemology it should be evident that the political and educational outlook connected with an idealist public form of knowledge epistemology will be very different from a critical rationist growth of knowledge epistemology. Indeed far more is at stake in both cases for each involves a whole view of man's life in the world and a distinctive account of freedom and reason. While Hirst is supremely - in Kuhn's terms - a philosopher of normal science, Popper regards normal science as the abandonment of science which for him is located in the pre-paradigm and even more in revolutionary science and indeed comes close to a doctrine of permanent revolution.[103]

Popper makes the link between his philosophy of science and his political philosophy fairly explicit. In The Poverty of Historicism he writes that:

> ... the progress of science depends on free competition of thought, hence of freedom of thought, and hence, ultimately, on political freedom ... If the growth of reason is to continue and human rationality to survive, then the diversity of individuals and their opinions, aims and purposes must never be interfered with (except in extreme cases where political freedom is endangered). Even the emotionally satisfying appeal for a common purpose, however excellent, is an appeal to abandon all rival moral opinions and the cross-criticisms and arguments to which they give rise. It is an appeal to abandon rational thought ... Holistic control, which must lead to the equalication not of human rights but of human minds, would mean the end of progress. 104

Similarly he explains that his terms 'closed' and 'open' society indicate:

> ... a rationalist distinction; the closed society is characterised by the belief in magical taboos, while the open society is one in which men have learned to be to some extent critical of taboos, and to base decisions on the authority of their own intelligence. 105

Popper's distinction between 'open' and 'closed' societies is extremely equivocal. Sometimes the distinction appears to be between a differentiated and an undifferentiated society, sometimes between an individualistic and collectivistic conception of society. The extent of this confusion may perhaps be noticed if the passage quoted above is compared with the following two passages which positively relate the idea of the open society to pagan antiquity, Christianity and the French Revolution:

> "In the same generation to which Thucydides belonged, there arose a new faith in reason, freedom and the brotherhood of all men - the new faith, and as I believe, the only possible faith, of the open society." 106 "Just as the French Revolution re-discovered the perennial ideas of the Great Generation and of Christianity, freedom, equality and the brotherhood of all men, so Hegel discovered the Platonic ideas which lie behind the perennial revolt against freedom and reason. Hegelianism is the renaissance of tribalism. The historical significance of Hegel may be seen in the fact that he represents the 'missing link', as it were, between Plato and the modern forms of totalitarianism." 107

The trouble seems to be that a whole series of different distinctions most of which are by no means unambiguous - and indeed have different meanings for different viewpoints - Popper has clustered around his open-closed distinction. Indeed in that The Open Society and Its Enemies was, as he put it, his war effort, his main concern seems to have been the 'political' one of appealing

to as many groups as possible to unite them in opposition to [illegible] Nazi totalitarianism. However, I would wish to maintain that most of the key distinctions generated by his critical rationalism are extremely problematic. This has led to many Popper legends - as Popper calls them - which has meant that any attempt at a consistent interpretation of Popper contradicts something that he's maintained elsewhere.[108] A further problem has been that his distinction 'open-closed' has come into circulation in educational circles (as has talk about 'falsification') in complete ignorance of Popper's own educational views.

He suggests that state involvement in education is "... liable to produce dogmatic self-satisfaction and massive intellectual complacency, instead of critical dissatisfaction and eagerness for improvement."[109] Not only is it liable to retard the growth of knowledge, but equally, and at the same time it "may endanger the most precious of all forms of freedom, namely intellectual freedom."[110] He complains of the "deeply rooted prejudice that only alternative to laissez faire is full state responsibility."[111] He suggests that it is part of the state's function to ensure that no one lacks the opportunity for education. However, he does not suggest the institutional means whereby some alternatives to either laissez faire or full state control could be provided, and falls back to saying that if he had to make the choice then the former would be infinitely superior. Like J.S. Mill he speaks of the dangers of public opinion to freedom of thought and suggests that "... by minimising the power of the state, the danger of the influence of public opinion, exerted through the agency of the state, will be reduced."[112]

There are just a few passages in Popper's writings which do relate to the issue of the content and nature of education. His comments on science education though addressed to induction into Kuhn's normal science could equally be taken to relate to the Hirst idea of initiation into the natural scientific form of knowledge.

> The 'normal' scientist, in my view, has been badly taught. I believe ... that all teaching on the University level (and if possible below) should be training and encouragement in critical thinking. The 'normal' scientist ... has been badly taught. He has been taught in a dogmatic spirit:

> be as a victim of indoctrination, and a [illegible] a technique which may be e.g. [illegible] the reason why (especially in [illegible]). As a consequence, he has become just [illegible] an applied scientist, in contradistinction to what I shall call a pure scientist ... I can only say that I see a very great danger in it and in the possibility of its becoming normal (just as I see a great danger in specialisation, which is also an undeniable historical fact): a danger to science and, indeed, to our civilisation. 113

Shortly we shall consider Paul Feyerabend's recommendations for a non-indoctrinating teaching of science which stems from a 'radicalisation' of certain themes in Popper's philosophy of science but with which, one suspects, he would have little sympathy. In terms of Popper's epistemology it seems hard to know how the teaching at the school level could help but be indoctrinating. Similarly Popper is highly critical of the type of view of history maintained by Hirst. Such historians:

> Aiming at objectivity, they feel bound to avoid any selective point of view; but since this is impossible they usually adopt points of view without being aware of them. This must defeat their efforts to be objective, for one cannot possibly be critical of one's own point of view, and conscious of its limitations without being aware of it. 114

Consequently Popper recommends that the historian:

> .... be clear about the necessity of adopting a point of view, to state this point of view plainly, and always to remain conscious that it is one among many, and that even if it should amount to a theory, it may not be testable. 115

Consequently:

> It is possible, for example, to interpret 'history' as the history of class struggle, or the struggle of races for supremacy, or as the history of religious ideas, or as the history of the struggle between the 'open' and the 'closed' society, or as the history of scientific and industrial progress ... there is necessarily a plurality of interpretations which are fundamentally on the same level of both suggestiveness and arbitrariness (even though some of them may be distinguished by their fertility - a point of some importance). 116

Having maintained that the view of knowledge such as Hirst clearly holds leads to uncritical dogmatism and indoctrination it is perhaps not surprising that Popper would also have to suggest that Hirst's idea of forms of knowledge is a variety of 'essentialism'. Popper writes:

> ... subject matter, or kinds of things, do not constitute a basis for distinguishing discipline. Disciplines are

> distinguished for historical reasons and reasons of administrative convenience (such as the organisation of teaching and appointments), but partly because the theories which we construct to solve our problems have a tendency to grow into unified systems. But all this classification and distinction is a comparatively unimportant and superficial affair. We are not students of some subject matter but students of problems. And problems may cut right across the borders of any subject matter or discipline. 117

The negativity and fear of commitment which Popper regards as so essential to self-emancipation leaves his philosophy virtually without contact with both educational institutions and the inevitably formative character of education.[118] What values should the institution embody? Should the teachers be free to teach what they believe? Should science be taught à la Popper? Should critical rationalism either be assumed or actually propounded in the classroom? Should history be taught as class struggle, or the struggle to achieve the open society, or should many representative views be presented for the free choice of the children? Popper neither addresses himself to these questions nor is it easy to see what kind of reply he could make.

At this point we will turn to Paul Feyerabend's book Against Method: Outline of an anarchistic theory of knowledge, for in some respects it constitutes an outworking of some of Popper's ideas, and it does address itself expressely to educational issues. Like Popper, Feyerabend identifies closely with the individualist philosophy of John Stuart Mill. In On Liberty Mill viewed with great apprehension the involvement of the state in the actual process of education. He wrote:

> That the whole or any large part of the education of the people should be in state hands, I go as far as any one in deprecating. All that has been said of individuality of character, of diversity in opinions and modes of conduct, involves, as of the same unspeakable importance, diversity of education. A general State education is a mere contrivance for moulding people to be exactly like one another ... An education established and controlled by the State should only exist, if it exist at all, as one among many competing experiments, carried on for the purpose of example and stimulus, to keep the others up to a certain standard of excellence. 119

While Feyerabend is not anxious about the role of the state in education - indeed he presupposes it - his main concern is the powerful place that science, or rather Science, occupies. Like Popper, Feyerabend's philosophy is centered

on the growth of knowledge and even more on the attainment of human freedom. However, while Popper believes that the concepts he is primarily connected with rationalism, Feyerabend, by contrast seeks to show that rationalism is inimical both to the growth of knowledge and human freedom. With respect to the growth of knowledge Feyerabend sets up a confrontation between the principles proposed for science (and assumed to be the secret of success of science) derived from the rationalist philosophers with the actualities of the history of science. He maintains that:

> ... one of the most striking features of recent discussions in the history and philosophy of science is the realisation that events and developments, such as the invention of atomism in antiquity, the Copernican Revolution, the rise of modern atomism (kinetic theory, dispersion theory, stereo-chemistry; quantum theory), the gradual emergence of the wave theory of light, occurred only because some thinkers either decided not to be bound to certain 'obvious' methodological rules or because they unwittingly broke them. This liberal practice, I repeat, is not just a fact of the history of science. It is both reasonable and absolutely necessary for the growth of knowledge. More specifically, one can show the following: given any rule, however 'fundamental' or 'necessary' for science, there are always circumstances when it is advisable not only to ignore the rule, but to adopt its opposite. For example, there are circumstances when it is advisable to introduce, elaborate and defend ad hoc hypotheses, or hypotheses which contradict a well established and generally accepted experimental results, or hypotheses whose content is smaller than the content of the existing and empirically adequate alternative or self- inconsistent hypotheses and so on. 120

This critique of the golden rules of Popper's scientific methodology involves, at the same time, the repudiation of the demarcation between 'science' and 'non-science' which is central to Popper's philosophy. This is the case because, for Popper, real science is to be identified by the use of that methodology. Feyerabend maintains that not only would the use of such a methodology - or any methodology - would have been disastrous to the growth of knowledge, but that, in actuality, there is continuity between, e.g. between science and myths, that indeed some of the most advanced areas of science are mythological, and mythology cannot be excluded from science. The reason for this is that:

> None of the methods which Carnap, Hempel, Nagel, Popper or even Lakatos want to use for rationalising scientific changes can be applied, and the one that can be applied, reputation, is greatly reduced in strength. What remains are aesthetic judgments, judgments of taste, metaphysical prejudices,

> [illegible], it [illegible] **subjective wishes**: [illegible] general returns to the individual [illegible] the [illegible] seems to lose when entering its more pedestrian parts ... 121

Science is not and cannot be and should not try to be:

> a **neutral structure** containing positive knowledge that is independent of culture, ideology, prejudice. ... We see: facts alone are not strong enough for making us accept, or reject, scientific theories, the range they leave to thought is **too wide**: logic and methodology eliminate too much, they are **too narrow**. In between these two extremes lies the ever changing domain of human ideas and wishes. And a more detailed analysis of successful moves in the game of science ('successful' from the point of view of the scientists themselves) shows indeed there is a wide range of freedom that **demands** a multiplicity of ideas ... 122

For Feyerabend this multiplicity of ideas is vital for the growth of knowledge so he recommends what he calls a pluralist methodology. For example, it is important to develop theories which contradict well established experimental results or well confirmed theories, because facts are constituted by older ideologies, and a clash between facts and theories may be a proof of progress and may help to make explicit the principles in familiar observational notions. Further, the evidence that might refute a theory can often only be uncovered with the help of an alternative theory, and indeed the formal properties of a theory can often only be recognised by contrast with another theory rather than by analysis. Such a pluralistic methodology recommends that the scientist:

> ... must compare ideas with the ideas rather than with 'experience' and he will try to improve rather than discard the views that have failed in the competition. Proceeding in this way he will retain the theories of man and cosmos that are found in Genesis, or in Pimander, he will elaborate them and use them to measure the success of evolution and other 'modern' views. He may then discover that the theory of evolution is not as good as is generally assumed and that it must be supplemented, or entirely replaced, by an improved version of Genesis. Knowledge so conceived is not a series of self-consistent theories that converges towards an ideal view; it is not a gradual approach to the truth. It is rather an ever increasing **ocean of mutually incompatible (and perhaps even incommensurable) alternatives**, each single theory, each fairy tale, each myth that is part of the collection forcing the others into greater articulation and all of them contributing in this process of competition, to the development of our consciousness. 123

Feyerabend maintains that modern education needs to be radically reformed if

the stage of free development of individuals. In this [illegible] he wants "to get education out of the hands of the 'professional educationists'. The constraints of grades, competition, regular examination must be removed and we must also separate the process of learning from the preparation for a particular trade."[124]

Further one must avoid at all costs inculcating the "special standards which define special subjects and special professions" and on no account should these be made the "defining property of a 'well educated man'".[125] Rather than being an initiation into the public forms of knowledge general education:

> should prepare a citizen to choose between the different standards, or to find his way in a society that contains groups committed to various standards but it must under no condition bend his mind so that it conforms to the standards of one particular group.[126]

The greatest danger comes from the group called scientists, and they must be stopped from taking over education and from "teaching as 'fact' and as 'the one true method' whatever the myth of the day happens to be ... decision to work in accordance with the canons of science should be the result of examination and choice and not of a particular way of bringing up children."[127] Just as education has been liberated from religious ideology so must it be liberated from a scientific ideology which believes itself to possess the one and only sensible way of approaching a problem. Consequently Feyerabend proposes that general education will be the study of the major ideologies - including the scientific one - as historical phenomena. Institutionally this will mean that the separation of church and state (and state education) must now be followed by a separation of science and state (and state education) if education is to remain religiously neutral, for science is nothing other than our "most recent, most aggressive, and most dogmatic religious institution."[128]

It is fascinating to compare the ideas of R.S. Peters with those of Feyerabend on science and reason. Peters maintains that:

> There must ... be some form of public test to decide between competing assumptions. This means agreement not just how answers are to be sought but also about the types of considerations that are to count as deciding between possible

[illegible] action not just in terms of the [illegible] criticism which it provides, but also in terms of the agreement in judgment which it [illegible] its testing procedures. These guarantee objectivity and the escape from arbitrariness ... Thus the individual, who is accustomed to reason in this developed sense, is one who has taken a critic into his own consciousness, whose mind is structured by the procedures of a public tradition. 129

This viewpoint expressed by Peters constitutes almost precisely what Feyerabend regards as the ideologically petrified science which rationalism produces and which he passionately believes stands in the way of the growth of knowledge and freedom. He maintains that such ideologies should:

> have no room in the process of general education that prepares a citizen for his role in society. A mature citizen is not a man who has been instructed in a special ideology, such as Puritanism, or critical rationalism, and who now carries this ideology with him like a mental tumour ... An essential part of general education ... is acquaintance with the most outstanding propagandists in all fields, so that the pupil can build up his resistance against all propaganda, including the propaganda called 'argument'. It is only after such a hardening procedure that he will be called upon to make up his mind on the issue rationalism-irrationalism, science-myth, science-religion, and so on. 130 ... A society (and education) which is based on a set of well-defined and restrictive rules so that being a man becomes synonymous with obeying these rules, forces the dissenter into a no-man's land of no rules at all and thus robs him of his reason and his humanity.131

The 'science' that Peters celebrates as the supreme expression of reason in action Feyerabend views as hardly less than a disaster. He writes that:

> Science education as we know it today ... simplifies science by simplifying its participants: first a domain of research is defined. The domain is separated from the rest of history (physics, for example, is separated from metaphysics and from theology) and given a logic of its own. A thorough training in such a 'logic' then conditions those working in the domain; it makes their actions more uniform and it freezes large parts of the historical process as well ... an essential part of the training that makes such facts appear consists in the attempt to inhibit intentions that might lead to the blurring of boundaries. A person's religion, for example, or his metaphysics ... must not have the slightest connection with his scientific activity. His imagination is restrained, and even his language ceases to be his own. 132

This brief exposition of Feyerabend's epistemological and educational perspective brings us back to the some problems encountered in Popper. In both cases it

seems impossible to [illegible] ideals in educational institutions, [illegible]. Feyerabend's concern to have a completely neutral education which leaves the pupil with complete freedom of commitment seems quite impossible, and quite remarkable coming from Feyerabend who does not believe in neutral knowledge. His problem is precisely analogous to that of those who propose a neutral introduction to the various religions and ideologies in religious education. Which are to be selected and how are they to be treated? How is the diversity to be characterised or explained? What is to count as a proper preparation for making a meaningful decision? There seems to be no neutral way of proceeding and here Feyerabend's acuteness seems to have given way to total educational naivity. Part of the reason for this is that both Popper and Feyerabend - and those who propose neutral R.E. - seem unable to call into question their assumption of the rightness of the single common state controlled school. In this assumption lies Herberg's 'Continental' philosophy of education with all its totalitarian implications which will remain in spite of all attempts at 'liberalising' the contents. The actuality of the common institution will both guarantee the uniformity of a single tradition, and will call forth rationales for its defence in the face of alternatives. In spite of his 'anarchism' Feyerabend could be any 'continental' philosopher of education when he writes that properly "general education ... prepares a citizen for his role in society."[133]

It is especially surprising that Feyerabend does not see that the ideal of the single institution is seriously at odds with his recommendations for a pluralist methodology and for the proliferation of ideas. In view of both Popper's and Feyerabend's allegiance to J.S. Mill it seems strange that they have not investigated the possibilities of social and educational pluralism such as Herberg suggested was involved in the 'Anglo-American' philosophy of education. Perhaps the reason is that their social thought remains largely trapped in the individualist-collectivist dialectic so frequently found in Humanist thinkers. Robert A. Nisbet in Community and Power has ~~both~~ pinpointed part of the problem when he writes:

> Because of our single-minded preoccupation with the individual as the sole unit of study, and upon the State as the sole source of legitimate power, we have tended to overlook the fact that freedom thrives in cultural diversity, in local and regional differentiation, in associative pluralism, and, above all, in the diversification of power.
>
> Basically, all these problems are reducible, I believe, to the single massive problem of the relation of political government to the plurality of cultural associations which form the intermediate authorities of society. There are many: religious, economic, professional, local, recreational, academic and so forth. Each of them is an organisation of human purposes and allegiance related to some distinctive institutional end. Each of them is, apart from the checks provided by the existence of the other and competing forms of association, potentially omnicompetent in its relation to its members.
>
> It is the continued existence of this array of intermediate powers in society, of this plurality of "private sovereignties" that constitutes, above everything else, the greatest barrier to the conversion of democracy from its liberal to its totalitarian form. 134

However, while Nisbet's recognition of the pluriformity of human society is important it does not seem as if the appeal to 'liberal democracy' begins to solve the problem of education, for the very term simply presupposes the "individual and state or society" reductionism which he takes to task at the beginning of the quotation.[135] The problem of education to which I refer is two-fold. The first, following Nisbet, is the relation of political Government to education. Pluralism at this level would mean the relative sovereignty of educational institutions with respect to state control. However there is a possibility of a further pluralism in the sense of a plurality of educational institutions based on different outlooks following the pattern of the 'Anglo-American' philosophy suggested by Will Herberg. If one is opposed to the first pluralism then the second will (almost) certainly be opposed too. Both pluralisms may be opposed in the name of social unity, or the first may be, while the latter may be opposed on the basis of an epistemology (and axiology) which maintains the neutrality of knowledge. Consequently the charge which the proponent of double pluralism is liable to encounter is that of social divisiveness and having the intention to indoctrinate. The notion of indoctrination, as we have seen, is sometimes that of teaching a minority view as if it were true, or teaching something as

true which cannot be justified in terms of [illegible] Sometimes these two are combined in the idea of '[illegible]'.

In our first two chapters, and to some extent in this present chapter, we have both indicated the humanist crisis of 'reason' and the consequent recognition of the role of ultimate commitments or religion in knowledge. In the philosophy of science, for example, one has seen a shift which basically supports the epistemology advocated by Kuyper and Dooyeweerd which I have schematised on page 81. This shift Henryk Skolimowski has formulated as follows:

> 1. Facts and observations, of primary importance to logical empiricists and most empiricists.
> 2. Problems, conjectures, (theories) and refutations, of primary importance to Popper; on this level 'facts' and 'observation' are determined by our problems and theories.
> 3. Paradigms of primary importance to Kuhn. They determine at least partially not only the content of our theories, but also the comprehension of our "facts".
> 4. Metaphysical research programmes or conceptual frameworks: these not only provide conceptual tools and determines the nature of problems, but usually spells out what counts as genuine science, thereby determining the scope of science; in so doing it implicitly or explicitly defines the meaning of rationality and the objectivity of science and not infrequently it suggests the concept of truth. 136

There is an acknowledgement here of the continuity between fact and metaphysical frameworks and it would not be difficult to argue that behind these lie ultimate commitments. There is the further point that the development of knowledge is best advanced by the mutual criticism of various viewpoints, ~~otherwise~~. That one viewpoint should monopolise all educational institutions would mean both the end of freedom of thought, and would lead to the stagnation of that dominant viewpoint itself. Polanyi has argued that groups in society who are deprived of the means to develop the potential of their own perspective - or metaphysical research programme - are effectively paralysed. He writes:

> People under totalitarian dictatorship may bitterly dislike their rulers. But so long as these effectively prevent the formation of an independent intellectual leadership, even a universal repudiation of the official orthodoxy will produce no alternative movement of thought. In consequence, official ideologies will frequently be used automatically by people for the current interpretation of events, even though they do not support these ideologies. Totalitarianism has clearly

demonstrated that no modern culture - [illegible] - or civic - can survive, except by the operation of authoritative institutions. 137

In Britain a concern for 'equality' and 'unity' is moving educational thought and practice in the direction of totalitarian democracy of a socialist-humanist character. The demand for unity and consensus means giving authoritative status to what is held true, right and valuable by that veritable fiction 'Society' but by hardly anyone or any group. In the process parents are denied authority over the upbringing of their children and teachers must teach only 'public truth'. This 'public truth' like Plato's golden lie is politically required by the state school, even though no-one accepts it, and indeed, even official reports half acknowledge what a mirage it is ... however it must - politically - exist if there are to be state schools.

Consider the following passages from the recently published Schools Council Working Paper 53 The Whole Curriculum 13-16. The Paper maintains that:

> ... it is difficult to achieve agreement on curriculum policies. Views about what the curriculum should include, in what form and to whom it should be taught, are matters of dispute, as much as among the general public as among professional workers in education. As a working party composed exclusively of people in the education service, we have certainly found it difficult to reach concensus on many of the issues confronting us. Indeed, even on the comparatively technical matters of curriculum planning and organisation, our views differed on how best to translate educational aims into workable policies. The truth is, of course, that in so far as people's views diverge on a great many social, political, philosophical and other questions, so too will their views about what kinds of school curricula are desirable and attainable. 138

Having acknowledged all this - and it would not matter if differences were much greater than they are - the Paper, quite predictably, has to trivialise these vital differences. Somewhat later in the paper we read:

> We have tried to show that although these issues are deeply problematic, springing as they do from our deepest beliefs about what the purposes of education are, they are nevertheless not always as cut-and-dried as they are made to appear in the ideological debate. We have tried to show in our analysis of these issues that a reconciliation of views may often be possible, especially if they are explored in terms of their relevance to the particularities of teaching and learning rather than as general propositions which are held to be true at all times and in all circumstances. 139

Here there is the grudging admission that some may have different views on the purposes of education which are simply not reconcilable, and the people who refuse to let their deepest beliefs be given the dogmatic treatment of synthesis are stigmatised as holding 'cut and dried' beliefs, insinuating that they are rigid, dogmatic and have simply given up thinking. Those people who refuse to have their deepest convictions relativised (i.e. 'reconciled') are further ridiculed as those who hold to "general propositions .. held to be true at all times and in all circumstances." The final insinuation, however, is that the fact that some might hold such doctrinaire ideologies is perhaps no problem at all, because allegiance to "general propositions" is really irrelevant "to the particularities of teaching and learning". The Paper avoids refutation on this point by failing to specify what these particularities might be. Further, while in one sense the point about general-particular is truistic, the sense on which the argument depends presupposes that education is and can be nothing more than the sum total of particularities devoid of general purpose. This nominalistic presupposition serves both to obscure the general purposes (confused, contradictory or whatever, in any actual educational institution, and is a 'practical' prescription for meaningless education. However if general views really are irrelevant to education it is hard to understand why the writers of the Paper are so anxious to find reconciliation and consensus.

The central recommendation of the Paper - the educational covenant - is a 'democratic' device for ascertaining the General Will for education which, by enforcing consensus, will make irrelevant people's deepest convictions about the aims of education, especially that of minorities. We read:

> The chief difficulty about the concept of the educational covenant is that the claims and obligations of its various parties are not easily reconcilable in practice and indeed may even be incompatible. There have been times when schools could count upon the support of society; they and those they served shared common educational and social ideals. Today, by contrast, only a few schools feel that their aims command ready acceptance. Indeed the concept of the covenant is, we believe, appropriate and necessary precisely because there is so little agreement in our society about what the aims of education should be. 140

[illegible] remarks that the writers of the paper engage in [illegible] expedient because they simply cannot see [illegible] this is the best that can be done in terms of the presuppositions from which they were operating and the reviving of the dead letter of the role of parents in the 1944 Education Act is certainly commendable.[141] That the covenant can be nothing more than a desperate expedient is clear from the Paper's recognition that what is educationally worth-while turns upon the question of 'man's essential nature'. That this has profoundly problematic implications for our state educational system is evident when it is recognised as the Paper puts it:

> What it means to be fully human is the ultimate issue upon which human beings, though seldom addressing themselves to the matter in explicit philosophical terms, show themselves to be deeply divided. [142]

It is at this point that I wish to lead into the conclusion of this dissertation by bringing together the themes of our first chapter on the struggle between Christianity and Humanism for the direction of education. If it is the case that education cannot be neutral because it always assumes a view of what it is to be fully human, and if Christianity and Humanism do not share a common view of man, then to seek for a common education which takes both perspectives seriously is an exercise in futility. Education therefore raises in an acute form the question of how men of diverse commitments and diverse frameworks of belief concerning reality and human existence can live together in harmony and equity within one national community? It seems to me that the underlying assumption of a <u>common education</u> which originated in the Greek <u>polis</u>, and was inherited by medieval Christendom, Anglicanism and most recently by Modern Humanism has been, and will be, an endless source of social disharmony and inequity. The present struggle for a <u>neutral public life</u> (including education) advocated by Humanists (and some Christians such as Hirst) I have sought to argue is impossible in principle at every level.[143] What is claimed to be neutral, e.g. in knowledge, I have sought to show is actually rooted in the Humanist perspective. From the Christian side has come the idea of a <u>Christian public life</u> (including education) which would claim for Christianity a special place in the schools

of the nation. The 1944 Education [illegible] recent 'Save Religious Education' petition of [illegible] dicated upon this view.[144] It should be added that both views see religion as no more than a dimension of life as the dispute centred on the character of assemblies and R.E., but that increasing numbers of Christians and Humanists are recognising the totality character of their struggle. It should also be added that there are deep differences too amongst Humanists and it is probably these to which the Paper was referring as perhaps irreconcilible.

This massive problem of modern 'open' society was encountered in the mid-nineteenth century Netherlands and was resolved in terms of social and educational pluralism which I believe needs serious consideration in our own situation.[145] Unlike the most contemporary social ideals (e.g. Socialism, Democracy, Open Society, etc.) which assume that ultimate authority deprives from man (i.e. are basically Humanist in assumption) the pluralism which developed in Holland was based on the Calvinistic confession of the sovereignty of God. It was Abraham Kuyper who was chiefly responsible for articulating this Christian social philosophy. For Kuyper the sovereignty of God implied that all legitimate earthly authority was both delegated and delimited in character. He maintained that each area of life (state, family, education, industry, church, etc.) had its own specific divine calling which it had to be free to fulfil. Any dominance of one area over the others, e.g. that of the church institution (medieval Catholicism), business (laissez faire capitalism) or state (socialism and fascism) meant a violation of what he called 'sphere sovereignty'. It meant that the dominating institution went beyond its legitimate calling as well as distorting the life of the other institutions. With respect to the state its task was that of maintaining public justice. This meant the harmonious co-ordination of the other spheres yet without controlling them. This brings us to the second pluralism advocated by Kuyper which was based on his view of religious freedom. This meant maximising the opportunity for everyone to live out their basic beliefs and commitments without suffering any civil disability.

This 'double pluralism' he applied to the university either in the following manner. In the first place the university should not be controlled either by the church or state, nor, he would have certainly added today, by big business. Secondly, that within the university world it must be possible for the different worldviews to have their own institutions - Berger's 'plausibility structures' - because:

> only a peaceful separation of the adherents of the antithetic principles warrants progress - honest progress - and mutual understanding ... In the idea of one Science only, the old curse of uniformity is yet maintained ... it may be prophesied that the days of its artificial unity are numbered, that it will split up and that ... at least the Roman Catholic, the Calvinistic and the Evolutional principles will cause to spring up different spheres of scientific life, which will flourish in a multiformity of universities. We must have systems in science, coherence in instruction, unity in education. That is only free which, while it is strictly bound to its own principle, has the power to free itself from all unnatural bonds. The final result, therefore, will be ... that liberty of science will ... triumph at last; first by guaranteeing full power to every leading life-system to reap a scientific harvest from its own principles; and secondly, by refusing the scientific name to whatsoever investigator dare not unroll the colours of his own banner, and does not show emblazoned on his escutcheon in letters of gold the very principle for which he lives, and from which his conclusions derive their power. 146

This pluralist principle has been exceedingly powerful in Dutch life - in politics, trade unions, broadcasting, hospitals and not least in education. About 70% of children attend 'private' schools. There are Protestant, Catholic and Neutral (mostly Humanist) universities which are equally tax supported and equally free from state control. Here is a framework for education in a truly pluralist society which though developed from a Christian conception of 'reason' and 'freedom' has been found acceptable to those of widely differing convictions. Britain's synthetic Christian-Humanist educational tradition is now rapidly disintegrating. The inherited legislation and institutions are ill adapted for dealing equitably with the new formations of worldview and commitment which are rapidly coming into being. I can think of no better way of concluding this dissertation than by listing the main principles which underlie the Dutch educational system for they seem to speak to our condition.

1. Education is a joint responsibility of the family and school. Education is more than the conveyance of factual knowledge. It implies training the powers of interpretation and judgment in the perspective of a faith or a philosophy of life and value system. All education must be implemented within a basic concept of the human being and his relation to the universe.
2. Freedom of education should be seen in close relation with freedom of religion. Those who wish for their children an education in harmony with the religious and moral principles they inculcate in the home must be given the necessary facilities.
3. If it is recognised that the state must provide for education out of public funds, since it is too expensive to be paid only by parents, then it is a principle of equity and justice that these funds should benefit both public and private schools that live up to the same legal provisions and standards.
4. Public funds are collected by compulsory taxation, irrespective of the creeds of the citizens. Because all education is recognised as a matter of state care, the payments for all schools should be made from a consolidated budget. Hence there can be no question of individual citizens "earmarking" tax money in preference for this or that form of education. 147

Chapter III

1. The Phenomenology of Mind p.147
2. Hegel's Philosophy of Right (trans. T.M. Knox, Oxford, 1942) p.10
3. Ibid. p.256
4. Ibid. p. xviii
5. See Ibid. p.xvix
6. Ibid. p.xxiii
7. E.H. Carr writes that the practical conclusion drawn from the doctrine of the general will:

> "... not by Rousseau himself, but by the Jacobins, was the foundation of a single political party to embody the general will. Its logical conclusions were still more far-reaching. The individual, far from enjoying rights against society assured to him by natural law, had no appeal against the deliverances of the general will. The general will was the repository of virtue and justice, the state its instrument for putting them into effect. The individual who dissented from the general will cut himself off from the community and was a self-proclaimed traitor to it. Rousseau's doctrine led directly to the Jacobin practice of revolutionary terror."
> The New Society (Beacon Press, Boston 1962) p.63

8. The Social Contract (trans. Willmoore Kendall, Henry Regnery, Chicago 1969) p.208
9. Ibid. p.211

For Hobbes, religion must serve the state and likewise the ruler must determine the education of his subjects. J.H. Randall writes, not without a little irony, that:

> "Hobbes belonged, in fact, like most sensible Englishmen ... to that school of Anglicans which regards the Church of England as a branch of the Civil Service, the Archbishop of Canterbury as the Secretary of State for Divine Affairs. In this he was not only a prophet of what the Church of England was to become - with Parliament deciding for her what true religion is, and what God is, as by law established; he points to that whole modern conception of religion, which makes the Church the best instrument for maintaining morale in times of foreign war and domestic dissension." The Career of Philosophy Vol.I, p.550

10. Ibid. p.213
11. Ibid. p.219
12. see Ibid. p.220
13. Ibid. p.223
14. General Education in a Free Society (Harvard University Press, Cambridge, Massachusetts, 1945) p. 58
15. Knowledge and the Curriculum p.34
16. Ibid. p.35 (my italics 16-21)
17. Ibid. p.40
18. Ibid. p.40
19. Ibid. p.50
20. Ibid. p. 50
21. Ibid. p.35
22. Paideia: Ideals of Greek Culture (Basil Blackwell, (Oxford) Vol.I pp.109,111. See also William Barclay's Educational Ideals in the Ancient World (1959) and section III 'The Public and the Private Realm' of Hannah Arendt's The Human Condition (Doubleday, New York, 1959) pp.23-69. Concerning the relation of education to the state Aristotle writes:

> 'The whole of the state has one common End. Evidently, therefore, the system of education in a state must be one and the same for all, and the provision of this system must be a matter for public action. It cannot be left, as it is at present, to private enterprise, with each parent making provision

privately for his own children, and having them privately instructed as he himself thinks fit. Training for an end which is common should also itself be common. We must rather regard every citizen as belonging to the state. Each is a part of the state; and provision made for each part will naturally be adjusted to the provision made for the whole."
The Politics of Aristotle (Edited and translated by Ernest Barker, Oxford University Press, New York 1962) pp.332-333
Earlier he had maintained that the polis "... is an aggregate of many members; and education is therefore the means of making it into a community and giving it unity." (p.51)

23. A New Critique of Theoretical Thought Vol.I p.62. Hannah Arendt maintains that the foundation of the polis was preceded by the destruction of all organised units resting on kinship such as the Phratria and Phyle (op.cit. p.25). One finds a similar pattern of drastically reducing the role of the family during the French Revolution, R.A. Nisbet maintains in The Sociological Tradition (Heinemann, London 1972) pp.35-38
24. Moral Education in a Secular Society p.3
25. Knowledge and the Curriculum p.181
26. A History of Western Education (Collier-Macmillan, New York 1969) p.606
27. General Education in a Free Society p.x
28. Ibid. p.25
29. Ibid. p.26
30. Ibid. p.57
31. Ibid. p.76
32. Ibid. p.105
33. Ibid. p.126
34. Ibid. p. 93
35. The Noise of Solemn Assemblies (Doubleday and Company, New York 1961) pp.65-6
36. It should be mentioned that Dewey began his philosophical career as a Hegelian, features of which remained with him subsequently.

Dewey maintains that "the import of the term (truth) remains socially determined. To represent things as they are is to represent them in ways that tend to maintain a common understanding ... and understanding is a social necessity because it is a pre requisite of all community of action" (in a paper entitled 'The Problem of Truth' 1911) "Indeed, capacity to endure publicity and communication is the test by which it is decided whether a pretended good is genuine or spurious." (Reconstructions in Philosophy Beacon Press, Boston 1970) p.205. "It is not, so to say, the object, above which decides what is the proper and authorised account of itself; but the object as a term and factor in established social practice" (The Problem of Truth, 1911).

For a full analysis of this issue see Hendrik Hart's Communal Certainty and Authorized Truth: An examination of John Dewey's Philosophy of Verification (Swets and Zeitlinger, Amsterdam 1966)

37. A Common Faith p.84
38. Ibid. p.87 Compare with quotation 65 of chapter II
39. Ibid. p.26
40. Ibid. p.32
41. General Education in a Free Society p.40
42. Ibid. p.43
43. Ibid. p.39
44. Religion in America (Ed. John Cogley, Meridian Books, New York 1968) p.118
45. Ibid. pp.119-120
46. Ibid. p.120

47. La Chatolais declared in two pivotal terms:
"I claim for the nation an education [illegible] upon
the state alone, because education [illegible] essentially
to the state, because every nation has an inalienable
and imprescriptible right to instruct its members, because,
in short, the children of the state should be brought up by
those who are members of the state" quoted in Ideals and Ideologies
(ed. J.A. Lauwerys, Evans Brothers, London 1969) p.111.
In 1793 the state took from the church the control of education and successive governments passed numerous measures to centralise and broaden education, making it not merely the right but the political duty of all citizens. This policy was continued when in 1808 Napoleon decreed that "... no school, no establishment of instruction whatever, may be set up outside the Imperial University and without the authorisation of its head." Likewise in 1794 the fundamental law of Prussia stated that "schools and universities are state institutions charged with the instruction of youth in useful information and scientific knowledge. Such institutions may be founded only with the knowledge and consent of the state." (Ibid. p.111)

48. Religion in America p. 122

49. Ibid p. 125-6. In 1965 Paul Hirst argued that the maintained school should confine its religious education "... to instruction about beliefs and for the moral education it gives to be confined both in instruction and training to the common pool of natural moral principles that all share ... The only consistent alternative is, I think, the thorough-going pluralist system ... in which maintained schools offering education according to different religious principles are readily available to all children." (Knowledge and the Curriculum p. 184). He suggests that the latter policy would be impractical in England and that "to many it would, in any case, be most undesirably socially divisive." (Ibid. p.182). In terms of his later writings the notion of "education according to different religious principles" is anachronistic and self contradictory so that one presumes that for Hirst no alternative ought to exist even if it were practical and not socially divisive. It is curious that Hirst never criticises the existence of private schools as divisive.

50. Religion in America pp.126-7. In the same volume it is interesting to see the reaction of the Protestant theologian Reinhold Niebuhr to Herberg's suggestion that the "double taxation" of Catholic parents is fundamentally unjust. Niebuhr appears to concede that, as such, it is "unjust" but that "prudence requires that many imponderable factors be weighed in deciding questions of justice. Among the imponderables we must consider chiefly two: (i) the long tradition of the free public school, supported by tax money. Such traditions cannot lightly be changed without disturbing the public peace. (ii) the religious pluralism of America which makes any concession on this point inadvisable. Any tax exemption for Catholic parents or tax support for Catholic schools would open the door to a multiplicity of parochial schools. These would tend to disturb the unity of the nation. The nation can afford some slight deviation from the principle of the common school; it cannot afford the total loss ... the claim for tax support is likely to be granted only at the cost of terrible political turmoil." (Ibid. pp.49-50)
This remarkable passage bespeaks a clear commitment to American civic religion which defines pluralism, tolerance and justice in terms required by the supremacy of that religion. It seems strange if such a small step of justice would bring such turmoil to a status quo of which Niebuhr so evidently approves. Both of his arguments seem singularly implausible. The first amounts to suggesting that traditionally and institutionally entrenched injustice should be prudently ignored. Doubtless such traditions may not be "lightly" changed - overnight as it were - but one can work for serious reforms. In addition he appears to confer upon "public peace" such absolute value that could equally justify all sorts of desperate measures. The second argument is equally curious. Niebuhr seems to assume there would be vast exodus from the public schools, indeed his words at one point suggest a total exodus. If he really believes this then it would seem that a democratic government should note that the people are profoundly dissatisfied with the public

schools and should [illegible] Niebuhr also suggests that many [illegible] of other viewpoints too?) would be abortive. [illegible] this prospect alarming unless he sees an allegiance to [illegible] alternative to American civic religion. Putting the matter another way - why should the loss of the public school be regarded as catastrophic? This turns, it seems, on what is understood to be the "unity of the nation". It is not without interest that since 1958 when Niebuhr wrote that there has been a growing disenchantment with the public school such that a 1969 Gallup Poll revealed that "65% of those questioned felt that private schools were equal or superior in quality to public schools and that 59% asserted that they would send their children to non-public schools if tuition were free." On this see Paul A. Nielsen's The Christian School (Victor Books, Wheaton 1974) pp.26-7. It is further significant that Niebuhr nowhere relates his Protestantism to this issue. The lack of relation reveals precisely the secularistic dualism of his private and public religion, i.e. the complete privatisation of the Christian faith such as Hirst recommends.

51. In each case a unanimity was assumed, i.e. the essential continuity and unity of Western culture, agreement on the criteria for identifying something as a "social problem" and agreement as to the nature of "scientific method". Each of these assumptions is spurious and has become more visibly so since the Report was written. This has been especially evident since the abandonment of Functionalism in sociology, and work since 1960 in philosophy of science.

52. General Education in a Free Society p.44
53. Ibid. p.44
54. Ibid. pp.45-6
55. Ibid. p.41
56. Ibid. p.76
57. Ibid. p.57
58. Religious Education in Secondary Schools p.92-3
59. Ibid. p.78
60. Ibid. p.65
61. Ibid. p.65
62. Ibid. p.25
63. What Future for the Agreed Syllabus? (Report of a Working Party of the Religious Education Council of England and Wales 1976) p.14
64. Ibid. p.8
65. Ibid. p.17
66. Ibid. p.14
67. Ibid. p.10 The conjunction of these terms irrational, immoral and anti-social does not seem to contemplate the possibility of a belief being rational and anti-social or moral and anti-social. In other words, following Hegel, it presumes or even defines what is social as rational and moral.
68. Ibid. p.10
69. Class, Culture and the Curriculum (Routledge and Kegan Paul, London 1975) p.41
70. Ibid. p.89
71. Ibid. p.114
72. For a development of this argument see Hendrik Hart's The Democratic Way of Death (C.J.L. Foundation, Toronto 1967)
73. Social Change, Educational Theory and Curriculum Planning (Hodder and Stoughton, London 1975) p.132
74. Class, Culture and the Curriculum p.82
75. Ibid. p.50
76. Ibid. p.42
77. Social Change, Educational Theory and Curriculum Planning p.141 (my italics)
78. Ibid. p.141
79. It should not surprise us that Lawton combines Hirst's forms of knowledge with Raymond Williams' new left socialism for Lawton's notion of a 'common culture' stems from his Culture and Society 1780-1950 (1958) and The Long Revolution (1961).

The differences are those of [illegible] through criticism of the [illegible] liberate it from state control. But for:

> "The socialist alternative to [illegible] for personal life, for [illegible] in a common and equal culture, involves several practical and urgent measures. We need to abolish a private educational provision which perpetuates class divisions ... There can be no comprehensive education until there is a genuinely basic common curriculum". The May Day Manifesto 1968 (ed. Raymond Williams, Penguin Harmondsworth 1968) pp.34-5

80. Reason in History: A General Introduction to the Philosophy of History (Trans. R.S. Hartman, Bobbs-Merrill, Indianapolis 1953) p.45
81. The Philosophy of Karl Popper (Library of Living Philosophers) p.91-3
82. The Logic of Scientific Discovery (Hutchinson, London 1968) p.317
83. Ibid. p.111
84. Ibid. p.52
85. Ibid. p.37 and 38
86. It should be added that for Popper (as for Hirst) the terms reason and rational have a whole range of meanings. When he speaks of having 'faith in reason' then he is obviously meaning far more than trusting deductive inference. Elsewhere he writes "a rationalist, as I use the word, is a man who attempts to reach decisions by argument and perhaps in certain cases by (a reasonable) compromise, rather than by violence." Conjectures and Refutations: The Growth of Scientific Knowledge (Harper and Row, New York and Evanston 1968) p.356. In other places the term reason is used in contrast to feeling or arbitrary decision. Depending on which sense of the term rationalist one is using it can refer exclusively to a certain type of Humanist at the one end of the spectrum to the other end where only the chronically insane would be excluded. Another example of the latter characteristic of reason (and its cognates) is to be found in R.S. Peter's paper "Reason and Passion" in Education and the Development of Reason Part II pp.58-66.
87. The Logic of Scientific Discovery p.52
88. Ibid. p.50
89. Ibid. p.80-1
90. Ibid. p.82. For example, by introducing ad hoc hypotheses, by modifying the definitions or by scepticism about observations that threaten the system, etc.
91. See Ibid. p.88
92. Ibid. p.280-1
93. By uncritical or comprehensive rationalism, Popper means the view that "... any assumption which cannot be supported either by argument or by experience is to be discarded." Popper maintains that:

> "it is easy to see that this principle of an uncritical rationalism is inconsistent; for since it cannot, in its turn, be supported by argument or by experience, it implies that it should itself be discarded ... This criticism may be generalised. Since all argument must proceed from assumptions, it is plainly impossible to demand that all assumptions be based on argument. The demand raised by many philosophers that we should start with no assumption whatever and never assume anything without 'sufficient reason', and even the weaker demand that we should start with a very small set of assumptions ('categories'), are both in this form inconsistent. For they rest upon the truly colossial assumption that it is possible to start without, or with only a few assumptions, and still to obtain results that are worthwhile. (Indeed, this principle of avoiding presuppositions is not, as some may think, a counsel of perfection, but a form of the paradox of the liar)."

The Open Society and its Enemies (Harper and Row, New York 1967) Vol.II p.230

94. Ibid. p.231

95. Ibid. p.245
96. On Liberty (Everyman edition, J.M. Dent, London) p.63
97. The Humanist Outlook p. 234-5
98. Ibid. p.232
99. Ibid. p.282
100. The Open Society and its Enemies Vol.I p.242
101. Critique of Practical Reason (Bobbs-Merrill, Indianapolis 1956, trans. L.W. Beck) p.136
(cf. Reason in History p.52)
In his intellectual autobiography Popper mentions that he had generally thought of himself as a Kantian. Like Kant he found it "necessary to deny knowledge in order to make room for faith." Critique of Pure Reason B xxx p.29. In other words the science ideal is restricted to make room for the ideal of free personality, the primacy of practical reason. In Kant's case this is clear in his discussion of the antinomies he rejects the antithesis in favour of God, freedom and immortality. (Critique of Pure Reason A 466 B494). It was in the light of giving this content to his transcendental ideas that Kant worked out his whole critique of knowledge including the phenomena-noumena dualism. The dogmatic character of this ultimate commitment underlying his whole 'critical' philosophy is evident

> "... I will that there be a God, that my existence in this world be also an existence in a pure world of the understanding outside the system of rational connections, and finally that my duration be endless. I stand by this and will not give up this belief, for this is the only case where my interest invariably determines my judgment because I will not yield anything of this interest; I do so without any attention to sophistries, however little I may be able to answer them or oppose them with others more plausible."
> Critique of Practical Reason p.149

While Popper dispenses with Kant's 'God' and 'immortality' as not being conditions for the possibility of his morality (sometimes existentialist, sometimes intuitionist in character) he does assume the autonomy of the human self to which he shows an attachment similar to Kant's. If we asked Popper on what conditions he would give it up his response would be like that of Kant - under no conditions, for everything else depends on it. It accounts for the body-mind dualism, the natural science v. social science and history dualism, the science and metaphysics dualism and that of conjectures and refutations.
102. See S.U. Zuidema Communication and Confrontation (Royal Van Gorcum, Assen and J.H. Kok, Kampen 1972) pp.132-3, 142-3.
My suggestion here is just as culture is seen as a threat, a snare, a temptation to man in existentialism and that one's authentic identity consists in a negating, revolutionary attitude to all culture, so Popper sees actually existing knowledge - the absence of the attempt to falsify it implies surrender, decadence and spiritual enslavement.
103. See Popper's 'Normal Science and Its Dangers' in Criticism and the Growth of Knowledge pp.51-58
104. The Poverty of Historicism (Harper and Row, New York and Evanston 1964) pp.90 and 159.
Similarly:

> "... it is the great tradition of Western rationalism to fight our battles with words rather than with swords. This is why our western civilisation is an essentially pluralistic one, and why monolithic social ends would mean the death of freedom: of the freedom of thought, of the free search for truth, and with it, of the rationality and the dignity of man."
> The Open Society and its Enemies Vol.II p.396

105. Ibid. Vol.I p.202 See also p.294 note 6
106. Ibid. Vol.I p.184
107. Ibid. Vol.II pp.30-1

108. This becomes evident [illegible] virtually none of his critics [illegible] they've failed to note other [illegible] written on the [illegible] in question.
109. Ibid. Vol,I p.130
110. Ibid. Vol,I p.131
111. Ibid. Vol.I p.131
112. Conjectures and Refutations p.[illegible]-350
113. Criticism and the Growth of Knowledge p.53
114. The Poverty of Historicism p.152. See also The Open Society and its Enemies Vol,II, chapter 25
115. Ibid. p.152
116. Ibid. p.151. In The Open Society and its Enemies Popper maintains that this holds for the "historical natural sciences such as historical geology." (Vol.II p.265) which raises some interesting questions about the status of evolutionary theory. Popper in his feschrift speaks of Darwinism being "almost tautological" and "almost logically necessary" and not a "testable scientific theory but a metaphysical research programme - a possible framework for testable scientific theories." The Philosophy of Karl Popper p.134. Popper also maintains that, unlike Hirst, "I do not deny that it is as justifiable to interpret history from a Christian point of view as it is to interpret it from any other point of view." The Open Society and its Enemies Vol.II p.271
117. Conjectures and Refutations p.67
118. See Richard Allan's excellent paper "Education: The Fear of Commitment and the Disengagement" in Convivium (Summer 1976)
119. Utilitarianism, Liberty and Representative Government (Everyman edition, J.M. Dent, London) p.161
120. Against Method (New Left Books, London 1975) pp.23-4
121. Ibid. p.284-5
122. Ibid. pp.302-303
123. Ibid. p.30
124. Ibid. p.217
125. Ibid. p.217-8
126. Ibid. p.218
127. Ibid. p.218
128. Ibid. p.295
129. Ibid. p.61 and 62
130. Ibid. p.308
131. Ibid. p.218
132. Ibid. p.19
133. Ibid. p.308
134. Community and Power (Oxford University Press, New York 1962) pp.265ff. See also R.A. Dahl's Pluralist Democracy in the United States (Rand McNally, Chicago 1968) and Seymour W. Itzkoff's Cultural Pluralism and American Education (International Textbook Company, Scranton, Pennsylvania 1969)
135. For an important examination of the problems of political liberalism and for an excellent account of Dooyeweerd's political philosophy see James Skillen The Development of Calvinistic Political Theory in the Netherlands, with special reference to the thought of Herman Dooyeweerd (Duke University Ph.D. Thesis, 1974) pp.151-179
136. The Philosophy of Karl Popper pp.490-1. Sholimowski gives an excellent account of Popper's philosophy and distinguishes between what he calls Popper's methodological period and his metaphysical period. The transition comes around 1960. It will be noticed that I have restricted myself to the methodological Popper in this thesis. The ontology and epistemology of later Popper has considerable affinities with Plato, Hegel and Darwin. Whereas the role of the human agent in knowledge (against logical Positivism) was central to his early philosophy, he now seems more concerned to defend the objective (inter-subjective) character of knowledge against 'psychologism' (Polanyi) and 'Sociologism' (Kuhn). No new political philosophy seems to have been forthcoming. One wonders if anything has happened to the Open Society in view of Popper fraternising with its arch-enemies.

137. [illegible]
138. The Whole Curriculum 13-16 [illegible]
139. Ibid. pp.58-9
140. Ibid. p.29
141. E.G. West Education and the State (Institute of Economic Affairs, London 1965). This book shows clearly that Section 76 of the 1944 Education Act concerning the rights of parents has been made quite ineffective. The relevant passage says:

> "In the exercise and performance of all powers and duties conferred and imposed on them by this Act the Minister and local education authorities shall have regard to the general principle that, so far as is compatible with the provision of efficient instruction and training and the avoidance of unreasonable public expenditure, pupils are to be educated in accordance with the wishes of their parents."

The erosion of parental rights is clearly a violation of the code of the European Convention on Human Rights which was ratified by this country. The code explicitly guarantees the right of parents to choose the form of their children's schooling in conformity with their own religious and philosophical convictions.

142. The Whole Curriculum 13-16
143. See Richard Allan "Neutral Against Faith" Spectrum Sept. 1976, pp.13-14
144. Nationwide Festival of Light Summer Broadsheet 1976. See the valuable analysis of Nicholas Wolterstorff in Religion and the Schools (W.B. Eerdmann, Grand Rapids, Michigan 1966). Wolterstorff distinguishes between neutral, sacral and pluralist views of society. In his terms the B.H.A. versus F.O.L. struggle is one between the neutral and sacral views.
145. See Bernard Zylstra's From Pluralism to Collectivism: The Development of Harold Laski's Political Thought (Van Gorcum, Assen 1970)
146. Lectures on Calvinism pp.140-1. Kuyper is here using the term science in the European sense to refer to scholarly knowledge in general.
147. Quoted by E.L.H. Taylor The Christian Philosophy of Law, Politics and the State (Craig Press, Nutley, New Jersey 1966) p.40

[illegible]

Allen R. [illegible]
"Neutral Against Faith" Spectrum Sept. 1976
Arendt H. The Human Condition Doubleday, New York, 1959
Aristotle The Politics of Aristotle (ed. and trans. E. Barker, Oxford University Press, New York, 1962)
Nicomachean Ethics trans. M. Ostwald, Bobbs-Merrill, New York 1962
Armitage W.H.G. Four Hundred Years of English Education Cambridge University Press, 1965
Ayer A.J. Language, Truth and Logic Victor Gollancz, London 1946
The Problem of Knowledge Penguin Harmondsworth 1956
(ed.) The Humanist Framework Pemberton, London 1968 ?
Bartley W.W. Retreat to Commitment A.A. Knopf New York 1962
Berger P. The Noise of Solemn Assemblies Doubleday and Company, New York 1969
Britton K. Philosophy and the Meaning of Life Cambridge University Press 1969
Blackham H.J. Humanism Penguin, Harmondsworth 1968
Blamires H. The Christian Mind S.P.C.K., London 1961
Burgess H.J. Enterprise in Education National Society and S.P.C.K. London 1958
Carr E.H. The New Society Beacon Press, Boston 1962
Cassirer E. An Essay on Man Doubleday, New York 1953
The Problem of Knowledge: Philosophy, Science and History since Hegel Yale University Press, New Haven and London, 1969
Cogley J. (ed.) Religion in America Meridian Books, New York, 1968
Colbeck J.J. "The Vulgar Component in Philosophy" Education for Teaching (Spring 1976 Number 99)
Dahl R.A. Pluralist Democracy in the United States Rand McNally, Chicago 1969
Dearden R.F., Hirst P.H. and Peters R.S. Education and the Development of Reason Routledge and Kegan Paul, London 1975
Descartes R. The Philosophical Works of Descartes trans. E.S. Haldane and G.T. Ross, Cambridge University Press, 1967
Dewey J. Reconstruction in Philosophy Beacon Press, Boston, 1970
A Common Faith Yale University Press, New Haven 1964
Dixon K. (ed.) Philosophy of Education and the Curriculum Pergamon Press, Oxford 1972
Dooyeweerd H. A New Critique of Theoretical Thought 4 Vols. H.J. Paris, Amsterdam and Presbyterian and Reformed, Philadelphia 1953-8
In the Twilight of Western Thought Craig Press, Nutley, New Jersey 1960
Durkheim E. The Elementary Forms of Religious Life Allen and Unwin, London, 1971
Sociology and Philosophy Cohen and West, London 1953
Edwards P. (ed.) Encyclopedia of Philosophy Collier-Macmillan, London and New York 1967
Etchells R. Unafraid to Be Inter-Varsity Press, London 1969
Ellul J. The Technological Society Vintage Books, New York 1964
Feyerabend P.K. Against Method New Left Books, London 1975
Flew A.G.N. (ed.) Logic and Language (1st & 2nd Series) Doubleday, New York 1952
Fogarty M. Christian Democracy in Western Europe 1820-1953 Routledge and Kegan Paul, London 1957
Fountain D. Isaac Watts Remembered Henry Walter, Worthing 1974
Freeman D.H. Recent Studies in Philosophy and Theology Presbyterian and Reformed, Philadelphia, 1962
Gellner E. Words and Things Victor Gollancz, London 1963
General Education in a Free Society Harvard University Press, Cambridge, Massachusetts 1945
Good H. & Teller J.D. A History of Western Education Collier-Macmillan, New York 1969
Green V.H.H. The Universities Penguin, Harmondsworth 1969
Grene M. (ed.) The Anatomy of Knowledge University of Massachusetts Press, Amherst 1969
Hart H. Communal Certainty and Authorised Truth: An examination of John Dewey's Philosophy of Verification Swets and Zeitlinger, Amsterdam 1966

Hegel G.W.F. Early Theological Writings ed. T. Knox, Harper and Row, New York 1961
Reason in History: A General Introduction to the Philosophy of History Trans. R.S. Hartman, Bobbs-Merrill, Indianapolis 1953
The Phenomenology of Mind Harper and Row, New York 1967
The Philosophy of Right trans. S.W. Kyle, George Bell, London 1896

Hirst P.H. & Peters R.S. The Logic of Education Routledge and Kegan Paul, London 1970

Hirst P.H. Knowledge and the Curriculum Routledge and Kegan Paul, London 1974
Moral Education in a Secular Society University of London Press 1974
"Christian Education: A Contradiction in Terms?" Learning for Living March 1972
"Religious Beliefs and Educational Principles" Learning for Living July 1976

Hume D. An Inquiry Concerning Human Understanding Bobbs-Merrill, Indianapolis 1955

Huxley J. Essays of a Humanist Penguin Books, Harmondsworth 1966

Itzkoff S.W. Cultural Pluralism and American Education International Textbook Company, Scranton, Pennsylvania 1969

Jaeger W. Paideia: Ideals of Greek Culture Basil Blackwell, Oxford

Jeffreys M.V.C. Education Christian or Pagan London University Press 1947
Glaucon: An Inquiry into the Aims of Education Pitman, London 1950

Jongsma C. Second Thoughts on the New Maths Christian Studies Unit, Derby 1976

Kalsbeek L. Contours of a Christian Philosophy Wedge Publishing Foundation, Toronto, 1975

Kant I. Critique of Pure Reason trans. N.K. Smith, Macmillan, London 1964
Prolegomena to any Future Metaphysics trans. P.G. Lucas, Manchester University Press 1959
Critique of Practical Reason Bobbs-Merrill, Indianapolis 1956 trans. L.W. Beck
Religion within the Bounds of Reason Alone Harper and Row, New York 1960

Kienel P.A. The Christian School Victor Books, Wheaton 1974

Kohl H. The Age of Complexity Mentor Books, New York 1965

Korner S. Categorical Frameworks Basil Blackwell, Oxford 1974

Kuyk W. "The Irreducibility of the Number Concept" Phisosophia Reformata 31 (1966) pp.37-50

Kuhn T.S. The Structure of Scientific Revolutions University of Chicago Press 1962

Kuyper A. Lectures on Calvinism W.B. Eerdmann, Grand Rapids 1970

Lakatos I. & Musgrave A. Criticism and the Growth of Knowledge Cambridge University Press 1970

Lancer S. Philosophy in a New Key Mentor Books, New York 1953

Lawton J. Class, Culture and the Curriculum Routledge and Kegan Paul, London 1975
Social Change, Educational Theory and Curriculum Planning Hodder and Stoughton, London 1975

Livingstone R. Education for a World Adrift Cambridge University Press 1943

Lobowicz N. Theory and Practice: History of a Concept from Aristotle to Marx University of Notre Dame Press 1967

Livingstone R. The Education of the Future Cambridge University Press 1941

Lowith K. From Hegel to Nietzsche Doubleday, New York 1967

Marx K. & Engels F. On Religion Foreign Languages Publishing House, Moscow 1955

May J.A. Kant's Concept of Geography and its relation to recent geographical thought University of Toronto Press, Toronto 1970

Merton R.K. Science, Technology and Society in Seventeenth Century England Harper and Row, New York 1970

Mills J.S. Utilitarianism, Liberty and Representative Government Everyman edition, J.M. Dent, London

Minshull R. The Changing Nature of Geography Hutchinson's University Library, London, 1970

Morris Brayl J. [illegible]

Moberly W. The Crisis in the University [illegible] 1949

Nash A.S. The University and the Modern World [illegible], London 1945

Newman J.H. The Idea of a University Image Books, Garden City, New York 1959

Nisbet R.A. Community and Power Oxford University Press, New York 1962

Passmore J. Man's Responsibility for Nature Duckworth, London 1974

The Perfectibility of Man Duckworth, London 1970

Peters R.S. (ed.) Perspectives on Plowden Routledge and Kegan Paul London 1969

Ethics and Education George Allen and Unwin, London 1971

(ed.) The Philosophy of Education Oxford University Press, 1973

Reason and Compassion Routledge and Kegan Paul, London 1973

Psychology and Ethical Development Allen and Unwin, London 1974

Philosophy and Pluralism North Holland Publishing Company, 1965 (Amsterdam)

Plato The Collected Dialogues of Plato ed. Hamilton & Cairns, Pantheon Books, New York 1961

Plumb J.H. Crisis in the Humanities Penguin, Harmondsworth 1964

Polanyi M. Personal Knowledge: Towards a Post-Critical Philosophy Harper and Row, New York 1965

Popper K.R. The Logic of Scientific Discovery Hutchinson, London 1968

The Poverty of Historicism Harper and Row, New York 1964

The Open Society and its Enemies Harper & Row, New York 1967

Conjectures and Refutations Harper & Row, New York 1965

The Philosophy of Karl Popper Library of Living Philosophers ed. P.A. Schilp 1974

Randall J.H. The Career of Philosophy Columbia University Press 1970

Reid L.... Ways of Knowledge and Experience Allen and Unwin, London 1961

Philosophy and Education Heinemann, London 1962

Religious Education in Secondary Schools (Schools Council Working Paper No.36) Evans/Methuen Educational, London 1971

Richter M. The Politics of Conscience: T.H. Green and His Age Hollenfield and Nicolson, London 1964

Rookmaaker H.R. Modern Art and the Death of a Culture Inter-Varsity Press, London 1970

Rousseau J.J. The Social Contract trans. Willmoore Kendall, Henry Regnery, Chicago 1969

Rusk R.R. The Philosophical Base of Education London University Press 1928

Russell J. Francis Bacon Methuen, London 1965

Russell R.A. Religious Groundmotives and Philosophical Analysis McMaster University, M.A. thesis 1967

The Growing Crisis of the Evangelical Worldview Bristol University, M.A. thesis 1973

Ryle G. Dilemmas Cambridge University Press 1964

Schegrin M.L. "On Being Reasonable Philosophy of Science, March 1973

Schilpp P.A. (ed.) The Philosophy of John Dewey Library of Living Philosophers, New York 1951

Silberman C. The Crisis in the Classroom Random House, New York 1971

Skillen J. The Development of Calvinistic Political Theory in the Netherlands, with special reference to the thought of Herman Dooyeweerd Duke University, Th.D thesis 1974

Spier J.M. Christianity and Existentialism Presbyterian and Reformed, Philadelphia 1953

Strawson P.F. An Introduction to Logical Theory Methuen, London 1960

Stoker H. "Towards a Deontology of Scientific Method" in Philosophy and Chemistry North-Holland Publishing Company, Amsterdam 1965

Storkey A. "Education and the State" Diploma of Education thesis, Nottingham University 1976

Strauss D.F.M. "Number-concept and Number idea" Philosophia Reformata 35 (1970) pp.156-177 and 36 (1971) pp.12-42

Sylvester D.W. Educational Documents 800-1816 Methuen, London 1970

Taylor M.J.H. The Christian Philosophy of Law, Politics and the State Craig Press, Nutley, New Jersey 1966

[illegible] Curriculum [illegible]
The Idea of a Christian [illegible]
Tibble J.W. The Study of Education Routledge and Kegan Paul, London [illegible]
Trigg R. Reason and Commitment Cambridge University Press [illegible]
Tucker R. Myth and Philosophy in Karl Marx Cambridge University Press 1967
Ueberweg F. A History of Philosophy Hodder and Stoughton, London 1885
Van Brummelen The Place of Mathematics in the Curriculum
Christian Studies Unit, Derby 1976
Vriend J. (ed.) To Prod the Slumbering Giant: A Christian Response to the Crisis in the Classroom Wedge Publishing Foundation, Toronto 1972
University Pamphlets S.C.M. London 1946
Warnock G.J. English Philosophy since 1900 Oxford University Press 1959
What Future for the Agreed Syllabus? A Report of a Working Party of the Religious Education Council of England and Wales 1976
West E.G. Education and the State Institute of Economic Affairs, London 1965
Williams R. The May Day Manifesto Penguin, Harmondsworth 1968
Wittgenstein L. Wittgenstein's Notebooks 1914-6 trans. G.E.M. Anscombe Blackwell, Oxford 1961
Philosophical Investigations trans. G.E.M. Anscombe, Blackwell, Oxford 1963
Wolterstorff N. Reason within the bounds of Religion W.B. Eerdman, Grand Rapids, U.S.A. 1976
Religion and the Schools W.B. Eerdman, Grand Rapids, U.S.A. 1965
Young J.M.L. The Two Empires in Japan Presbyterian and Reformed Publishing company, Philadelphia 1961
Zijderveld A.C. The Abstract Society: A Cultural Analysis of our Time Penguin Books, Harmondsworth, 1972
Zuidema S.U. Confrontation and Communication Wedge Publishing Foundation, Toronto 1972
Zylstra B. From Pluralism to Collectivism: The Development of Harold Laski's Political Thought Van Gorcum, Assen 1970