I hereby declare that I have composed this work; that it has not been accepted in any previous application for a degree; that I alone have done the work of which it is a record; and that all verbatim extracts have been distinguished by quotation marks and the sources of my information specifically acknowledged.

Roger J. Newell

Roger J. Newell
The thesis argues that an intriguing similarity exists between the theological epistemology of C. S. Lewis, a literary critic and lay theologian, and that of T. F. Torrance, a Reformed theologian deeply concerned with the epistemological questions of modern science. Their epistemological interaction is brought to bear on several interrelated issues: the theological roots of modern science, the nature of scientific objectivity, the nature of art and the structures of theological rationality, with particular inquiry into the roles of logic, intuition and imagination. I argue that their writings reveal a fundamental agreement on the nature of rationality, which in turn reflects a universal way of knowing in the arts, sciences and theology. This agreement reinforces the validity of each of these fields of knowledge.

I call this way of knowing 'participatory knowledge'; it consists of both cognitive and feeling qualities. Its object-centred participation leads us to a realist commitment to a knowledge of objective reality and ontological structures, though not in the sense of a detached, objectivististic knowledge. From this perspective, I explore the 'field-relationship' between science, art and theology and describe an a posteriori approach to natural theology implicit in Lewis and explicit in Torrance.

I conclude that the theological claim to know God is like a science in that a real, empirical object is known, and yet is like an art in that a qualitative experience is of the essence of this knowledge—the knowledge of the living God. The intermingling of the art and science paradigms does not exhaust our understanding of theology, but is a promise and pledge of theology's maturity.
Participatory Knowledge: Theology as Art and Science in C. S. Lewis and T. F. Torrance

Ph.D., University of Aberdeen
1983

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PREFACE

In his recent work, *Theology and the Philosophy of Science*, Wolfhart Pannenberg made an appeal for a unitary scientific methodology in order to insure the validity of knowledge in all fields from natural science to theology. Going even beyond this was the call made some years earlier by Michael Polanyi to reintegrate the arts with science in a culture dangerously torn by a dualistic view of life. Such questions concerning the nature and authenticity of knowledge have been of special interest in the wake of modern science's multifaceted advance in our century. In attempting to come to grips with this advance, modern philosophy has proffered numerous epistemological explanations in different forms of idealism, empiricism and even in the dissolving of many epistemological issues as the tired errors of mistaken categories.

There are three ongoing fields where epistemology has been released from the more traditional philosophical discussion and has received quite different treatment. First, we have the towering progeny of modern man—natural science, where new knowledge has not been a theoretical problem but a startling fact. The discovery and understanding of this knowledge have meant the triumph of the empirical, the *a posteriori* and the concrete in epistemological method. Secondly, we have the arts, where the direct, intuitive-imaginative experience is primary as one apprehends the object in an immediate and qualitative way. The quantitative analytic mental tools so revered in a technological world are considered secondary and subordinate. Finally, in theology, the claim is continually made to know God. Here I choose to limit myself to the claim of Christian theology. In this thesis, I argue that this knowledge claim is like science in that a real, concrete, particular object is known. And yet, theology is like art in that a qualitative experience is of the
essence of this knowledge, the knowledge of the personal, living
God, the enjoyment of whom is man's chief end.

Believing that theology may legitimately begin with the
object known or the knowing process, through the study of two
men's theological epistemology, I use these analogies to seek a
deeper penetration into the theological knowledge claim (the
discovery process and nature of this knowledge), and thus into
the subject matter of theology. T. F. Torrance is a Reformed
theologian, deeply immersed in the knowledge quest of modern
science—its structures and method; C. S. Lewis was a profession-
al literary critic, an Anglican lay theologian, acquainted first
hand with artistic experience. I argue that the way forward in
theological epistemology demands the intermingling of the artist
(hereafter I use 'artist' and 'poet' interchangeably) and the
scientist in order to do justice to the unique subject matter of
Christian theology.

Even before the days of James Clerk Maxwell, there has been
a heuristic tradition in Scottish science and philosophy which
uses analogies to suggest fresh hypotheses and to throw new light
on old problems. Torrance's 'theological science' stands clearly
in this tradition. Since this heuristic strategy became apparent
to me during my research, I seek to use two analogies, one ex-
plicit (Torrance) and one implicit (Lewis), as a means to form
a more helpful approach to doing theology, and more particularly,
as a means to penetrate more deeply Christian theology's claim
to know God.

The interaction of scientist and artist leads to unexpected
parallels and inevitable conflict. They alternately offer a
critique of each other, yet all the while, I seek to hold each
approach accountable to the object of their knowledge quest. At
times I argue that Torrance misapprehends certain qualitative
aspects in the knowing process. And I argue as well that Lewis
lapses into a rationalism more philosophically based than em-
pirically grounded. But I believe that a radical openness to
a reality external and other than the self is the methodological
compass which steers both men through their journey into theology.

In this thesis I argue that though there is no uniform
method of knowing which functions alike in all disciplines,
there is a universal way of thinking and acting common to all science and art. This conviction grew as I began to see a genuine correlation between Lewis' approach to art and theology and Torrance's approach to natural and theological science. As I trace, organize and pursue their theological epistemologies in dialogue with the arts and the natural sciences, this unitary way of knowing will be disclosed. I believe one of the fruits of this integrative study of Lewis and Torrance is that it helps to clarify a fundamental agreement on the nature of rationality and the way of knowing in the arts, sciences and theology.

From Torrance I trace the theological roots of Western science. (Later, I will more briefly describe the theological roots of Western art.) I will then seek to expound and integrate their notions of rationality and knowledge, with special attention to the imaginative-intuitive nature of knowledge, and the role of logic (Chapters I-IV). I then argue that this way of knowing culminates in an understanding of objectivity as participatory knowledge (Chapter V). From these insights into the knowing process (object-centred participation), I discuss what this teaches us about the nature of art (Chapter VI), science (Chapter VII), and theology (Chapter VIII).

In discussing art and the task of literary criticism (Chapter VI), I suggest some ways of understanding the art-theology 'field-relationship' as a beginning statement in reconstructing theology as art and science. In Chapter VII, I discuss this reconstructed natural theology and interpret Lewis' own 'natural theology' in the light of the Lewis-Torrance integration. The concluding chapter focuses on the implications of participatory knowledge for theology, by making heuristic use of the analogies of theology as art and theology as science in order to offer some suggestions about the relationship between man's rationality and the subject matter of theology.

To explore theological epistemology from the standpoint of poet and scientist leads to a deeper understanding of two inter-related issues: first, the nature of theology's rationality and its implications for natural theology and apologetics (or
Christian persuasion) and second, the relation between the theoretical and the empirical in the knowing process.

This latter concern has led both men to explore the depths of theological knowledge. They have seen (if I may distinguish for the sake of analysis) that it involves man's cognitive, feeling and volitional capacities. I call this approach participatory knowledge and seek to show how Torrance begins his analysis of participatory knowledge from the critical realist position of modern science and theology, while Lewis begins from the idealist posture of his philosophical and literary training.

In this thesis, I have deliberately avoided selecting any one theme or concept to analyse the nature of this participation and their epistemology by unraveling a single, albeit masterful thread. I offer instead a cinemascopic or stereophonic presentation of the multi-faceted grasp of theological knowledge in Lewis and Torrance. Though I struggled to avoid it, this leads at times to some repetition and overlapping, but I risk this in hopes of presenting a fuller, fairer and more penetrating exposition and interpretation of their endeavours. Because my design has been to describe the epistemological unity of theology, art and science in an a posteriori manner, I do not argue inferentially or deductively from any philosophical framework or experience to the truth of this way of knowing or to the truth of Christian faith. Rather I expound the epistemology implicit and explicit in Lewis and Torrance and draw out its organic correlations with the way of knowing in all fields, especially art and science.

A genuine correlation in the knowing process helps uphold and reinforce the integrity of each of these disciplines. Further, the case for an underlying unity of the sciences, art and theology suggests the inadequacy of the false polarities of a rationalistic scientism versus an irrational Romanticism or an objectivistic positivism versus a subjectivistic existentialism, which either vilify one another or paradoxically pass over into one another. The hegemony of these dualisms in modern culture has resulted not only in the unnecessary rivalry between the arts and the sciences but in the abnegation of theology.
In addition to laying out the epistemological unity inherent in their theologies, I have a subsidiary purpose in bringing together Lewis and Torrance. For various reasons, Lewis has too often been ignored by 'professional theologians', but enthusiastically read by the educated, but not theologically educated. I believe that if Lewis could be set alongside a creative and deeply learned contemporary theologian, his own strengths and weaknesses might be seen and appreciated in a new light. On the other hand, though Torrance's contribution to contemporary theological scholarship in the English speaking world is immense not only for its depth and breadth, but also creativity, there remain many theological students, both vocational and non-vocational, who are but dimly aware of what he is doing to reconstruct Christian theology. By aligning his thought with Lewis, I believe his own contribution can be seen more clearly. Such a comparative analysis brings Torrance's concerns down from the misty mountains of advanced philosophical and scientific abstractions into dialogue with the clarity and concreteness of Lewis' plain man's theology. I also believe that Torrance's own reconstruction invites and is aided in its task by a more considered integration of aesthetics which Lewis' work suggests and provokes.

From this inquiry some significant differences and agreements emerge and we see how in each man, the subject matter of their inquiry tempers and corrects their epistemology and provides them with an invaluable openness to reality. Both men have written occasional or emergency theology, facing contemporary issues and challenging the status quo. Whether their occasional contributions become the theology of the future is probably idle speculation. But I believe their contributions will aid theology and the Church with the facility to learn and develop an ever closer appropriateness to its subject matter.

Ironically, history reveals that great creative breakthroughs in a field of exploration often cripple themselves in their functioning, by exaggerating their viewpoint to the detriment of their competitor's legitimate concerns. Thus, for example, the task of a student of a Calvin or a Barth is to find the truth underneath the overemphasis. I seek, therefore,
neither to demolish certain tendencies of Roman Catholic theology on the one hand, nor the importance given by modern Protestantism to subjective awareness. Rather I seek to include them in a more empirically controlled epistemological framework.

Surely one of the exciting developments in modern theology is the narrowing of the gap between Reformed and Roman Catholic theology. They are "in the process of converging to the benefit of both", as Torrance has put it.4 In one sense, this thesis serves as a case study in this development. Lewis has been interpreted quite often as a mere Thomist. However, his theology operates outside and reaches beyond traditional Thomistic categories. Torrance has been labelled 'Barthian' and naively criticized on that basis, or accused of writing a new apologetics which justifies theology by capitalizing on the current prestige of modern science. Yet his inquiries into the knowing structures of modern science, as well as his Patristic studies, have led him beyond Barth into a thorough re-examination of the underlying structural unity of creation and redemption.

Any thesis which criticizes and analyzes an important field of knowledge involves one in the incongruity of a young academic offering a critique of thinkers of profound gifts and stature. Since all novitiates inevitably cut their teeth in this manner, one must develop (in addition to some sense of proportion about one's analysis) a philosophy of criticism. Surely the pons asinorum upon which all theological thinking may stumble is to allow one's own unquestioned assumptions and a priori prejudices to render imperceptible the congruence and rationality of one's subject matter. Therefore with Lewis I concur that the best criticism arises from a deep appreciation and affection for the subject matter one explores. If one shares the concerns and respects the intentions of an author, then I think one has a chance of showing where they succeed or fail in their quest, and perhaps even of showing reasons why. When a thinker one likes is disappointing, then one is probably on to something. And so I unashamedly confess my obligation to these men. My analysis is born of the impact their work has made upon me as I have sought to know and learn the meaning of theology. Hopefully my criticisms reach to the heart of their intentions and are not
the trivial knit-picking of a critic who feels obliged to disagree for the sake of independence, originality or some other scholarly chimera. Though there are many difficulties in writing a thesis which deals with comparisons, I would apply to theological traditions St. Augustine's maxim "He who knows only the Bible does not know the Bible". To get inside two different theological traditions and see their real differences and surprising similarities from within is to be in an enviable critical position. Hopefully the implicit ecumenical dialogue will provoke further self-criticism within its readers as it has its author. If (as I believe) the Church's task (and joy) is to know and to make known God, all theology endlessly needs to think and pray self-critically through its epistemology.

There are two very different kinds of research. One kind is a provocative inquiry into a small but crucial corner of knowledge, never before so exposed. The other way goes directly to the heartbeat of a primary issue and explores its great and intrinsic riches. I have done the latter. By bringing together Lewis and Torrance on the central Christian confession to knowledge of God, I seek as far as possible, to get myself out of the way, allow them to throw their light upon this subject and then to 'let the seas roar and the mountains shake'. The result is not original in the sense that new ideas break forth recurrently on the pages. It is hopefully systematic theology in the sense that I have sought to bring together their theological epistemologies in a naturally cohesive and orderly manner.

Several final comments are in order before I turn to acknowledge those who have aided me in research and writing. First, the study of twentieth century thinkers and concerns compels one to look over his shoulder to the prolegomena of the past in order to appreciate the issues in their modern dress. This is doubly necessitated here, for both men are steeped in the knowledge of the theology and philosophy of past centuries. This leads me to make constant references to epistemological issues as they have arisen at crucial points in the history of theology. Secondly, there is no serious discussion of a doctrine of Scripture here. This is not because such a discussion is
irrelevant to the knowledge of God, but because I have taken my lead from Lewis and Torrance. Though each displays a deep respect and honour for Scripture, neither uses it as a 'starting point' or ground for his theological epistemology. What relevant comments they do make concerning Scripture, I have noted along the way.

Finally, as the study moves back and forth from the poet to the scientist, there is some disparity in the style and tone of presentation. Lewis further aggravates this tendency because as an ex-atheist and a popular literary figure, his theology is richly embroidered in autobiography. This is to our critical advantage for we can follow empirically in his theological journey. His pilgrimage is a lived epistemological quest. To ignore this would be to lose the peculiar flavour of his theology. In contrast, Torrance being a professional theologian, does his theology in the more traditional style and vocabulary of a professor within the University. A 'realism of presentation' demands faithfulness to both men's form and individuality. Thus some unevenness of style is unavoidable.

I would like to express my thanks to those who helped me with this study. I warn them that these words only hint at my gratitude. First, I am grateful to my supervisor, Professor J. B. Torrance, for his pastoral care, scholarly counsel and for giving me the emotional freedom to disagree and criticize. I also would thank him for giving many, many students a living model of devotion to the Truth and unconditional care for others, both to the left and right of the theological spectrum. I would like to thank T. F. Torrance for the generous amount of time he gave me one morning in Edinburgh. After immersing myself in his writings for a year, I put my questions to him and was able face to face to hear and see his integrative theological thinking. It was a great joy. Also I thank Rev. Walter Hooper, who, in spite of the personal and scholarly demands from Lewis students world over, reached into his seemingly endless hospitality to give of himself in conversation and to give access to the unpublished writings of C. S. Lewis.
During the second half of my work—writing and correlating my research, I had the great good fortune to be a part of an academic and worshipping community, St. John's College, University of Durham. The staff and my students contributed more than they can imagine to my wife, Sue, our daughter, Marilee (who was born soon after we arrived), and to myself and my writing. St. John's provided the transition in my thinking from an isolated researcher's methodological analysis to participation in a loving 'community of verifiers'. Special thanks are owed to my Principal, Ruth Etchells, and Vice-Principal, Bruce Kaye (now Master of New College, University of Sydney).

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1 Wolfhart Pannenberg, Theology and the Philosophy of Science, 1976, p. 20-22.
CHAPTER I

THE NATURE OF SCIENTIFIC OBJECTIVITY

A. Theological Roots of Modern Science

It seems odd to us today that Galen achieved great notoriety at the University of Padua when he endorsed observation and actual experimentation as essential for the advance of science. But this only reveals how thoroughly modern science has revolutionized our structures of epistemology. 1 It also creates the greatest question in the history of science: how to explain why Western Christendom was the one viable birthplace of science amidst the stillbirths of all the other great ancient cultures. 2 Even after we rightly credit the Greeks for contributing the building materials of mathematics and logic, there remained a fundamental catalyst which needed to be supplied. 3 T. F. Torrance believes the key to the methodological upheaval in natural science lies in the great renewal which occurred in the queen of Medieval science and culture. 4 Let us then briefly explore what Herbert Butterfield calls the "semi-technical reasons" 5 for the elasticity of Protestant theology which enabled it to make creative alliance and give direction to the scientific revolution.

Torrance began to express the importance of Reformed theology for modern science as early as 1956. 6 He argued that the seed of empirical science was spawned in the repentant openness of Luther and Calvin to rethink the a priori Aristotelian framework in which Medieval theology had been cast. In order to distinguish the real from our own mental states, the new way tested all traditional ideas and assumptions by face to face interaction with the object. 7 As a result, a crescendo of change echoed far and wide in a fresh openness to a new vision of reality, to have done with "idols of the study" (Bacon) and to allow science to interpret the books of nature with the
same empirical directness and a posteriori obedience with which Calvin and Luther sought to approach Scripture. 8

Prior to the Reformation winds of change, Medieval theology understood God's eternal nature within the classical Aristotelian categories of impossibility and changelessness. God's mind as Eternal Reason was changeless and timeless as well. Nature existed eternally in God's mind and hence reflected the timeless and changeless nature of her Creator. 9 Moreover, Aristotle's teleological universe taught that all aspects of life sought to reach their final goal. Specifically, nature was impregnated with final causes. This meant that nature was studied from fixed premises and proceeded by logical argument. 10 Though critical of Augustine's Platonism, Thomas retained his notion that the intellect was able to penetrate into the essence of a thing only because it shared in the divine light. 11

Therefore, because man possessed this innate a priori connection and knowledge of the rational patterns in God's mind, his study of creation applied these eternal patterns to the books of nature. Epistemologically, this meant the real attention and focus of science was on exploring by thought and meditation the Eternal patterns and structures. A concern for final causes "drove out inquiry into physical causes". 12 Knowing nature was reduced upwards to knowing the eternal patterns of rationality in God's mind. Though Thomas modified Augustine's notion of a sacramental universe wherein the material world had its meaning only as it reflected its unchanging and heavenly form, his use of final causes insured that nature was still understood by a prior notion of the eternal ideas in God. 13 Christian thinking, like Greek thought before it, was dominated by speculative and a priori mental habits, ultimately distrustful of any intrinsic rationality in the material creation. 14

Inevitably, by linking so tightly the mind of God to creation and supposing (presupposing) that this rational pattern eternally existed in God's mind, there could not be sufficiently appreciation for the sheer novelty of creation. That is, in creation God had done a new, quite unnecessary thing. 15 More precisely, creation by God's design and decree had its own contingent and distinct nature, and therefore, its own contingent
and distinct rational order. The new science could not be free to concentrate fully on nature itself and be object-centred until it had good cause to suspend its commitment to an ontological bond between God's mind and nature's necessary reflection of his mental patterns.

Then came the Reformation. In effect, Luther and Calvin sought to rewrite theology by starting with God's act of love in Christ, instead of speculative and philosophical prolegomena concerning God's existence and essence. For Calvin, it was not God's mind which tied creation to himself in a relation of logical-causal necessity, but rather God's personal, loving act which bound him to the world.

Whatever the structures of God's mind or his creation, they were not to be known by interior, a priori reflection. Epistemologically the path was now open to view creation as utterly distinct (even from the supposedly eternal patterns in God's mind), yet dependent upon God's loving decision to love and create. This two-pronged emphasis, distinct yet contingent, meant that nature's order was a creaturely order, without any logically necessary connection to God's mind. Nonetheless, because it was God's creation, its patterns were intelligible. But the patterns were creaturely patterns, knowable only through observation and penetration into the creaturely processes. A priori rational connections such as final causation were dropped. As a result, there emerged a new openness which enabled science to put its questions directly to nature and not be controlled by prior assumptions or mediated by God. This inaugurated a new freedom to discover the contingent creaturely patterns that were actually there.  

Men like Bacon began to seek a method which would unite theory and experiment in a new way, free of necessitarian constrictions.

The Protestant rationale, which made it scientifically admissible to bracket-off ultimate questions, was that since God had created the world out of nothing, the world possesses a contingent reality of its own. Therefore, it must be studied and interpreted from its own contingent, natural processes and created rationalities, and not from God. As
Hooeykaas notes, the world came to be seen not as a living organism generated (and hence part of) God, but as fabricated by God like a machine. 19

Natural science as the study of immanent rationalities, strategically refuses to ask the question of the ultimate rational ground in order to explore and understand contingent events and data. Medieval science, by conjoining within natural science the ultimate questions of teleology and possibility, could not be open to direct, empirical exploration. Their scientific questions, being philosophically controlled, were neither properly open nor appropriate in mode or idiom to the contingent rationality of the natural world. 20 In the new science, a mechanical world fabricated by God out of nothing does not find its final cause within itself, but finds its reason for being in the plan of its maker and thus outside of itself. 21

The philosophical controls of pre-Reformation Christian thinking grew out of Greek and Latin cultural influences. Of primary importance was the Greek unwillingness or incapacity to understand the natural within its contingent happening. Greek thought never grasped the rationality of the contingent, natural world because it viewed the universe as necessary and it dualistically assumed that matter is mindless. 22 It could not be properly open to a rationality which empirically inheres in the natural world. 23 Even Aristotelian science with its notion of form inhering in the particular, erred in trying to abstract a logically necessary and timeless intelligibility from the sensible accidents. This thinks away the contingent rationality and epitomizes the great lack of empirical science in Greek culture. For the contingent and empirical are inseparably bound. If nature's order is necessary, then its laws are discoverable by a priori, necessitarian thinking. Thus Greek science was limited by its necessary relation between God and the world and by its dualism between matter and mind.

Torrance argues that the new science was possible only with a new understanding of nature and rationality, that nature's rationality is contingent, not linked by logical necessity to patterns in God's mind, but linked only by the free
grace of God. Both the matter and form of creation are equally created out of nothing and united in one rational order. 24 Since the Medieval understanding of nature was yoked to its understanding of God, a new doctrine of God was needed. Thus the great difference between the more or less static science of the ancient and Medieval world and the great movement of modern science rests upon a difference in the doctrine of God. 25

In summary, from its grasp of the dynamic nature of God, Reformed theology perceived the utter contingency of nature, dependent upon God's gracious will and creative Logos, and yet ontologically distinct from his being (even by any mental necessity). Science, under God, was now free to study nature directly, according to its own rationality, free of Aristotle's teleological presuppositions. 26 The Greek dualism which considered matter to be mindless, sense and intellect locked in conflict, was dethroned. The doctrine of the inherent intelligibility of contingent existence had arrived and modern science, perhaps the creative product of the West, was born. 27

If we leap into the modern world for a moment, it is striking to see that this same belief in the world's inherent rationality and external reality has been deliberately affirmed as the basis of all creative science by Albert Einstein. 28 But as we know, the history of the science-theology encounter between the Reformation and field relativity has been more often a debate than a dialogue and reveals a chequered grasp of the unity of these fields and their epistemological parallels.

And here a caveat must be entered. The new science was not born without the proximity of dangerous parasites. While eliminating fatal Medieval mistakes, the Protestant-natural science alliance produced its own problems. Bacon, for all his empiricism and methodological rigour, made no new discoveries. His empiricism was a bare empiricism, with no sensitivity to the essential role of mathematical bridges connecting mind and matter. This was only later rectified by Galileo and Newton. More problematic was Bacon's vision of knowledge as power which came to have a near fatal impact in the amoral tendencies of modern technology. 29

5
Secondly, a contingent world without necessary, logical dependence on God may falsely aspire to ontological independence and no transcendent explanation. Such ontological autonomy leads to an ultimate arbitrariness in nature and in science. But as Einstein and others have noted, it is ironic that if an arbitrary irrationality is assumed at the beginning of science, man would have no confidence to ask nature his questions and to expect rational explanations.

Thirdly, the new Protestant theology emphasized man's full place by way of personal response. However, man in Protestant theology has continually been tempted to usurp the major role in theology and emphasize appropriation in thought-forms, emotional response, self-realization and self-understanding and thereby exercise a dominance properly given him only in natural science.

Once we grasp the theological roots of modern science, it becomes increasingly clear that much of the perennial science-Christianity controversy has been more than unnecessary. As Butterfield observed, the religious opposition to early science would not have been significant had it not been supported by a priori philosophical reasons (which we have already discussed) and the conservatism of scientists themselves. Stanley Jaki reminds us that harmony with Christian faith was a creative unity in scientists like Copernicus (a Christian Platonist), Kepler, Newton, Boyle and many others.

Filial interaction continued into the seventeenth century where natural science was steeped in faith in God's wisdom. For in the worship of God who was all wise, it followed that his creation was rational as well. The earth's rationality was surely not man's decision, the data gathered not man-made. The world was a unity bound together by rational laws and in harmony with God her Creator. Historically, the cumulative statements of the great creative scientists are impressive evidence for the theological kinship with creative science. Even up to the present day, the great creative scientists have shared a very different dogma than that of the philosophically based logical positivists.
But the mood of man changed. Enlightenment culture grew enamoured with man's creative intellect. The object-centred, empirical focus on the subject matter was eclipsed by a pre-occupation with the self and its mental structures. And yet, seventeenth century scepticism had not a scientific origin, but a literary one. Boyle, Newton and Kepler were all pious men. The increasingly secular eighteenth century Zeitgeist assimilated scientific discoveries into a new outlook not shared by the great scientists themselves. Though by the nineteenth century science and religion were in open warfare, the fact remains that the great creative scientists did not attack religion. The Engels, Huxleys and Spencers were not scientific discoverers, but "propagandists of an interpretation of science" who claimed religion and science to be in desperate conflict.

The twentieth century has witnessed a remarkable, even dramatic re-emergence of the historical and methodological unity of theology and science. Though scientific etiquette seems to insist that religion not be publicly mentioned in connection with science, within the private letters of Planck, Bohr and especially Einstein, a vigorous and vital dialogue concerning the inherent connection between science and theology has been taking place.

Nonetheless, the bulk of academic science has yet to face the fact that all science failed in pagan society. Jaki, the Benedictine philosopher of science, believes that the source of the failure lies in the doctrine of eternal recurrence of life (pagan-pantheistic) against the Christian doctrine of once-for-all creation. Torrance, on the other hand, emphasizes the new understanding of contingency based upon a very different, Greek Patristic and Reformed doctrine of God which emancipated nature from an idealist, rationalist theology.

The fruitful cross-fertilization of theology and science is more than intellectual history. For example, the ideas James Clerk Maxwell used in his field theory (so influential on Einstein), were deeply indebted to William Hamilton's metaphysics lectures at the University of Edinburgh. Let us note in this regard Richard Olson's comment:
Not only was J. C. Maxwell among the most brilliant and original scientists of the nineteenth century; he was also more consciously aware of the metaphysical and methodological bases of scientific work than were any of his contemporaries.

Maxwell's adherence to Brown's and Hamilton's belief in the relational aspect of all scientific knowledge and to Hamilton's emphasis upon analogical or metaphorical insights into such relations is central to his greatest work in electro-magnetism and kinetic theory.45 It is this hidden witness to the science-theology field relationship which Torrance seeks to make explicit. His writings are of singular importance if only for their pioneer discussions in the wake of this renewed dialogue.

Beyond the work of all other scientists, Albert Einstein's has given modern science a quantum leap forward. Though unforeseen even by Einstein, the implications of his discovery of relativity began a movement within the creative heart of science to reconsider the ontological and theological implications of modern science and to reintegrate the arts with science. It is this new awakening to the theological-scientific connection that Torrance has pursued. He believes that the theory of relativity implicitly but profoundly affirms from within creative science itself, the heuristic necessity of belief. It also re-examines the nature of the rational and mental structures which create scientific theory (the a posteriori, object-centred, intuitive creation) and restores the validity of ontological reference in the scientific world of contingent intelligibility. Further, Torrance argues that this renewed and rigorous integration of science and theology is equally beneficial to the subjectivity-ridden and philosophically insecure world of modern theology.

B. The Nature of Scientific Objectivity

Simply stated, the aim of science is not to predict but to comprehend reality. And this means seeking the simplest possible system of thought which will bind together the observed facts.46 However, the roads of knowing which claim to reach this goal diverge greatly. Modern instrumentalist science seeks a detached and disinterested knowledge of things by means of controlled observation. It searches for
mathematical instruments to analyze and quantify nature's interconnections within a sphere bracketed off from ontological reference. Instrumentalist theories are neither equatable with ontic structures, nor necessarily descriptive of the real world. Thus Ernst Mach and his philosophical descendants, the logical positivists, opposed Max Planck and denied the existence of atoms. For Mach, theories are but operational structures operationally defined. They are mental fictions which arrange nature for our convenience. The knowledge that results is an economical set of conceptual relations, objective only in the sense that they are necessarily the same for all men and independent of the observer, but not in the sense that they are grounded in invariant structures inherent in the space-time universe. That is, they have no ontological reference to the external world.

In the light of modern physics, Torrance argues that science must now seek a knowledge not merely of operational structures imposed upon sense impressions, but a knowledge of objective, external reality. For unless we are up against an implacably objective reality independent of us, there can be no science. For science is about "man's knowledge of structures in nature independent of his knowing of them and over which he has no control".

Lest this argument appears to be just another antiseptic and academic debate, we should listen to the charge of C. S. Lewis, that the despair of objective truth among the sciences has made science indifferent to truth and as a result has led to the devious concentration on technological power. As Polanyi has shown, a science bereft of ethical grounds has no safeguard against totalitarian manipulation, and leads to the creation of ecological chaos. It is this notion of instrumentalist objectivity—that we inhabit an inherently chaotic, irrational, amoral universe, which modern existentialism presupposes when it claims man must create his own meaning and security in an indifferent universe. We must now probe further into the nature of the objective knowledge which Torrance seeks in science. Later we will explore the objective experience Lewis describes in art and the objective
knowledge of God which both men believe to be at the heart of theology.

1. The Empirical-Theoretical Relationship in Science: The New Objectivity

The genius of scientific rationality lies in its unique relationship between theory and the empirical world. By replacing deduction from absolute principles with intuitive-inductive openness to the object, modern science discovers a real knowledge of the world. Historically, the title 'dogmatics' in the Greek sense of yielding definite, positive knowledge, was first bestowed on natural science.54

It is the grounding of the conceptual within the empirical that differentiates science from philosophy, says Torrance. Science handles its terms and concepts within the framework of concrete experience and existence. Whereas in philosophy, the concrete, particular and experiential referent vanishes, scientific concepts are never without factual and experiential referents. Unfortunately, philosophy often fails to notice that in transferring the living epistemological relationship of empirical object and subject-knower into a logical framework, it produces an abstraction, which vivisects the empirical connection that alone renders scientific statements meaningful.55 Subtly but effectively, this subordinates the empirical to the theoretical.56

The modern restatement of an abstract, philosophical objectivism began to influence science when Newton created a comprehensive rational framework for his gravitational discoveries. He posited a "methodological objectivity" by the use of absolute and relative categories and erected absolute space as the rigid scaffolding of his gravitational theory.57 Objectivity became synonymous with this absolute causal framework of space and time. But in Kant, Newton's methodological objectivity became a regulative objectivism by first, changing Newton's absolute and relative categories into the ontological distinction between noumena and phenomena, and secondly, making this ontological structure a synthetic a priori piece of the mind's necessary mental equipment. Kant had transferred Newton's empirical-theoretical notions of space and time into
forms of perception outside of and prior to experience. This means he had withdrawn the physical and objective connections which space and time had in Newton, connecting them to the physical world merely by a mental habit or regulative structure. Here was an objectivity created by the mind, uncontrolled by any empirical-ontological connection.

Kant's philosophical framing of Newton in effect resolved the real world, to which Newtonian physics had pointed, into an a priori, man-made mental construct. Objectivity had become a methodological instrument to cope with observational relativism in the absence of any control from the side of the universe through structures inherent in it and independent of ourselves. Though Kant's intention was to restore the validity of science in the wake of Hume, his grounding of science within a priori regulative notions led to the later conventionalism of Mach and the positivists, who were to reduce objectivity to a pragmatic necessity by which science co-ordinated its experiments.

Of course, it is this instrumentalist-methodological objectivity which relativity theory challenges. Einstein proposed that space and time were neither independent nor absolute, but "fused together with each other and with empirical content in intrinsic interrelations of the universe and are integral to the objective structures of space-time". And so when four-dimensional geometry was discovered and found to be empirically grounded, it was much more than a mental creation, but a far reaching correlation between abstract conceptual systems and physical processes. The aftermath of this was a call for a profounder understanding of objectivity and for the end of the ancient Greek dualism of abstract form imposed upon a shapeless material-empirical world. Einstein's new conception of the universe exposed the Newtonian-Kantian world of causally absolute space and time to be an artificial device to cope with the relativities of observation. Einstein sought a deeper penetration into the non-observable and invisible field relations which glued reality together,
connections deeper than perception alone allowed. By this achievement, Einstein replaced both the Newtonian methodological objectivity and Kant's regulative one with a profounder objectivity grounded neither in man's a priori mental structures (Kant), nor in an external objectivistic empirical world (Newton), but in "an invariant relatedness inherent in the universe", welding empirical and theoretical organically together. The result is a new physical concept of objectivity, where form and being, structure and matter coinhere in the space-time structure of the universe.

This more profound and empirically precise empirical-theoretical co-ordination means that many fields of relations and forces cohere through the natural correlations of different levels. An examination of this hierarchical structure will be explored later. But meanwhile let it suffice to say that ordinary appearances are grounded organically as real on their own levels "in correlation with other levels of reality and are treated as relative aspects of the totality of existence".

In the light of these developments from within science itself, certain deeply embedded Western cultural assumptions must be qualified and reconstructed. Since the days when Boethius subsumed the active knower into a logical category, the role of the knower in objective knowledge has too often been avoided. Nineteenth century objectivist science saw objective knowledge as the knowledge of purely objective empirical facts.

Today we must query this proposal. How can we separate ourselves from the fact that we know the object? James Brown has pointedly observed that objectivity belongs to objects in relation to subjects, for neither subject nor object exist in a self-contained sufficiency. Either pole taken by itself is an abstraction from the living context of subject and object in interaction. Bohr, Eddington, von Weizsäcker and above all, Polanyi have demonstrated that personal factors of belief, commitment and will always enter into scientific knowledge. Man's knowing cannot transcend his own human starting point or it ceases to be human knowledge. The knower is now understood by
science, not as an absolute, transcendental ego or an intermediary, but as a relational part of the empirical world.68 Science uses theories, models and analogies as instruments through which we discern objective reality "as far as we may...".69 The finest physical concepts never exhaust, nor are they identifiable with, the universe's ultimate rationality. Paraphrasing Wittgenstein, Torrance believes that no theoretical statement can give a final account of how our theoretical statements are related to being.70 But now science seeks an objectivity which does not involve the elimination of the subject, but rather its admission to a proper and controlled relation to the object.71

Today scientific objectivity freely recognises with Kant man's role in constructing the empirical world, but this does not entail that we cannot have knowledge of ontological structures. The active role of the mind's creative (for example) mathematical connections and mental architectural structures of clarity must be affirmed.72 Science may thank Kant for forcing it to face up to the profound implications of the knower's role in epistemology. This is the insight of idealism in the Kantian tradition. But we must turn a deaf ear to his conclusion that we settle for a knowledge of phenomenal appearances only. Ontological agnosticism is a Kantian idealist assumption, not a scientific discovery. Torrance wants to wean us from Kant's assumption that scientific knowledge is only a knowledge of phenomena which therefore lacks any organic cognitive link to external objective reality. For Torrance, theoretical structures are not a priori regulative concepts imposed upon nature, but are co-ordinated with and taught by an inherently intelligible external world.

The quest for objective knowledge means that we must be self-critical, seeking a controlled subjectivity, not a phantom objectivity artificially hoisted away from all involvement with the knower. Scientific objectivity is not a determinist knowledge of things apart from a human knower (as if man was not essentially bound up in the knowing relation), but it points us outside, away from our bundles of perceptions and nerve
complexes, to real and external objects. And in turn, this leads us to revise our theories in the light of the object about which we learn.

For Torrance, this new objectivity alone reconciles knowing and being by connecting in a natural synthesis two things previously disparate; it takes seriously both the conscious mind of the knowing subject and the utter otherness of the empirical. And it refuses to reduce the wonder of this rational connection to the mechanistic metaphors of causation, regulation or inference. This integration occurs only with and through man as the rational, yet personal element in the universe through whom the "latent intelligibility of the universe is brought to conceptualization and expression". Only a person is capable of referring to what is distinct from him and is capable of distinguishing what he knows from his subjective states. A proper objectivity in no way minimises or ignores the role of the subject, but it does rule out any regulative anthropocentric theology, for the epistemological structure within man's is shared with the universe, of which our own existence is an integral part.

2. Ontological Reference

For Torrance, the insights of the new objectivity into the organic connection between theoretical and empirical compel us to reinterpret the thought-forms of science as being not merely economic statements but rather statements with ontological reference. Einstein believed in the free creation of physical concepts which he defined as theoretically and logically coherent structures organically connected to reality. In a parable, Einstein likened the physical concepts of science to a man trying to solve an intricately devised crossword puzzle. There is no logical formula by which to find the answer and yet only one word combination really fits all the various pieces. Within a post-Einsteinian framework, science is ultimately concerned with physical concepts, "movements of thought, at once theoretical and empirical, which penetrate into the intrinsic structures of the universe". As Einstein puts it, a physical concept's "justification lies exclusively
in its clear and unambiguous relation to facts that can be experienced." \(^79\)

Pure science struggles to obtain not merely a convenient pragmatic ordering, but a real knowledge of the world. \(^80\) Einstein opposed Bohr's understanding of complementarity because Bohr limited science to the tracking down of relations between manifold aspects of our experience, and did not seek to go beyond to a penetration into quantum realities and describe their dynamic structures. \(^81\)

Heisenberg attributed Einstein's inability to accept the Copenhagen-Tübingen theory to a latent Cartesianism. That is, Einstein was unable to accept the subject's involvement in science. \(^82\) But this analysis ignores Einstein's own discussion of physical concepts as the free creations of the intellect and reflects Heisenberg's Kantian assumption that objective knowledge can only mean a knowledge of things as they appear to us, not a polar relation of a subject seeking to apprehend a real, external object.

Science seeks a knowledge which unites the theoretical and the empirical, thought and being, by discovering intrinsic organic connections. But this occurs only by penetration into the connection and order inherent in the empirical—not by imposition of a foreign order into the empirical from some prior conceptual schema. For when we penetrate into the interior structural coherence of the empirical we find ourselves at grips with reality. Scientific knowledge occurs by bringing the object's inherent rationality to light and expression. \(^83\)

C. The Nature of Form

Modern science had grown to despair of knowing objective reality, settling instead for instrumentalism and operational definitions. This was due to undercutting the grounding of the theoretical within the empirical. The reason? Kant assumed a radical disunity of our epistemological structures and the objects we know, that is, of form and being. This was the legacy of Kant's doctrine of the categories of the understanding; it is only by applying our mental structure to the formless mass of the sensory world that knowledge occurs. \(^84\)

David Hume had shown that if we limit knowledge to sense
experience, (following Aristotle and especially Locke), there is no objective, empirical grounds for causality, the necessary connection between events as employed in science from Galileo to Newton. It was only a genetic habit of mind. That is, Newton's doctrine of causality had confounded the relations of matters of fact and relations of ideas. Kant's doctrine of the categories was a direct response to Hume. Science needed a new, stable epistemological structure, which Kant supplied by making causality a built-in structure of consciousness through which man imposes order on all he perceives. This reintroduced rational necessity into scientific knowledge but in an abstractive, artificial, objectifying way. Necessity did not spring from the objective pole of knowledge, but from the subjective. Any real knowledge of the objective pole, now defined as the 'thing-in-itself', was out of the question. Rationality was no longer read out of nature, but into it.

And yet no science merely operates empirically. Bacon's radical empiricism never discovered any new secrets of nature because he failed to see the importance of mental-mathematical connections. At his best, Bacon was not a discoverer of truth, but an exposé of fallacies. Similarly in theology, experience alone leads to confusion. "Religious experience can be made to yield almost any sort of God." Within the predominant materialist creed in many spheres today, there are modern materialists to experience with his own eyes, says Lewis, the heavens roll up and feel himself hurled into the Lake of Fire, "he would continue forever in that Lake itself, to regard his experience as an illusion and to find the explanation of it in psychoanalysis or cerebral pathology". There can be no proof even of sense experience with a materialist a priori. "Experience by itself proves nothing." Following Martin Buber, some have argued there is a knowledge superior to the subject-object relationship; that there is a kind of experience above knowledge. But Brown indicates this is subjectivity without objectivity. Experience alone is brute fact. It throws light on nothing—not even itself. In science and theology, it is through a close integration of theory with experience that knowledge occurs. How then can science and
theology avoid using concepts and principles which veil rather than reveal knowledge?

D. Inference: The Logical-Causal Explanation
(Thomist and Reformed Rationality)

Before Kant rejected objective knowledge of the external world and resolved that we could know appearances only within certain a priori conditions, the greatest attempt to bring together theoretical and empirical was through the logic of inference.

The Medieval sacramental universe was a masterful integration, which bound together the dichotomies of thought and being, sensible and intelligible, the eternal rationality of God's mind and the temporality of space, time and matter, all by the belief in a God-given, pre-established harmony and inherent correspondence between Aristotelian logical form and ontological reality. Objective knowledge was possible when ideas from experience (for nothing is in the mind which is not first in the senses, taught Aristotle) were abstracted and then elaborated in a deductive framework of strict logical connection.

Only within this context can we understand Lewis' lifelong commitment to the validity of the laws of inference, which serve him as the basis for scientific and (at a lower level) theological knowledge.

"Everything I know is an inference from sensation... All our knowledge of the universe beyond our immediate experiences depends on inferences from these experiences. If inference does not give genuine insight into reality then we can know nothing." Miracles contains Lewis' most prolonged epistemological discussion and details his commitment to the logic of inference. In expounding the relation of logical thought to being, Lewis argues that mind is prior to nature; we build up a concept of nature out of reason through the rational process of inference. "Physical reality is an inference from sensation." "That is what we start from; the simple, intimate, immediate datum. Matter is the inferred thing, the mystery." "When logic says a thing must be so, Nature always agrees." By giving priority to mental reality, Lewis falls prey to what Torrance calls
a reduction upward, whereby he lifts the universal and necessary from the temporal and particular in our understanding of the objective world. Thus for Lewis, what we really know about the objective world is its mathematics. "Numbers are the substance of our knowledge, the sole liason between mind and things." Lewis sees this as the lesson of modern physics. That is, the map of mathematical laws is the true reality. Yet Lewis perceives the value of the concrete and particular by calling it the realm of meaning. Statements concerning concrete woods and elm trees are metaphors which are best spoken of in a poem. Only metaphors give real and concrete meaning to otherwise abstract scientific truths. True ideas are linked to reality by abstract inferential logic and meaning by the concrete imaginative-intuitive faculty. Meaning is thus the more concrete and intimate connection to reality, and truth the external, abstract-inferential link. Thus reality consists of these two together: true ideas and concrete meaning.

In regard to objective knowledge in the natural sciences, Lewis held together thought and being, by giving precedence to mind or thought and seeing it as ontologically connected to what is beyond the merely natural, to a supernatural link with God's mind. This makes knowledge of the material possible, but at the cost of making the material dependent on the mind's priority. This averts a fall into matter's priority which implies that irrationality and chance are at the base of things.

Lewis held (unlike Kant) that facts are real and concrete actualities "out there" which the necessary laws of nature connect. These connections are abstract, logical ones. Thus Lewis describes Christ's death as a fact and atonement theory as the way the fact works, which is less real than the fact. As we will see, Torrance, following Einstein (and Barth), seeks a thought-being connection based on interior relations within the coherent field relationships which inhere in reality and not exterior, abstract, logical-causal ones.

By inference then, science connects facts into a coherent framework. This is the objective, rational knowledge which Lewis believes science discovers. Science is the process of
"ratiocination". For Lewis, the knowledge given by natural science depends on the logical bridge between thought and being. Logical abstractions bridge the gap between our thinking and our sense experience of the world.

It is important to recognize that Lewis finds in science an objective truth about the real, external world, by means of the logical correlation of form to matter. If the resulting certainty were the product of the mind alone, as in Kant, there would be no genuine correlation with the external world. Knowledge would be only about the phenomenal world we help create. For Lewis, the laws of inferential logic which connect our minds to the external world are descriptive, not prescriptive as in Kant.

Thus for Lewis, as for Torrance, man exists in a natural cognitive unity with nature. Therefore man can have objective, rational knowledge of the external world. This is an important connection between Lewis (and thereby Thomism) and Torrance (and thereby Reformed theology). As Torrance notes, the strength of Medieval theology was its grasp that the objective rationality of the universe is grounded in the rationality of God, and that the meaning of the universe ultimately lies in its sacramental reference beyond the temporal and visible to the eternity of God.

But there is an important difference. Torrance denies that the "natural link" is an abstract, logical-causal one. Rather it is a concrete, intuitive organic connection. As the philosopher H. D. Lewis puts it, Thomistic natural theology fails when it breaks up into a series of logical-causal steps what is in fact one insight and also when it seeks to start from purely finite facts and reason to conclusions about the infinite. Further, as F. W. Camfield notes, this makes God an inference from the fact of the world. Hence, the world is more real than God and God needs the world.

The Achilles heel of the logical-causal link for science, as Jaki and E. L. Mascall both admit, is the rationalist presumption it permits. Our mental link with reality is an a priori, logical one. Newton methodologically triumphed over Descartes when he aligned geometry with the experimental method.
against the elaborate deductive system of Descartes. A lack of interest in the empirical, contingent world is inevitable with a logical-causal link between thought and being. This means we have access to rational knowledge without recourse to rigorous, a posteriori, empirical investigation.

For Aristotle, what lies above the moon is the necessary, regular and eternal. "And of course for any Greek, what is necessary and eternal is more divine." As we have seen, only with the Reformation did Christian theology decisively depart from these notions and recover the implicit Christian teaching which saw the contingent world as inherently rational and therefore knowable through direct empirical inquiry and not through a priori logical structures.

Within a logical-causal notion of rationality, natural theology arises as the systematic attempt to develop inferential and logically reversible connections. Had Lewis believed this were the only or even the primary connection of thought to being, he would have engaged in the task of restating the classical Thomist arguments. But nowhere does he do this, and at several places he explicitly denies the validity of this logical exercise. As we shall see, a superior, translogical-causal level of rational knowledge exists for Lewis, which encompasses the higher levels of reality such as moral and theological knowledge.

Torrance argues that the Reformation challenged the notion of a natural harmony between the form structure of logic and the form structure of being. Since then, one can no longer assume a relation between the logical forms of reason and the nature of truth. Nor can we argue necessarily from the forms of reason to the truth of being. Rather, there exists an irreversible relationship of grace immediately maintained by God which he freely posits and preserves in love, that is, in Jesus Christ.

The post Medieval understanding of God's relation to creation preserves his freedom: the creature does not exist in continuity or necessity in relationship with God. Rather, God in grace and love sustains the relation between God and Man through his Holy Spirit, and brings creaturely
relations to their telos in God through the personal, incarnate activity of the Divine Logos.

Lewis' own writings reflect ambivalence towards the Medieval synthesis. Though he unashamedly marvels at it and thoroughly enjoys both its vast scale and amazing harmonizing, he admits it is not true. He describes the Medieval synthesis as all eros climbing up to God and no agape darting down. Lewis can be quite critical of Aristotelian philosophy; Aristotle the philosopher of divisions made the great chasm between God and the world and paved the way for deism. He is usually more sympathetic to Platonic theology and calls Plato the doctor of Protestants.

Lewis' concern for an objective truth and rationality in nature led him to support the logic of inference as the link between God's rationality and nature. It is a pity he did not have time or access to the critique of inference by Einstein, a thinker no less committed to a rational universe. For in the work of Einstein, modern science has seen a deeper confirmation of the rationality and reality of the created universe. The belief in a natural cognitive unity between man and nature has been affirmed even if a logical-causal link (along with Euclidean geometry and Newtonian physics) has been qualified, but verified in a limited way, as a limiting case of rationality.

Through the scientific advances of Galileo and Newton, science broke free from fixed a priori premises and began to co-ordinate theoretical and empirical with quite new cognitive structures in an a posteriori manner (e.g., Newton's differential calculus). However, Newton continued to elaborate his scientific method as the abstraction of certain concepts from experience.

Torrance argues that prior to Einstein, science believed its progress lay in abstracting formal elements from being and logically connecting them—"apart from their ontological import." However, the Medievals and Newton believed in a pre-established harmony and ontological connection between logical inference (and in Newton's case, Euclidean geometry) and physical reality, and not as in Kant, an ontological dualism.
Unfortunately, the Medieval ontological connection was by a participation in the eternal reason of God, which finally broke off its empirical realism.

Newton mathematically linked the empirical world in an external way to an inertial system of absolute space and time. This gave science an abstract theoretical link to the real world. By this plan Newton brought mathematical order to the world, but by means of immutable laws of nature which connected the world through causal and mechanical means. Nonetheless, the rationality of the universe remained objectively grounded in the created universe. As Einstein and others happily admit, Newton's successes were extraordinary.

If we omit the Kantian idealist metaphysic which had grown around the philosophical borders of science, this was the state of science until the later years of the nineteenth century and the work of Maxwell and Faraday on field equations. Scientific concepts were understood, as Lewis puts it, as abstracted inferences connecting mind to matter. The great twentieth century changes in science do not mean (as in Kant) that we can no longer believe in a natural conformity of our thoughts to reality. But they do mean, Torrance argues, that there is no logically necessary connection between our reasoning capacities and the truth of being.

Neither relativity nor quantum theory has found any necessary logical bridge from sense experience to concepts. In quantum theory a new kind of connection appears which does not fit into the old notions of mechanistic causality. If logic is right, quantum theory must be wrong. If quantum theory is right, logic must be wrong. Therefore a new quantum logic has been developed to connect geometry a posteriori to the dynamics of reality.

This means that the eighteenth and nineteenth century view of physics in which basic concepts are "deduced from experience by abstraction, i.e., by logical means" has ended, says Einstein. "We now realize with special clarity how much in error are those theorists who believe that theory comes inductively from experience." If C. S. Lewis appears naive in the wake of Einstein, so too do Newton, J. S. Mill and Ernst Mach.
There is no inductive method which leads to the fundamental concepts of science. Failure to understand this fact constituted the basic philosophical error of the nineteenth-century. Heisenberg echoes Einstein when he remarks that "data do not imply theoretical concepts".

Nonetheless, a real and rational relation exists between scientific concepts and experience, as seen in physics between mathematical equations and the operations of nature. Einstein rejected Bertrand Russell's assertion that all concepts which do not grow directly out of sense experience are metaphysical. For to exclude all concepts not directly derived from experience as metaphysical would be to exclude all thinking. Experience suggests the correct mathematical concepts "but they most certainly cannot be deduced from it" for they are "free creations" of the mind. Later we will explore how logic and causality function in today's scientific world.

E. Sola Ratione? The A Priori Error

As we have seen, the role of a priori principles in science has often been debilitating. As Butterfield notes, it was the a priori intellectual system of Aristotle, not Christianity, which retarded scientific progress in the Medieval period.

Lewis suggests the great deception of Aristotelian physics lies in its artful co-mingling of observation and experimentation. So amazing was this intellectual synthesis, that it seemed self-evident. The only problem (ignored for many years) was that small pockets of empirical data did not square with it. This problem recurrently nags science. Dominant presuppositions are so very influential, they often falsify observation. Whole generations arise with a perspective once seen as universal yet now seen as hopelessly provincial. From a modern vantage point, past controversies are usually most notable because "the premise which neither side questioned, now seems the shakiest of all".

Not uncommonly, the prevailing climate of opinion becomes the single greatest hindrance to progress. It is all too easy for the best empiricist to observe only what he has been taught to look for. The answers which nature gives depend entirely
on the questions we ask. The better our question, the better nature's answer. 138 "In his own subject, every man knows that all discoveries are made and all errors corrected by those who ignore the climate of opinion." 139 Therefore, it is essential to the health of every science to rid itself of deep-rooted and often uncritically repeated prejudices. 140 Tragically, it is often the greatest thinkers who are the most in danger of a priori excess. They are the ones capable of great sacrifice and filled with a great cause. 141

All a priori methods of investigation de-empiricize their study by allowing their concepts to exercise a definitive control over the object of inquiry. 142 Descartes travelled this dead-end path when he declared that method is independent of the specific subject-matter. 143 This is the inevitable tendency of the Greek mind. As Kitto points out, the great characteristic of Greek form in art and in science is that "the form is entirely under his control". 144 The Greeks preferred to impose a pattern on life rather than to accommodate themselves to the pattern of life.

The history of science teaches us that sola ratione is a heuristic dead-end. When Kepler rejected the circularity and uniformity of the universe, it was a victory of Christian empiricism over Platonic rationalism. 145 "Reason herself tells us not to rely on her alone," says Lewis.

When it becomes clear you cannot find out by reasoning whether the cat is in the linen cupboard, it is reason herself who whispers 'Go and look. This is not my job: it's a matter for the senses'. 146

Though self-evidently wrong-headed to Lewis, theoretical domination over nature and theology seems to be an inevitable human tendency. So well-ordered was the Medieval Thomist-Aristotelian synthesis that Lewis reckons the human imagination has never before it had anything so sublimely ordered. Perhaps it was too ordered. 147 So expansive was man's confidence that his mind could possess exact knowledge of the supersensible world, that he neglected the sensible world. 148 There were no empirical checks on his speculations.

Unfortunately, the history of Protestant thought records
a similar dominance. It took only a generation for Protestant scholasticism to systematize theology into thought-forms not directly derived from the actual field of theological inquiry, but from a formalistic Aristotelianism coupled with the new rigid mechanistic framework of physics. Theology became reduced either to a system of philosophy based on principles of autonomous reason or a system of theology grounded on principles self-evident to the reason (innate ideas). The absence of empirical grounding and connection is the blindness here. If epistemological certainty is born of the mind alone, (as in Kant through a priori imposed categories) there is no correlation between thought and being. Reason is shut up to the phenomenal--its own creation. The autonomous mind triumphs by absorbing reality into itself. The abortive victory of the theoretical over the empirical is a familiar and recurring heresy in science and theology. As Kierkegaard declared, "To assert the supremacy of thought is Gnosticism." The absence of empirical grounding and connection is the blindness here. If epistemological certainty is born of the mind alone, (as in Kant through a priori imposed categories) there is no correlation between thought and being. Reason is shut up to the phenomenal--its own creation. The autonomous mind triumphs by absorbing reality into itself. The abortive victory of the theoretical over the empirical is a familiar and recurring heresy in science and theology. As Kierkegaard declared, "To assert the supremacy of thought is Gnosticism." The absence of empirical grounding and connection is the blindness here. If epistemological certainty is born of the mind alone, (as in Kant through a priori imposed categories) there is no correlation between thought and being. Reason is shut up to the phenomenal--its own creation. The autonomous mind triumphs by absorbing reality into itself. The abortive victory of the theoretical over the empirical is a familiar and recurring heresy in science and theology. As Kierkegaard declared, "To assert the supremacy of thought is Gnosticism."

The end of all science is to connect theoretical with the empirical by fundamental principles. But in flat rejection of Kant, Einstein argued that these principles...cannot be justified either by the nature of the intellect or in any other fashion a priori in the Kantian sense. In any ontological question, the only possible procedure is to seek out those characteristics in the complex of sense experience to which they refer. Einstein argues that science needs free, creative concepts in the sense that they are not logically deducible from observation and experience. Nor ought they to claim absolute, a priori validity. Nevertheless, physical laws for Planck and Einstein describe a reality in space and time independent of ourselves. How can this be? For Einstein it is the miracle of the world's rationality which he openly acknowledges in wonder. Our concepts actually correspond to and harmonize with external reality.

F. A Priori and Innate Ideas

Nobody who has really gone deeply into the matter will deny that in practice the world of phenomena unambiguously determines the theoretical system, in spite of the fact there is no logical bridge between phenomena and their
theoretical principles. This is what Leibnitz described so happily as a 'pre-established harmony'.

---Einstein

Einstein proceeds to affirm that the fundamental ground of science is the conviction that existence should have a completely harmonious structure. "Today we have less ground than ever before for allowing ourselves to be forced away from this wonderful belief."154

This Einsteinian credo brings us to the great divide between Kant and Leibnitz (now empirically radicalized by Einstein and Torrance). Whereas for Kant, form (e.g., space and time) precedes our experience of things and as the a priori structures of the mind determines their possibility, for Leibnitz the form lies embedded in reality and we have access to this form by the rapport mutual given by God between all substances. "God has given...to all real unities a perfect spontaneity and a perfect conformity with the whole external world."155 Matter contains its own inherent contingent rationality, or to use Kant's language, its own power of representation.156 For Leibnitz, as for post-Einsteinian science, space and time are not a priori structures by which the mind orders experience, but the very intelligible framework which the mind is marvellously able to grasp.157 Torrance declares that the unity of form inhering in being which relativity implies, means that rational as well as physical properties are equally and inseparably grounded in the space-time universe independent of us.158

Thus we see that the older doctrine of innate ideas (versus synthetic a priori concepts) has a vital link with Einsteinian science. There exists a more intimate, realist connection between thought and being than the Kantian formula permits.

6. Axioms. The Triumph of A Posteriori Thinking

For Torrance, the uncritical acceptance of any categories of thought as universally valid for all fields shrouds objectivity with a massive mental subjectivity. It makes and moulds the object it seeks to know by the inflexible conceptual structure's which condition our apprehension. 'In the Kantian
system it is only our mental a priori which sufficiently organize the senses for knowing to take place at all. "Thus the order and regularity in the appearances, which we entitle nature, we ourselves introduce." 159

Unhappily, conceptual structures which are independent and undetermined by experience, cannot possibly be criticised or modified by experience. This imports a priori mental subjectivity into the study of the object and unilaterally dictates the nature and possibility of the knowledge of the object. 160

Inevitably, order implanted by the active intellect displaces and denies the possibility of a living, concrete and intrinsic order.

The Kantian dualism between form and being is a blind alley for science and hinders heuristic breakthroughs by its a priori, independent, and logical-causal structures. Because the Kantian superstructure had acquired an almost wholesale approval among modern scientists, James Brown argues that natural science deals only with one class of objects, namely those which submit themselves to exhaustive description by the categories of the understanding. Brown argues that 'objectivity' ought not to be identified with the control of the object by the subject which most natural science entails. 161

Similarly, Torrance refuses the terms and divisions of the old Kantian parameters. More than anything else they have created the fatal epistemological chasm between science and theology (and between social and natural science), thereby risking the veracity of all these fields. 162

It is because the premises of truly scientific thinking cannot be anticipated by detached, a priori thought, but only discovered as we allow our thinking to take shape under the determination of the reality into which we inquire, that Torrance prefers the term 'axiom' to 'premise'. Most significantly, these empirical or a posteriori axioms have a surprise element in them, for they cannot be established antecedently independent of empirical relations to the subject matter. 163

By virtue of their object-centred orientation, axioms are cognitive constructs which are essentially descriptive rather than prescriptive. 164 Ultimately it is reality itself
which teaches us axioms appropriate to it and which judges the truth or falsity of our axioms.\textsuperscript{165}

Torrance seeks an \textit{a posteriori}, object-centred form and rationality which inheres uniquely within each of the sciences and allows the object to teach the knower the intrinsic rational categories appropriate to it. In contrast to Kant's \textit{a priori} thought forms, Torrance argues that true noetic forms are organically related to ontic structures, embedded within them, and have their own non-logical-causal necessity. If ontic structures contain their own order, the knower's task is not to impose artificially an abstract order on to a chaotic mass, but to discover by attentive, humble inquiry the order and rationality which inheres within the object.\textsuperscript{166}

Without an empirically open, object-derived order, precision and clarity are either lost or become only the precision of an abstract barrier without integral connection to the object. True clarity and precision arise only by letting our thought forms become moulded and shaped by the nature of things as we become open to whatever the object reveals.\textsuperscript{167}

The scientific genius consists in its ability to discover the intimate union between the empirical world and its theoretical components. We discover these physical concepts not by a logical-deductive mechanism, but by an extra-logical apprehension (Einstein) or as Polanyi puts it, through tacit, non-formal inference.\textsuperscript{168} As we have seen, this object-centred, \textit{a posteriori} method is exemplified in Einstein's search for physical concepts which are neither absolutely nor aprioristically arranged and pasted to the empirical world, but are empirically embedded, and therefore genuine pointers to reality.

The new physical geometry developed in conjunction with Einstein and several gifted mathematicians, was of crucial importance, for it revealed Euclidean geometry to be a distorting and idealized abstraction of geometry from experience.\textsuperscript{169} Formerly, geometry was studied as an isolated and self-contained conceptual system, pursued as a theory utterly antecedent to physics. But the new four-dimensional geometry was seen to be bound up with the space-time structures of the real world and could only be pursued in "indissoluble unity" with physics.\textsuperscript{170}
In theology, this means (contra Leibnitz) that we cannot begin with any timeless truth or innate idea even such as 'God is love'. Theology as an axiomatic science sees its principles rooted and grounded in the empirical self-disclosure of God's concrete, incarnate coming of Jesus Christ into our world of space and time. We dare not presume God's love to be true necessarily or universally apart from God's gracious activity in Christ. This further implies the cruciality of the empirical correlates of Christ's bodily resurrection and ascension if Christianity is not to lapse into conceptual meaningless.

Principles in axiomatic science are no longer the premises of our knowledge from which we deduce necessary conclusions. As Northrup says, Kant's notion of regulative a prioris which are not developed through dialogue and empirical interaction, "no longer holds". But axiomatic principles are cognitive instruments developed through the process of questioning and discovery. The result is a radical reconstruction of the nature of first principles and how they are derived. There have been strong reactions to this in theology and in science, but as Thomas Kuhn points out, the changes wrought by a paradigm shift inevitably cause an entrenchment by the scientific institutions which are comfortably settled into the older views.

Axioms are never formed a priori or in detachment from empirical work, but are discovered by laying bare the rational structures embedded in the subject matter's inherent connections. This is how Athanasius approached the incarnation. The resulting axioms are compelling because they so astonishingly correlate our thinking to empirical reality. As we shall see, this is a process not of abstracting qualities we look for on the basis of some rearranged values or principles, but a process of indwelling in which the unique structures of reality teach us the appropriate categories.

This is how theology understands the fundamental concepts of the homoousion, the hypostatic union and the Trinity. They result from a deep penetration into the inner cohesion of the Gospel. Torrance insists that these concepts be seen as
open and flexible structures, used "postulatively" and having a fluid revision the further they penetrate. This emphasis is most important, for it keeps us from the nominalist identification of our concepts with reality itself. That is the danger with permanent and fixed formal axioms. If the structures of our understanding involve a permanent form, then we could gain our knowledge through a mere study of the forms without empirical enquiry.

But it remains a constant frustration that the mind of man is so inelastic, so slow to change its frame of reference and so given to rigid form. All fixed categories (abstract objectivism) entail a hidden subjectivity. Here we glimpse already the cardinal problem of all epistemology, the anthropological intrusion of the self as the implicit object of study. It is painful for the idealist to hear an Einstein say, "There are no final categories in the sense of Kant." Nonetheless, after wrestling with Newtonian-Kantian concepts of space and time for twenty years, relativity theory only came about by the forming of a new empirical framework; a breakthrough was fostered by a commitment constantly to adapt the structures of knowing to the structures of the object we seek to know.

H. The Decline of Dualism

It is a dull and obtuse mind that must divide in order to distinguish; but it is still worse, that distinguishes in order to divide.

---Coleridge

Once the dichotomy between form and being is no longer assumed a priori, knowledge is understood to be grounded not in our a priori categories of the understanding, but in the inherent relatedness that permeates the universe. Within a non-dualist approach to the universe, science and theology believe that the universe has a completely harmonious structure; we are not playing with mental games, but in fact we can correlate theoretic components with empirical content.

There remains an epistemological dualism in the sense that the proper rational structures must be discovered. But our knowledge gap is no longer (as in Kant) made into an ontological gap. We may unashamedly have faith that this gap
can be overcome and continually lessened. And as Einstein reminds us, "The successes reaped up to now by science do it is true, give a certain encouragement for this faith." 189

The Eastern critic of Western thought, Radhakrishnan, has noted that for Hegel and Kant, there is no unity prior to the unity created by reflective thought. 190 But in post-relativity thinking, a unitary framework of thought exists in which empirical and theoretical are integrated but it is empirical reality itself which is the ultimate arbiter of our theoretical precision. 191

As a result of this new integration of thinking and being, many axiomatic dualisms of the old science are no longer relevant. For instance, science now severely qualifies the older dualism of classical physics between two substances, mass and energy. In relativity physics there is no essential difference between these two. 192

The theological implications of non-dualist thinking are of equally profound import. For example, the deist disjunction between God and the world with its axiomatic impossibility of God's incarnate interaction in spacial-time has been discredited. 193 The old-style 'liberal theology' which denies the incarnation and resurrection, has its scientific correlate in the equally dubious dogmas of the old positivist science. 194 The new science has "peeled away these pseudo-concepts" and calls theology to be true to its own foundations laid down when the Greek fathers wrestled with the dualistic modes of Greek culture. 195

When Torrance restructures the mind's order-originating role, he is not tediously reasserting a naive realism and empiricism, wherein observed facts are independent of our scientific constructions (the myth of uninterpreted facts) and the universe in itself lacks form. 196 Though Kant realized that empirical and theoretical components of knowledge operate together, his synthetic a priori method focused on mental structures independent and logically prior to the empirical. This embedded form solely in man's mind. The universe was "intrinsically amorphous". This arbitrarily weds rationality to the mind and divorces it from nature. Man in his struggle
to understand the universe exalts and honours himself at the expense of the physical creation. German idealism thus expressed in a subtle new form the ancient Greek idealist dichotomy between sensible and intelligible, form and being.

In contrast, Torrance argues for a Hebraic, non-dualist mode of connection which sees that form and being are interwoven in the universe. When a physician studies anatomy, he does not impose a structure. Nor does a geologist impose geometric patterns into crystalline rock. That is, rational as well as physical properties are equally, inseparably and organically grounded in the space-time universe (unlike Kant) independently of us. The scientist searches the empirical in order to find appropriate theoretical constructs. It is because nature is inherently rational that reason cannot be separated from experience. Theory is a posteriori which seeks to grasp the form inherent in the empirical.

If the theoretical and the empirical cannot be separated, one field of science cannot allow its mental tools to be dictated by a prior or autonomous thought structure. Nor should another field prescribe its methods or predetermine its results. The entire idealist scheme amounts to the establishment of a general prescriptive framework neither grounded in nor corresponding to empirical reality. Therefore it must be regarded as the greatest of many idols of the study.

Within the quest for a new objectivity conceived within a unified structure of form and being, lies the great divorce between Torrance and Kant. Kant presumed a chasm between sense and intellect "bridgable only by the mind's synthetic a priori mental constructs. Instead of a chasm, Torrance believes form and being coinhere even more intimately than the Thomist-Newtonian logical-causal harmony. We discover rationality not by presuming an artificial a priori causality, but by an intuitive, a posteriori penetration.

Ⅰ. Form and Being in Science and Theology

As we have noted already, nowhere has the "profound correlation between abstract conceptual systems and physical processes" been more clearly demonstrated than in the development of four-dimensional geometry. There science discovered
that form and being are already fused together in the real world. Relativity and quantum physics have both demonstrated that space and time are not a priori mental forms antecedent to external reality. Substance and causality are no longer feasible as necessary categories of the understanding, constituting the universal and necessary frame for all empirical knowledge. Therefore, it is scientifically and philosophically unjustifiable to extrapolate into other fields the deterministic causality of either the old Newtonian scientific framework, or the philosophical necessitarianism of the Kantian interpretation.

As Einstein has shown, because geometric forms cohere within physical reality, it is no longer feasible to pursue geometry as a detached conceptual schema independent of and prior to the space-time universe. Formerly, the old abstractive science tore away surface patterns from their objective ground and assumed there cannot be a knowledge of things in their internal relations. Science now seeks natural coherences within an indissoluble unity of form and being.

If it is illegitimate to inquire into a field by abstracting principles and essences, or digging out the kernal and shedding the husk, a new mode of inquiry is needed. That is why today science can no longer dismiss uniquenesses and particularities, but seeks to find the organic and inherent structures within them. The resulting physical concepts have a direct bearing on reality itself.

Similarly in theology we find that it is no longer epistemologically valid to detach the being of God from his acts. The Roman Catholic doctrine of God, structured within Aristotelian notions of substance, created an a priori, static ontology and static modes of thought, unrelated to God's activity, and within which Christ himself was interpreted. A proper theological epistemology should instead be worked out within an exposition of the content of the Word of God become flesh in Jesus Christ.

On the other hand, we can so focus on God's acts that we cut them off from God's being. This is the legacy of much post-Reformation thought and is analogous to Bacon's empirical
focus without Newton's mathematical integration. It cuts off salvation and justification from their coherence and empirical reality in Christ, the incarnate Son of the Father. Inner content and outer form are much more integrally joined than axiomatic dualist thinking can conceive. For example, even in church government, our notions of ministry must be inseparably bound to Word and sacrament, and not historically dubious arguments of lineage and succession. Similarly in theology, we move from the trinitarian activity in the economy of salvation to the ontological reality with which God's saving acts integrally cohere.

The integration of form and being in theology also tells us that theological statements should conform in form and content to its object. Form cannot be separated from content because empirical reality should mould the form we use. As Einstein puts it, the most satisfactory concepts are those in which "the fundamental hypotheses are suggested by the world of experience itself".

As in natural science, so in theological science, the unity of form and being requires changes in our traditional rational structures as we develop new cognitive instruments forced on us by the object. Form and content, method and subject-matter, belong inseparably together. But form and method are determined by the nature of the content and subject-matter.

The new objectivity displays a deepened respect for reality. Nature's dimensions of order are not man-made contrivances but possess an inherent rationality which man in wonder discovers. Admittedly, this order is apprehended at only elementary levels, but this is again part and parcel of a respectful openness to a reality whose rationality far transcends our understanding. For Einstein, the scientist must maintain a perspective of wonder and openness towards the "eternal mystery of the world". Though physical concepts reach towards the reality, they do not envelope or exhaust the richness of its rationality.

The new physics has radically challenged the dualistic assumptions endemic in modern culture by its radical
penetration into the rationality which inheres in the world. As a result, for the first time in the history of science, theology may dialogue with a natural science which from within has broken down the dualist barriers between the theoretical and the empirical, the tangible and the intangible and therefore which does not automatically deny the possibility of a continuous dynamic interaction between God and the universe. For in the wake of the incarnation, theology's interaction with natural science becomes not a speculative endeavour, but a necessary implication for a theology which is about God actively revealing himself within the space-time structures of the real world and a natural science which seeks to understand its own ontological implications.

Science advances in knowledge by the creative and artful cracking of nature's secret code. "God is subtle, but not malicious." True knowledge does not occur by violently imposing abstract rationalities on chaos, but is won by wooing nature to reveal herself, by careful attention and openness. Objective, rational knowledge is a polar relation between subject and object, not an application of rational laws to nature. It occurs through careful dialogue with nature, not by straining nature through a priori mental laws.

Modern science's new objectivity reveals a fresh object-centred approach to rationality, and reinforces this procedure already at work in theology. I will try to show through correlation with Lewis' approach to art, the wide ranging breadth and coherence of this new objectivity for art, science and theology which points towards a unitary epistemological way of approach at once encompassing in scope and rich in variation.

J. The Beliefs and Axioms of Science

Though Torrance rejects the legitimacy of a priori conceptual structures in natural and theological science, he does not deny but affirms the propriety of regulative dogmatic beliefs which lie behind the achievements of science. When Kant offered his 'critical' approach as an alternative to Hume's sceptical method and the Leibnitz-Wolff 'dogmatic' approach, he in fact shrouded his own credo, namely, his belief that man's autonomous intellect creates and imposes rationality, but does
The history of science has shown that whereas Kant's a priori notions no longer are scientifically possible, the belief in a coherent connection between our thoughts and external reality has become an ever more confident 'regulative belief'.

Is Torrance inconsistent in affirming certain regulative beliefs while eschewing a prioris and innate ideas? I think not. Unlike innate ideas, Torrance sees regulative beliefs as ultimately grounded in empirical reality, namely, in the empirical reality and givenness of God's self-revelation. The best of Western science, he argues, which humbly inquires into creation

rests upon foundation ideas that science did not and could not have produced on its own, ideas that derive from the Christian understanding of the relation of God to the universe.

These regulative scientific beliefs such as unitary yet multivariable rationality, contingent intelligibility and the credo ut intelligam heuristic method are implicit in and grounded upon Christian revelation. Let us look at two inter-connected regulative beliefs which are indispensable to modern science.

1. Ethics, Science and Technology

Unfortunately, when instrumentalist science dissolves the search for objective knowledge into the economical co-ordination of scientific relations (as epitomized by Ernst Mach's Science of Mechanics), it also attenuates scientific theory and reduces it to the pragmatic ordering of the world for the more effective control by man.

Due to this expansive tendency and the implicit Kantian metaphysical assumptions of instrumentalist science, Torrance distinguishes between pure and applied science. We pursue pure science for its own sake (object-centred). Applied science we pursue for a sociologically or politically conditioned end (subject-centred). The two sciences yield qualitatively different kinds of knowledge, and develop different conceptual frameworks determined by their different purposes.

Instrumentalist-technological science may yield prodigious technological achievements through violent questioning and
controlled experimentation. This does not imply that nature lacks intrinsic order, nor that we must impose rationality, but only that we have unequally yoked thought and being. A pure science which seeks objectivity is at cross purposes with the violent imposition of abstract patterns on nature.

Our current and manifold ecological and economic crises bear witness to the fact that a manipulative mood has endlessly nagged science. Perhaps, thinks Lewis, the triumphs of science "may have been too rapid and purchased at too high a price and something like repentance may be required". In the Lewis novel, Perelandra, the evil scientist, Weston, rejects the notion of science as knowledge for its own sake and accepts only the idea of knowledge for utility. This is the perpetual danger of science; its urge to use, apply and appropriate knowledge overruns its primary concern for knowledge of the object. Ironically, it destroys the very basis for scientific inquiry.

For many theologians, artists and philosophers, this is the shape of science—a pragmatic, non-philosophical, technological enterprise, uninterested with its own philosophical justification or its ethical implications. The dominance of science by instrumentalism led the Scottish philosopher, John Macmurray, to define science as amoral, impersonal, systematic information valued for its own use. Similarly, when Lewis defined science as that which experiments, not asking why or whether something exists beyond quantitative results, he had in mind the instrumentalist's methodological rejection of metaphysical questions. But if many in an unguarded moment would happily banish science as the West's bastard son (were it not for its incredible success), for others, the very success of science radically calls to question the legitimacy of all other fields not directly serving its advance or living strictly under its guidelines.

Against these instrumentalist-technological tendencies Torrance stands unalterably opposed. He diagnoses the instrumentalist roots to lie anchored deep within the tradition inherited by the West from ancient Greek rationalism through Roman pragmatism to Kant and modern idealism, namely, a deep
chasm between being and phenomena, subject and object, operational theories and empirical reality. These ever diverse pairs are joined only in an inorganic, pragmatic way and impose an order upon the world solely to be more efficiently used by man. But as we have seen, Torrance believes an alternative framework has undergirded true scientific discovery, which heals the doubts and dualisms that have incessantly plagued science.

If pragmatism and instrumentalism evaporate pure science, what values and beliefs undergird a science which seeks objectivity and truth? In That Hideous Strength, Lewis argues that science minus moral underpinnings is self-destructive. Lewis has often been criticised for being anti-scientific, but this confuses technology with science. Lewis once suggested that technology was the West's new means of feeding its materialistic addiction since it had lost its slave labour to the Marxists and the abolitionists.

Lewis endorses the sciences as "good and innocent in themselves", but believes the "despair of objective truth" and consequent concentration on mere power over nature had unmistakably demonic implications. As more and more scientists have surrendered the belief that science is a true account of objective reality, he wondered if we might be living "nearer than we suppose to the end of the Scientific Age".

Historically, Lewis traced the poisonous element within science to the new empiricism's proximity to magic. The magician is the ancestor of the modern applied scientist. As a literary historian, he reminds us that in the sixteenth century high magic (not witchcraft or astrology) and applied science were often avowed and vindicated by the new learning. Today pragmatic technology contrasts science with magic largely because science succeeded and magic failed. But at one time this outcome was uncertain. To put it starkly, the dark motivation in the new learning desired to subdue reality to man's wishes. Magic sought power over nature. The solution was a new technique. Magic was defeated not because man felt it morally wrong, but because in applied science man
found a more effective technique by which to control and dominate nature. But their goal was one. Both seek knowledge for the sake of power. Here then are two conflicting approaches to science. One seeks to conform the mind to reality by means of knowledge, self-discipline and virtue. The other seeks to subdue reality to the wishes of man.

Clearly, a dominant intellectual mood of the times was a new self-assertion and search for power. This was the negative side of man's new freedom in thought. The loss of Rome's authoritarian intellectual structures did indeed create a new empirical openness, but also a potentially distorting preoccupation with the by-products of knowledge, whether it be theology's focus on Christ's benefits and man's new spiritual power in Melancthon and certain Anabaptists or science's new power over nature.

When Bacon sought knowledge not as an end, but as a means to power, he resembled the higher Platonic theology of the time which emphasized man's power over the universe. While Torrance admits this problematic side of Bacon's statement that the function of knowledge is "to extend more widely the limits of and power and greatness of man", he believes that Bacon's emphasis on listening and conforming our ideas to nature kept him from the desire to manipulate nature. Lewis sees Bacon in a more self-asserting light. Machiavelli's political power quest bears similar signs of a new grasp for power. Lewis attributed this power preoccupation to the rejection of the hierarchy of being scale which guarantees man at once a limited freedom. This power urge is also observable in the incipient distortion of the Reformers' (especially Calvin's) new awareness of God's personal election to redeem man. Torrance denies that election and predestination are the central themes in Calvin. Rather Calvin's theological centre is Christ and union with Christ. Though important to Calvin, predestination is normally spoken of not as the underlying theme of all, but in the context of controversies, as a "protecting wall for the central emphases of grace and adoption or sonship in Christ". Calvin never taught predestination as a doctrine in itself, but rather
within the context of Christ, the beloved Son and mirror of our election. Elsewhere, Torrance admits that a problematic ambiguity exists in Calvin when he speaks of election preceding grace. Nonetheless, Calvin insists we must not think of election apart from Christ. The later preoccupation with God's election and sovereignty in Calvinists like Beza and Perkins and the minimal stress on God's decision as loving and appropriate or rational (Athanasius) created a distorting emphasis on God's omnipotent will-power. The fact remains that post-Reformation theology evidences a new stress on the mighty will of God. Both Klaaren and Hooykaas trace the new rational empiricism to a voluntarist theology of the Creator. By stressing that the world springs from God's will, not his being or reason, theology opened its doctrines of God and creation to the danger of the arbitrary exercise of will-power (might makes right), which has an unmistakable resemblance to the power urge of technology. Torrance recognizes this danger and seeks to ground creation in the gracious will of the Creator Logos.

The new theology may have ignored the chain of being, but it understood man to be God's priest over creation. Man's freedom to know lay under obedience to the Father. Nonetheless, science's proximity to an awakened urge to power in all fields created an inherent tension in its ensuing history, (and in theology).

It may be that modern science owes its lack of consensus on an objective moral framework to its neighboring origins with man's dream to obtain power without paying the price of obedience to the Father of heaven and earth. Certainly our contemporary ecological-economic crisis supports Lewis' contention that "the evil reality of lawless applied science (which is Magic's son and heir) is actually reducing large tracts of nature to disorder and sterility at this very moment".

It is this same lack of commitment to transcendent moral obligations (particularly the love for and honour of truth) in modern science against which Michael Polanyi has warned. With Marxism having severely attenuated pure science in Russia
and reduced it to state-serving technology, Polanyi asks what philosophy of science the West has which will maintain its objectivity and investigative purity. He answers that without a personal commitment to, and love for truth, the seduction of science by political and nationalistic pressure is inevitable. When the transcendent ground of science and religion is denied, a totalitarian state arises. That is, without a belief commitment to the reality of truth, justice, charity and tolerance, the state or nation inherits in a 'value vacuum' man's ultimate devotion. Apart from a personal commitment to honesty and love for truth, scientific investigation has as little value as an unsigned check. Moral belief and personal commitment alone maintain scientific objectivity. As Einstein puts it, "The achievement of science is based on the freedom of thought and on the principle that the desire for truth must take precedence of all other desires."

Einstein often hinted at the importance of moral commitment for science. In commemorating Marie Curie, he lauded her moral courage, suggesting that it had more to do with scientific work than intellectual skill. "Most people say it is the intellect which makes a great scientist. They are wrong: it is the character." History bears witness to the close connection between morality and truth in the fact that only within a close union of the two was science born. Science, Jaki reminds us, was spawned in a freedom it did not create and when it quailed at Hitler, its base of religion stood firm.

2. Belief: The Commitment to Rationality
Science demands also the believing spirit. Anybody who has seriously engaged in scientific work of any kind realizes that over the entrance to the gates of the temple of science are written the words, Ye Must Have Faith. It is a quality which the scientist cannot dispense with.

--Jaki

Torrance accepts as axiomatic the need for moral commitment in science. With Polanyi, he sees that our commitment to reality entails moral responsibility in our acts of judgement as the personal pole and the belief in the independent reality
on which it bears as the external pole of objectivity. 261 His own writings focus on the latter pole, that is, in all science we believe that what we seek to know is accessible to rational inquiry, that it is inherently intelligible. 262

Following the developments in modern physics, it is time both natural and theological science acknowledge the epistemological release which belief bestows in science. As Einstein trenchantly puts it,

without the belief that it is possible to grasp reality with our theoretical constructions, without the belief in the inner harmony of our world, there could be no science.... This belief is and always will remain the fundamental motive of all scientific creation. 263

It remains a miraculous fact, unprovable by science, yet holding it together, that the universe is comprehensible and intelligible to the human mind. 264

The commitment to the priority of regulative beliefs for all knowledge has been an explicit and influential element in Scottish philosophy and theology for many years. This is the legacy which William Hamilton passed on to James Clerk Maxwell. Following Thomas Reid and common sense realism, the ultimate bases of our knowledge, Hamilton puts it, are not inductively derived concepts but regulative beliefs.

Foremost among these facts of consciousness is a belief that a material world exists and that it is this external reality itself which is the object of our consciousness in perception. 265

It was Copernicus' firm belief that God had arranged "everything according to weight, measure, and number", which undergirded his astronomical achievements. 266 As Heisenberg admits, physics believes that the fundamental laws of the universe can be stated in a mathematically simple form, "but no convincing argument has yet been given to show that it must be so". 267

Recently, Wolfhart Pannenberg argued that any dogmatic starting point or faith assumption necessarily leads to subjectivism. 268 As an alternative, he endorsed the 'pancritical rationalism' of Karl Popper, a method, which for Pannenberg, supercedes empiricism and rationalism by presupposing no ultimate certainties. However, Pannenberg ignores one
unacknowledged credo, namely, the Enlightenment's reliability on man's rational capacities to know ultimate reality.\textsuperscript{269} It is an omission worth noting, that in his massive work, \textit{Theology and the Philosophy of Science}, Pannenberg has not one reference to Einstein's scientific work or his philosophy of science and commitment to the priority of belief.

Though all scientific knowledge involves a give and take between the knower and the object of inquiry, it is an awesome fact, says Torrance, that if the material world was not inherently rational and capable of apprehension, scientific knowledge would not arise at all.\textsuperscript{270} Though many problems baffle us along the way, science has the confidence to seek relentlessly for a solution because of its unshakeable belief in the universe's reliability.\textsuperscript{271} Only within the context of a profound faith in the accessibility of the world to rational understanding can science exist. Otherwise the physical world would be opaque to thought and science would be no more real than the noble unicorn.

It is in this context that we may best appreciate Lewis' argument in \textit{Miracles} for 'the self-contradiction of naturalism'.\textsuperscript{272} So convinced was Lewis of God and his creation's rationality, that his mind balked at the very thought of either an ultimate incoherence in nature (as implied by certain interpretations of quantum theory) or that the rationality we discover in nature has no ultimate grounding in a transcendent rationality.\textsuperscript{273} Where Lewis differs from Torrance is in believing that the naturalist or positivist position could be defeated by logical refutation. Lewis follows roughly the argument of A. J. Balfour's Gifford Lectures, \textit{Theism and Humanism}.\textsuperscript{274} It was G. E. M. Anscombe who first attacked Lewis' implicit identification of causality (cause) and logicality (grounds), the very connection to be proved.\textsuperscript{275} Lewis rewrote the offending chapter in \textit{Miracles}, altering it from the 'self-contradiction of the naturalist' to the 'cardinal difficulty of the naturalist'. But this rewritten chapter easily merits the label of being the most ponderous and opaque of all Lewis' writings. It does not carry the argument further.
Lewis' belief in the ultimate rationality of nature and its dependence upon transcendent rationality fundamentally agrees with Torrance. Torrance, however, appeals to the larger, non-logically formalizable notion of sufficient reason and rejects the more limiting case of logical self-contradiction. Torrance appeals to 'the principle of sufficient reason' to suggest that the rationality of the universe cries out for a sufficient explanation. One may argue for an ultimate arbitrariness without logical contradiction. For there is no logical bridge between thought and being. If there were, as Einstein and Torrance both point out, the rise of empirical science with its understanding of contingent intelligibility would have been unnecessary. Rationality could have been deduced a priori, without recourse to experiment.

The rational bridge between thought and being is cognitive but non-discursive; it is an intuitive connection, immediately apprehended but not finally capable of logical analysis. Lewis sought to logicalize an ultimate intuitive belief-truth which alone renders the world rational. Following Einstein and Polanyi and reflecting the common sense realist tradition, Torrance is content to 'restore the balance of our cognitive powers' to certain fundamental and intuitively grasped beliefs, of which belief in the inherent intelligibility of an external reality is fundamental.

It appears that science, as theology, must be content to rely on the intuitively perceived rationality of certain fundamental premises in its task of pursuing truth. Science believes that our minds are informed by an intuitive and rational contact with reality. Without this basic belief our minds founder in fruitless surmisings and irrelevant interpretations.276

For Torrance, the human reason can never operate outside a framework of basic beliefs.277 New facts alone did not destroy Newtonian physics. It was only when a new interpretive framework or belief system gave a new context for the facts that understanding progressed. Kuhn and Polanyi have called this a paradigm shift unbridgeable by logic.278
In *The Abolition of Man*, Lewis unapologetically appeals to our intuitive rational faculty to argue for his "dogmatic belief in objective value". One sees it or one does not. No inductive argument is appropriate. It is the same with the regulative beliefs of science. We must be content to exposit and describe the basic rationality of the universe without dependence upon any independent buttressing from necessitarian logic.

Science is grounded upon certain basic beliefs or fiduciary commitments (such as inherent rationality) which though constantly put to the test in every experiment, are not open to logical proof or logical derivation. Within a hierarchical integration of rational-ontological levels, they belong to a higher rationality than logical deduction as a prior intuitive insight and must be employed as premises in any attempted proof we would make. Maxwell and Einstein have both born witness to these beliefs as intuitive and religious in character.

In his exposition of intuitive rational beliefs, Torrance makes two assertions. First, the object we seek to know is accessible to rational questioning. Science presumes an object's rationality in order to inquire into it at all. Secondly, we accept the object of inquiry in its givenness. Science approaches its object with an a posteriori rationality. Speculative questions are set aside in order to probe into the object as it lies before us, asking nature questions appropriate to it. This faith in the universe's external, inherent rationality gave Max Planck confidence to continue his search for true principles until they had "revealed themselves to him". Einstein and Planck both unashamedly held that in the end, "the world of phenomenon unambiguously determines the theoretical system, in spite of the fact that there is no logical bridge between phenomenon and their theoretical principles". Apart from faith in the reality of rational structures inherent within the universe, there is no barrier against animism, the whimsy of pagan man's arbitrary gods and cosmos, or at best, a return to the Greek and Medieval inattention to the empirical world.
If we wish to study theology, to inquire into God, we must understand that the epistemological question is not utterly different from other fields of knowledge, but has a certain invariant relation to all fields. If our questions are appropriate to the uniqueness of each field and humbly open to the subject matter and to the rethinking of our prejudices and assumptions, we are in the most hopeful position to make progress. No science is free; it is bound to its object. It is only sustained as it began, by the love of truth.

Of course a true relation to an object will include the acceptance of certain statements as true. But with Polanyi we should distinguish the assertion that a statement is true from the statement which is true in order to emphasize that what enables the discovery of objective truth is our preliminary commitment to its reality. Only within a commitment of belief can the knower as personal agent function properly as he submits to what is independent of himself. For Torrance, this commitment to the object's rationality and truth saves scientific knowledge from the subjectivist fallacies of doubt and detachment.

Two such regulative, axiomatic beliefs bear a fuller discussion, which I will only briefly mention in this context. a. Contingent Intelligibility. In contingent intelligibility we come to the deep paradox at the heart of science. The Reformed theologians used to say nihil constat de contingentia nisi ex revelatione, nothing can be established about contingency except through revelation. Contingent intelligibility requires us to investigate the empirical world out of its own processes without recourse to God. Without contingency and its corollary of direct empirical investigation, nature's laws would be derivable immediately and necessarily through logical-deductive processes without need of experiment. Only by means of the bond between contingency and order has science successfully yoked experiment and theory. And yet we have seen that this bonding is not the result of science, but its starting point, grounded and comprehensible only within a doctrine of God as transcendent Creator of the universe.

b. An External World. Closely related to the contingent...
intelligibility of the world, is the belief in an external world. As Einstein puts it, "The belief in an external world independent of the perceiving subject is the basis of all natural science." 289

It is this belief that there exists an inherently rational world, independent of the observer, that Einstein grasped as the source of Planck's patience and endurance in discovering the 'new 'physical concepts' which laid the groundwork for quantum physics. 290 It was this same insistence in an externally real and rational world which lay at the roots of the debate between Planck and Mach, a debate in which Einstein left no doubt about his own sympathies. 291

K. The Function of Logic in Science and Theology

Above all else, says Lewis, the Medieval mind was a logical mind. As epitomized in Dante and St. Thomas, we see the tranquil indefatigable, exultant energy of a passionately logical mind ordering a huge mass of heterogeneous details into unity....They tidied up the universe. 292

For Aristotle, everything below the moon was the contingent which for him meant the irregular and perishable. Medieval science tried to study this chaotic, contingent nature by superimposing eternal logical patterns. The history of science has proved the severe limitations of such a method.

Pure logical thinking cannot yield us any knowledge of the empirical world....Propositions arrived at by purely logical means are completely empty as regards reality. 293

Logic 'tells us nothing new. It only orders and clarifies what we already know. Logic formalizes or gives a formal account of our intuitive faculty of judgement. 295

It was Occam who first saw that we cannot understand the sequence and succession of events in nature by converting their movement into a logical relationship. 296 As we have seen, this is Lewis' error in Miracles.

Formal logic connects our concepts in a coherent way, but at the cost of abstracting them from their material content. Logic is invaluable for its rigorous feats of elaborate deduction. But such knowledge benefits science only when harnessed to the material knowledge and contingency of each special field.
Otherwise we have precision of statement without empirical meaning or content. Only as the logic of scientia generalis is brought to work in polarity with scientia specialis, that is, the interior logic of each science, has abstract logic any value. Formalized logic abstracted from actuality restricts thought to the timeless, motionless non-empirical realm of possibility. Inevitably, the formalizing tendency of logic restricts order to the mind and denies that rationality and order inhere in the real world.

Modern science does not banish formal, Aristotelian logic, but understands its proper limits, as it does Newtonian physics. "Practically speaking, classical physics is still good for small velocities"—but not for settling fundamental physical questions. The answer to the Medieval-Newtonian use of logical-causal connections is not an anti-rational jeer (as Lewis accuses Humanism). Rather modern science recognizes through the sheer weight of empirical evidence, the inherent limits to precision when the relation of thought to being is formalized into a logical-causal framework. Radhakrishnan rightly criticizes the West for its rationalistic mode of thinking, that is, the assumption that all reality can be known in a logical way. But when on these grounds he dismisses Western thought, he has not taken seriously the whole history of modern science's integration of thinking with the empirical world. The genius of the West is not the primacy of the logical, but rather its relentless search for an empirical integration of thought and being, which gives full weight to the physical and the conceptual.

Lewis championed the validity of logic throughout his life because it kept out one kind of subjectivity which he called 'Bulverism'. This was his nickname for the process that psychologically explains how we came to argue a thesis and thereby dismisses the what and who, instead of showing precisely how the argument itself is incoherent or invalid. Logical argument enables debate to maintain an invaluable level of precision and clarity by which to examine ideas in a standardized fashion without descending to name-calling ad hominem and psychologizing innuendoes. Thus when Lewis confronted
E. M. W. Tillyard in a classic battle of two schools of literary criticism, he relentlessly unpacked hidden and false assumptions which undergirded certain assertions, pointed out non sequiturs and the use of question begging, emotionally charged expressions posing as arguments. Logic indeed frees us of many burdensome fallacies, formal and informal which we may implicitly carry with us.

Lewis recognized that logic could become a game of conceptual tiddly-winks. In retrospect, he refers to the logical arguments of his pre-Christian days as the "thin artillery of a 17-year-old rationalist". It would be a mistake to interpret Lewis' popular Christian writings as logical inferential proofs for God. To call Book I of Mere Christianity an inductive moral 'argument' for God not only disappoints us logically, but fails to do justice to Lewis' avowed intention of Biblical exposition and his intuitive argument (similar to that in The Abolition of Man) for the inherent, self-evidencing rationality of the Christian message.

At best, logic lays down a system of rules for formal validity which is applicable to every science. It tests the validity of arguments from true or false premises by recasting connections in the real world into subject-predicate form. But always it must leave "the question of factual truth to each special science to determine in its own field and in its own appropriate way".

The mathematician Kurt Gödel, has shown that for formal systems to be true, they must necessarily be incomplete since they contain propositions not definable within that system. Were they all completely definable within, the system would be a tautology, without reference to external reality. The complete formalization or logicalization of any science would make that science unreal and impossible. This applies to logical systems as well. They must be relevant to experience, empirically open and flexible. Logic unconnected to reality is meaningless. That is why a theology which ignores the empirical referents of theological statements and considers them only in their syntactical propositional relations, destroys the very thing which distinguishes theological
statements from all others and breaks syntactical order from its semantic-ontological footage. 311

This means that theology uses a repentant logic, in accord with and subordinate to the material content of theology. 312 The only necessity with which theology works is not logical necessity, but the a posteriori necessity that God can only relate with man as he has done in his love and judgement in Jesus Christ. 313 One of the recurring themes of Athanasius' De Incarnatione is that "apart from the Logos of God there is no truly logical thinking". 314 Theo-logic orders its thought forms according to Jesus Christ, the Eternal, concretely real "Logic" of God enfleshed in the contingencies and particularities of history. 315 Therefore dogmatics or systematic theology does not so much work out into a formal logical deductive system our knowledge of God, but presents in an integrated and coherent manner, the content of the Word of God and its epistemological relevance for all science and history. 316

Torrance interprets Calvin not as the creator of a severely logical theology, but as the faithful, thorough pioneer of a Christological analogy. 317 However, at times Calvin's ambiguous statements concerning election, reprobation and limited atonement (e.g., Christ died for all but only prays for the elect) reflects less a Christological analogy than a mind torn between logical deductive habits and Christological integration. 318

In this regard, Samuel Taylor Coleridge, the English poet and theologian, sought to restrict logic by means of his hermeneutical rule that a statement is "true to all intents and purposes", not to any logical deduction one cared to squeeze out. 319 This latter way gave the kind of legitimacy of major points of doctrine to minor or all logical correlates. Any facts repugnant to those conclusions had to be distorted. 320 Coleridge justifies his limiting of logic by giving priority to man's practical reason and his moral and spiritual being over man's speculative reason and logical processes. Therefore genuine theological statements "may not like theoretical or speculative positions, be passed onward into all their possible
Thus, for example, Coleridge rejected the Augustinian interpretation of "no other name" which condemns to damnation all who are not baptized Christians except by explicit belief and baptism. Similarly, Lewis interprets Christ's words about Hell as intended to address our conscience and will, but not our intellectual curiosity. Earlier, Athanasius had seen that when theology uses logical-causal connections in an absolute way, it distortingly projects into God the tensions and contrarities of human life and analogies.

Though Coleridge used Kant's philosophical distinctions, he gave priority to the practical, non-formalizable reason as the epistemologically higher level which controls and interprets the lower, discursive reason. In this sense, Coleridge foreshadows Polanyi's recent development of the same insight. Coleridge, of course, could not foresee that logical formalization was to be severely limited in physical sciences as well through the discovery of quantum and relativity physics. Lewis' thinking was undoubtedly influenced by Coleridge, both in the priority given to the practical reason over the discursive, and in his limited view of how logic in science would come to be relativised.

For Torrance, the primary thought-being connection which theology employs is not the abstract, non-empirical connection of abstract logic, but an organic connection, which inheres within its object, namely, "a connection in the Holy Spirit". Logical connections must be integrated into the actual knowledge of God which demands a "conceptual reform" in our mode and manner of argumentation.

If we had to depend upon a logical relation between the death of Christ and the forgiveness of our sins, we would be unforgiven whether we believe or not. The true empirical relation between God and man is "a free contingent relation"; it is the personal relation of God's loving grace to men. To formalize the grace of God into abstract logical-causal categories leads to the twin errors of limited atonement and universalism.

Theology must forego the tendency to transform the inherent Holy Spirit connection of theology into a formal
logical connection. By the renewing of our minds through Christ's vicarious life and death, all our modes of thinking are renewed and rehabilitated. The renewing work of the Holy Spirit gives a clarity and precision to theology which is not mechanistic and logical-formal, but relational and inherently intelligible. 328

Within science and theology, logic must now be seen as operational and relational and must allow the inherent rationalities of each scientia specialis to penetrate unshackled by a priori assumptions. This is the great epistemological lesson of which modern physics reminds all fields of science. 329

1. The Rise and Fall of Mechanistic Thinking

a. The Origins. The exaltation of mechanistic causality as the connecting link between thought and being, arose in modern science as a result of seeing the universe in terms of bodies in motion interacting externally and causally on one another. Though Medieval science also saw nature as a causally ordered system, its notion of motion was Aristotelian and its causes were 'final causes'. With Newton, nature's motion was Galilean and its causes were mathematical and mechanical principles. 330 The new causality became science's most highly prized mental tool. It reduced the chaos of contingent events to order by arranging events within a universal law which functioned impersonally and mechanically, allowing abstract mathematics to quantify the relations between phenomena. Galileo "abstracted from the natural cohesion of things" so-called primary qualities which are quantifiable. 331 Quantifiable qualities soon became the proper subject matter of science since they alone were open to mathematical representation and (apparently) open to complete formalization.

This change to mechanico-logical thinking reveals a deeper underlying change in man's intellectual yearnings. During the seventeenth and eighteenth centuries Christian theology grew "anxious to vindicate God's rationality" and opposed any kind of pantheism or panpsychism, as well as any notion of a magical or whimsical universe. 332 Following Athanasius, theologians had formerly understood the rationality of the universe on the basis of the incarnation and rethought
mind as disruption
The mechanical-causal mode of thinking became determinative in many other fields, including as we shall see, theology. In biology, Charles Darwin argued deductively that the development of all life was through a natural selection mechanism without recourse to any purpose. By his own admission, he had no empirical evidence that natural selection ever produced a new species.  

However, essential to cause-effect thinking is a necessary connection between empirical events, "and this I cannot find in any actual causal series", said David Hume. Hume challenged causality's objectivity by pointing out that a "necessary connection" can be neither observed nor experienced. Science can trace causality back only to mental habits or beliefs, but not to sense experience.

Kant's famous answer to Hume gave causality a mental necessity, but not an empirical, external necessity. That is the significance of his synthetic a priori doctrine. Kant salvaged Newton's now objectively questionable framework of absolute space and time by giving it a new objectifying framework as a universal and necessary form, not of the empirical world, but of the mind. Kant maintained science's mechanistic universe by transferring causality and absolute space and time from the mind of God which holds the world together, to the mind of man. The price Kant extracted by salvaging mechanistic science was the loss of an objective, rational order independent of our knowing it. An objectifying mode of thought replaced an objective mode; knowledge was limited to appearances which the mind constructs through a priori patterns.

Kant's idealist philosophy inaugurated a new and more severe strain of necessitarianism and determinism, because as unchangeable mental laws, the categories of understanding were not amenable to empirical alteration or verification. This prescriptive mental framework severely distorted and restricted empirical science's openness to the contingent world.

By the nineteenth century, science had reduced nature at all levels to the same forces and described all reality.
decline of
Miracle in West.
for it penetrates far deeper to the inherent connections between thinking and reality than causality allows. At one point Planck struggled with the quantization of energy because its denial of mechanical causality seemed to imperil the rationality of nature. Yet by sheer empirical openness and faith in the rationality of the universe, he had the courage to believe that the end of causality did not imply the absence of ontological rationality. Indeed, a new glimpse into the intrinsic rationality of the universe had occurred.

When analyzing literary history, Lewis intentionally avoided causal explanations. If we ask, for example, what caused the change in sentiment about women in the Medieval age, Lewis refused to answer, that is, if by cause we seek wholly to account for and explain away any novelty. For many years philological criticism had been deeply influenced by a mechanical image transposed from science. It implied that a cause-effect explanation accounted for all changes in meaning and in language development. In contrast, Lewis suggested a mutual influence much more subtle and reciprocal, as between friends.

For Torrance, the rationality of the universe is multivariable in mode, though unitary in character. The limitless variety of form and pattern in nature makes empirical investigative science essential to discover nature's subtle character. If nature's patterns were uniform, isomorphic and homogeneous throughout, science could proceed through logical-deductive processes alone. And yet, the belief in the coherent and rational character of nature gives science the confidence to question nature in never-ending variety.

Whereas science formerly sought to reduce all events to causal connections in a rigidly mechanical universe, it now seeks to discover relations between things and events at different levels of complexity. The universe is not a flat-levelled and simple causal system, but a stratified structure, which science is beginning to understand as a harmonious hierarchy of relations. But certainly it is not reducible to connections all on the same level. As Heisenberg attests, the world is "a complicated tissue of events with connections of different kinds alternating or overlapping or combining".
b. The Impact of Logical-Mechanical Thinking on Theology, Art and Ethics. Following Galileo, science pictured the universe as consisting of bodies in motion which causally and externally act upon one another. Torrance argues that these qualities were selected and abstracted from the natural cohesion of things and dubbed 'primary qualities', because they were (apparently) open to complete mathematical representation and formalization.

For Newton, God inertially contains and regulates the universe as the absolute container and thereby causally conditions all things within and reduces them to a rigidly mechanical system. As self-regulating, the universe has no need for any adjusting activity on God's part. Hence Newton supported Arius. God as the immutable container of the world of space and time could no more become part of the universe than a bucket could become one of the pieces within it. God is so transcendently and absolutely related to the universe that he is deistically detached from it, immutable and impassible.

By the time of Newton, science's notion of God's relation to the world had come full circle. Earlier Medieval science had refused even to think of nature apart from God, and refused to understand nature out of its own contingent rationality. For Newtonians, nature was so self-regulating and self-contained, that they had politely banished God's activity from the world he (admittedly) created. Not only was the incarnation abandoned, but the role of the Holy Spirit in creation was seen to be unnecessary as well. As Coleridge remarked, deism taught man to view the God-world relationship as one of a building to its mason, which "leaves the idea of omnipresence a mere abstract notice in the state-room of our reason".

Nineteenth century science proceeded analytically and atomistically, and broke nature down into particles to explain nature in terms of the causal laws of physics and chemistry. This led to a determinist view of all life. A closed and mechanistic universe correlated admirably with an immutable and transcendent deity and produced a massive deism still so influential in the Western world.
This deistic disjunction between God and the world means that no real word from God can cross the gulf between God and the creature. Two results follow. First, the Biblical understanding of miracles degenerates into supernatural interferences in our world which infringe on nature's laws. This in turn led to explaining the incarnation as a symbol. Deism denies any incarnate interaction, cuts short all ontological referents in Biblical statements and leaves theology with acts of God explainable only as existential happenings, but not factual events in historical space and time. Secondly, statements with ontological referents are re-interpreted as the socio-religious self-understanding of that time. With no ontological referent in God-man statements and no space-time empirical correlates, the Bible becomes a "nose of wax" reflecting man's self-understanding. Wittgenstein, however, reminds us that "turning all statements into descriptions of my inner life" is solipsism, not theology.

Through the combination of Newton's dualism of a mechanical universe and Kant's epistemological dualism of noumenal and phenomenal, God was conceptually shut out of the empirical world. By an illegitimate transference of a model from one field to another, the static and necessary quality of Newton's mechanistic universe was imposed on to the notions of history. Historical investigation became modelled after the empirical-causal method of science. Natural causality replaced God's agency in history. A yawning gulf arose between the accidental truths of history and the eternal or necessary truths of reason (Lessing). This is the cultural backdrop to Rudolf Bultmann's demythologizing campaign. This schema undoubtedly influenced Bultmann to think away the empirical reality of the incarnation into existential events devoid of empirical, space and time correlates.

In the wake of quantum and relativity theory, the mechanistic universe of Newton is today a most interesting and valuable piece of scientific prolegomena, but no longer the primary or normative scientific model of the universe. Its obsolescence is a crushing blow to all the apologetical and anthropocentric theologies forged within its guidelines.
Yet, this is a great gain for theological progress. Mechanical concepts ruled out *ab initio* any living and dynamic interaction of God with the world. As with science, so with theology. The form of connections between God and the world eludes all attempts to contain them within a framework of causal and logical relations. For Torrance, the demise of the mechanical universe allows the basic doctrines of incarnation and resurrection to be thought out and formulated on their own proper ground without extraneous conditions unscientifically imposed under the absurd claim of a completely formalized model of the universe.

Torrance argues that there can be no scientific or philosophical justification for extrapolating into other fields (history and theology) a deterministic causality of the now outmoded Newtonian-Kantian epistemological framework. If the old mechanical problems within science are now discounted by physicists as artificial frameworks that create pseudo-problems, surely the same applies to certain theological problems including, and extending beyond, the incarnation and resurrection.

Here we should note the determinist understanding of God's sovereignty in regard to the doctrine of election and predestination. Originally the Reformers, particularly Calvin, emphasized the priority and initiative of grace for our knowledge of God. 'Pre' originally meant that the saving grace which redeems man is grounded in the inner, eternal life of God himself. Man does not place himself under grace by any thought or action, for he is there already.

Mechanistic pseudo-problems soon developed. Through combining Augustine's notion of irresistible grace with the mechanistic notions of Aristotelian and Newtonian causality, predestination came to be understood as 'preceding grace' that is, the causal antecedent to our salvation in time. Augustine's causal notions of grace depersonalized grace. Within a Newtonian framework wherein absolute mathematical time and space are clamped onto relative, phenomenal space and time, (causally and logically conditioning them), it was not
surprising that this kind of mechanical prius which was believed to occur in the temporal-spatial realm was read back into God's eternal election. This led some theologians to posit within God an irresistible decree which regulates and limits the incarnation and cross of Christ. From the original Hebraic notion of the intensely personal, dynamic grace of God, predestination was translated into a deterministic and logically mechanical relation. If causal thinking distorts the epistemology of the physical universe, it distorts much more seriously when applied to theology.

Lewis saw the Arminian-Calvinist controversy as arising from an illegitimate attempt to work out the divine-human relationship in causal terms. When he described his own conversion, Lewis recalls a point at which he was aware of holding something at bay. He felt he had a choice—to unbridle or to close up. He opened.

Yet it did not seem possible to do the opposite... Necessity may not be the opposite of freedom and perhaps a man is most free when, instead of producing motives, he could only say 'I am what I do'.

Coleridge strongly opposed the mechanistic determinism of the American theologian, Jonathan Edwards. Edwards, Coleridge claims, makes causality the fundamental law of reality—physical and spiritual, and in so doing, "swallows up all attributes of God in the one attribute of Infinite Power". Lewis shares this opposition to an over-emphasis on God's will power, for "those who begin by worshipping power soon worship evil". Similarly, Polanyi seeks to re-interpret freedom in a non-causal manner. "The freedom of the subjective person to do as he pleases is overruled by the freedom of the responsible person to act as he must."

Man's freedom in the sense of a response of integrity to God rests upon the transcendent freedom of God over all space and time. Creation ex nihilo, therefore, denies that necessity governs the universe. Rather, God gives his creation a limited, contingent freedom grounded in his own freedom. Christianity frees man and the cosmos from the tyranny of fate and all pagan determinisms which seek to impose a cyclic necessity within a self-sufficient and uncreated universe. Man's
contingent freedom, as man's contingent rationality, is grounded transcendentally in God. For too long, said Einstein, man's moral life has been retarded by the deterministic frames of philosophy and science, which by their causal and objectifying modes of thinking leave many people with little room for a deepening religious and ethical sense. Nor have the arts been left unblemished. The first revolt against scientific mechanism came with the Romantic movement. Post-Newtonian scientific man had disenchanted from his universe the teeming spirits and the cosmic dance and festival, and exchanged these for a cold machine of determinate and mathematical causality. The Romantic reaction broke out of this sterile laboratory, but only by relinquishing the status of objective reality for its aesthetic enjoyment and ethical meaning in personal relationships; it detached value and beauty from any objective, rational grounding in the universe and ultimately from the transcendent love and beauty of God. Only through a personification or projection of the inner life of man on to nature did Romantic man again enjoy nature's beauty as well as analyze her rationality. (Of course, in idealism, nature's rationality is also imposed upon nature--by man's autonomous reason.)

In a sense, the Romantic counter attack on science ended in a truce. It gave free reign to logical-mechanical objectivity in nature, and left values, theology and aesthetics to the security of the inner spiritual life of man's consciousness.

Romanticism may be content to project value, beauty and rationality from our creativity on to a deaf and dumb universe. Christianity, however, seeks a deeper, objective restoration of rational form in both natural and theological science. The Romantic revolt failed because it insufficiently challenged mechanism. It still operated within an anthropocentric framework.

Kant's radical distinction between noumenal and phenomenal was attractive to many theologians for similar reasons. Particularly it appeared to offer an escape for the spiritual and moral life from the "oppressive tyranny of omnicompetent causality". As a result, the objective, this-worldly and
human was related only tangentially to the non-objective, transcendental and divine, with no possibility of interaction between God and man. Thus all historical statements about God's interaction with man (incarnation, atonement) were re-interpreted as this-worldly objectifications mythologically projected into God.\footnote{390}

As Einstein noted, this malaise is evidenced in modern man's moral and personal life as well. Modern industrial society often hears the chilling suggestion that life is degenerating into machines. When the functionalist-atheist Max Bense suggests as a remedy that we \textit{programme} beauty and precise pleasure, he only reflects the desperately dehumanizing factors at work in the intellectual and philosophical life of a technological culture.\footnote{391}

2. Determinism: The Quantum-Relativity Debate

As we have seen, a science which sees nature's rationality as a system of logical-causal connections inertially imposed by a detached and immutable God leads to a universe of necessity and determinism.\footnote{392} All logical-causal systems think away the radical contingency of the universe upon God and thereby identify rationality with logical necessity. This leads science back into a non-empirical rationalism. Though the older form of a closed mechanistic universe of cause and effect has been overthrown by relativity, determinism has emerged in a new form.

Quantum theory asserts that we cannot get behind the observer and his statistical account of probabilities to describe an objective order. In measuring positions or momenta of atoms, we necessarily exclude the other. Both can be accounted for only in a statistical approach of probabilities. Niels Bohr therefore concluded that there is an essential limitation in our description of nature. All observation interferes with the course of phenomena. Einstein was never satisfied with this. He wanted to go beyond probabilities to an actual description of reality. But when he asserted that 'God does not play dice', he was accused of determinism by his colleagues.\footnote{393}

Einstein believed the acquiesence of quantum theory
implied a lack of reality and real coherence independent of the subject. In effect, it was a return to Kant's *a priori* assumption of form imposed on phenomena. Einstein felt it was science's duty to penetrate into the inner relations of quantum realities and describe their dynamic structure. To stop at probability laws is a mere statistical resolution, which fails to uncover any objective order in contingent events and relations. It amounts to imposing a black box on their intrinsic connections.

Einstein's search for a direct description of reality is a realist position, not a determinist one. Einstein believed a real, external order exists in the world which we can miraculously apprehend. This does not imply a necessitarian order of rigid, causally necessary connections. By the phrase 'God does not play dice' Einstein expressed his profound belief in the regularity of nature. To reject random chance in favour of an objective but dynamic relatedness (as in field theory) inherent in quanta was not determinist, but realist. As Torrance puts it,

The Kantian notion of the objectifying activity of the reason is a renunciation of genuinely objective operations, and it was that relic of Kantian subjectivity that Einstein detected and repudiated in the Copenhagen and Göttingen forms of quantum theory.

It is quantum theory's statistical approach, not Einstein's relativity, which leads to determinism. Quantum theory operates with two distinct concepts of matter and field. When it assumes the two are continuously distributed for the sake of statistical understanding, it thereby operates within the old mechanical notions. 'Indeterminacy' can only be understood within the old framework of determinacy.

Quantum theory's implicit judgement that the universe is random and irrational for which man can only impose some statistical order also troubled Lewis. He found it almost impossible to believe scientists really meant that movements of individual units are in themselves random and lawless. Surely, thought Lewis, echoing Einstein, units of matter cannot be lawless in themselves, but only at present to us.
Since "it's the glory of science to progress", he believed that it would be sorted out and a governing principle found. This was Einstein's instinctive reaction to the contemporary forms of quantum theory.

To reject random chance is not to affirm determinism. A critical realism seeks to apprehend and describe realities themselves and not mere probabilities of occurrence. Einstein's vision of a continuous and dynamic relatedness inherent in reality, renders the chance-necessity dialectic irrelevant. For Torrance, the answer lies in seeing that there is a rationality without logical-causal necessity, a rationality of contingency which consists of a subtle cohesion of natural events and one way processes. The evolving and expanding universe demands of science more flexible and open forms of rational order, "which chance and necessity cannot begin to cope with".

3. Abstractions: Their Strengths and Weaknesses

As we have seen, Medieval science, Newtonian physics and positivism all allege that the rational components of knowledge are derived by means of logical inference from observation. We abstract theory by observing appearances. To abstract is to isolate the common quality by leaving out all the complex particulars in which it lies embedded. The resulting generalities and universals are creations of the mind; they are not real existences, but the workmanship of man. In such schemes, theory has an abstract and logical relation to being which we create from the raw data. Abstract concepts therefore exist only and wholly for the mind which conceives them. For Torrance, this eliminates the possibility that theory has an intrinsic relation to being, rather than an external, abstract relationship. (Of course, in the Thomist view, there is a real relation of abstract logical form to being which we are given based on a pre-ordained harmony. But this is not empirically grounded. Inference is an innate truth.)

Mathematics epitomizes the abstract concept. By the use of abstract mathematics Galileo created a new precision and clarity between our minds and the world. The discovery of abstract mathematical connections was crucial to the advance
of science. As a result of this achievement, science was
drawn to things amenable to measurement and calculation,
namely, shape, size, quantity and motion, and not taste,
colour, sounds and smell—Locke's secondary qualities.

Mathematics connects us to the empirical world. It
represents groups of connections in a coherent system of
concepts which are in turn represented by a mathematical
scheme. In effect, we isolate and idealize a group of con-
nections for the purpose of precision.

Another highly successful abstract mental process is
analysis, by which the whole is broken up into its constituent
parts for the sake of clarity and precision. Lewis defined
natural philosophy (science) as the product of abstraction
and analysis.

Lewis opposed any primary dependence upon the mental
activities of abstraction and analysis because he considered
them to be inherently inaccurate guides to reality. The reason?
Analysis, says Lewis, kills what it sees and sees only by
killing. "We murder to dissect." Analysis tempts us to
make distinctions in thought which are not empirically real
and hence, creates a bogus clarity.

Thus in poetic criticism, most analyses are cheap sub-
stitutes for an imaginative, participatory apprehension of the
poem. By focusing on very specific technical problems, ana-
lytical thinking easily avoids or ignores connections and
implications. For Lewis, the more concrete and vital the
poem, the more hopelessly complicated and misread it becomes
in analysis. One may with relative ease unravel a single
thread of a tapestry—an incident, a name, a motive, a doctrine
or principle one detects, extract it and proceed to interpret
the whole from that abstracted part. But this avoids the more
difficult and primary synthetic task of understanding the
whole picture from its many threads.

J. R. R. Tolkien, Lewis' friend and colleague, reminds
us that a picture is greater than and not explained by the
sum of its component threads. Here then is the fatal weak-
ness of the analytic method—to unravel a tapestry is not to
explain the weaving. Lewis borrows an analogy from Bergson to
explain the universe's rationality from a unified synthetic perspective. Men with mental limitations may regard a painting as made up of little coloured dots put together like a mosaic. By studying the brushwork of the painting through a microscope, they may sort these relations into certain regularities. But to conclude that any departure from these regularities is wrong or incoherent is to misunderstand. For what the little men painfully reconstructed from a million dots, the artist produced with a single, lightning quick brush-stroke, his eyes taking in the whole and his mind obeying laws of composition which observers who count dots have not seen and perhaps never will.418 This integrative paradigm more accurately reflects the rationality of God who heals and reorders nature through incarnation, atonement and resurrection. God's activity in Christ does not constitute a breach of order, but reveals the living rule and organic unity, whereby God works from his own point of view.

Analysis also can distort when it restructures its subject-matter by an unnatural abstract framework conceived (albeit brilliantly) by the interpreter who does not make the effort to discover in the whole its own organic structure, but instead dissects and reorders by unravelling one particular component.419 In its attempt to lay bare the essence of things, abstract and conceptual analysis often divests reality of its substance and can easily become a superficial reductionism.420 Nonetheless, abstract concepts are indispensable. Einstein testifies that the new clue which set him off toward relativity came "from an analysis of the most fundamental and primitive concepts".421 Analysis helps us avoid misunderstanding by forcing us to think more clearly in order to foster meaning. Lewis notes that at times we must go outside a work to read it properly. For example, we must leave the Medieval poem and look up the unknown words in a dictionary.422 Formal analysis, like its cousin, formal logic, enhances our intellectual powers "by performing otherwise impossible feats of deductive arguments."423 Like paper money, abstractions are more convenient than gold for exchange purposes.424 Of course, as the abstraction proceeds further afield from its
empirical base, it suffers semantic inflation.

Polanyi suggests that analysis functions best when it oscillates with seeing the whole. That is, through the rhythm of analysis and integration we move toward a deeper understanding of things, but always integration should pre-dominate. Analysis must always remain incomplete lest meaning be destroyed by overzealous formalization. Ultimately, analysis and integration are complementary. Polanyi and Lewis see the two as two different ways of regarding the same thing, namely looking at it and looking from it. If anything, Lewis more emphatically asserts that true analysis can only proceed properly from inside the concrete integrated experience.

The chief danger of the abstracting process is that it may dissolve out of our thought any empirical connection to nature and therefore it "lets actual change or motion slip through a mathematical mesh or system...". Mathematical generalizations rub away the differentiating features of the real world in order to create a highly abstract uniformity. But this resolves away contingency and leads to a determinist view of reality. This is the tendency of Greek and German idealist thinking: it imposes a pattern where there is none and obscures the inherent pattern which can be discerned only a posteriori by empirical observation and experimentation. This is Polanyi's cardinal charge against Kantian philosophy, that is, it imposes a bogus order without seeking a penetration into the interior structures of reality. Theoretical speculation is preferred over knowledge by experience.

Mechanical-causal frameworks lack a natural organic coherence with their subject matter; they are only an abstract, inferential construction. Fortunately, the collapse of classical mechanics has forced science to see that nature can only be understood out of its innate organization or dynamic field structures.

Following Maxwell, Einstein challenged the external, idealized mathematics and sought an embodied mathematics, that is, a geometry integrated with natural objects. By means of his four-dimensional geometry, Einstein found a way to fuse
together the logical-formal aspect and the intuitive content of mathematics. 432

Einstein demonstrated that even abstract mathematics is most precise when it has an embodied empirical connection to reality. Four-dimensional geometry does not abstract away the empirical, contingent and particular, but is attached and correlated with it. The implications demand of science a drastic change of first principles and method. 433 Torrance has in mind the essential unity of form and being, substance and structure which inheres in the universe and hence, an open a posteriori scientific inquiry.

At this point, Lewis differs from Torrance. He failed to rethink science radically in the wake of relativity and retains the nineteenth century notion of science, which primarily seeks prediction which abstracts from the uniqueness of events in order to predict 'abstracted identicals'. Scientific experiment reduces to a minimum all historical particularities and irrelevancies. 434 That is, for Lewis the abstractive, logical-causal process is science. Yet he was dissatisfied with this and was groping for a more intuitive and synthetic science. This is brought out by his positive comments about the anthroposophic experiments at the Goethe Institute. 435

Twentieth century science has broadened and deepened its own understanding of its nature and scope. The fundamental goal of science is not to predict, but to comprehend reality, says Einstein. He clearly realizes that mathematical precision and comprehension of reality is "attained only by the sacrifice of completeness". 436 Through its mathematical tools, science discovers only one quality of the real world. It does not exhaustively describe the real.

Post-relativity, science has begun to question certain misleading tendencies of abstractive procedure. For instance, though relativity theory legitimized Newton within a limited area, it saw that Newton created a great gulf between his abstract, impersonal objectivism and our ordinary experience. Torrance traces this gap to the dualism between primary and secondary qualities, subject and object, and finally, the artificial connection of absolute space and time which Newton
introduced to overcome these problems.\textsuperscript{437} In contrast, Einstein grounds scientific knowledge in patterns latent in the world (four-dimensional geometry) and thus connects the structure of scientific knowledge with our natural experience in an organic way with open field structures and fluid laws. And this in turn opens the way to study areas of heretofore heterogenous aspects of reality.\textsuperscript{438}

Above all else, Einstein saw that the abstracting process of science disengaged thinking from the inner form embedded in the field, a marvelous harmony which Leibnitz glimpsed. Thus science had omitted an essential part of the empirical world, namely, that part already fused with form. As a result, it lacked the appropriate conceptual form through which to grasp the object.\textsuperscript{439} The primary or synthetic mode of thinking seeks to connect things with other things and to think their interrelations, though never in an imposing or tormenting way.\textsuperscript{440} Hence, it is crucial that science determines correctly the specific mode or \textit{kind of connection} that truly describes the particular field it studies.

Because form and being are inherently fused together, integrative and not analytical thinking is the primary act in scientific discovery.\textsuperscript{441} Analysis may ignore the clues within the natural matrix in which they exist, in favour of their translation into prearranged logical-causal structures and criteria. Integration fuses clues. It does not deduce them.\textsuperscript{442}

Einstein admitted that mathematical precision arose only at the cost of completeness. This implies that mathematical precision is an abstraction of nature's inherent mathematical qualities from its coinherence with aesthetic and moral qualities. Einstein's abstractions differ from Newton's in that they are indwelt abstractions; modern physics now isolates and generalizes \textit{intuited} discoveries and no longer applies a regulative logical-causal framework on to nature. Torrance recognizes that following the intuitive free creations of fundamental physical concepts, science may, and indeed, must "connect up" by the abstractive deductive process, other ideas and connections in order to produce theoretic and logically coherent structures in nature.\textsuperscript{443} A similar
strength and weakness exists in Patristic theology's intuited penetrations into the grammar of the Gospel, which Torrance rightly sees as fundamental. They are, after all, abstractions, which considered apart from the concrete events of the life of Jesus, lose their relevance and validity. 444

4. Abstractions in Theology and Life

Theologians consistently struggle with the problem of imposing alien frameworks in theology. Many theological problems arise when artificial thought-forms are introduced to Christian faith, and encase theology in alien philosophical constructs. We have already noted how the Newtonian-Kantian a priori of space and time, a necessitarian framework, creates the cultural model which led to the de-historicizing and spiritualizing of Bultmann. There are many other instances we might mention. For example, Leo the Great transposed Peter's apostolic authority into the format of a pre-Christian Roman law with its structure of hereditary and legal succession. 445 Secondly, encasing the real presence of Christ in an Aristotelian concept of space as a receptable or container, led to the Latin-Lutheran-Reformed intransigence regarding an ecumenical eucharistic agreement. 446

We have seen that an embodied mathematics gives us a clear grasp of reality—at the cost of completeness. The incompleteness multiplies when we consider non-embodied mathematics such as Euclidean geometry or abstractions in literary criticism. To examine, to analyze without a living involvement in the literary context, is to take a red coal out of the fire to examine it. The coal fades to ash and dies. 447

For Lewis, abstractions dissect living concrete things in order to analyze. They are accepted by formal logic as true, to the extent that they embody timeless and universal laws. When we connect ideas to the laws of non-contradiction, we thereby cut off their connection in empirical reality. Such abstract ideas are only mechanical, and have no organic connection to empirical reality. "They are not living." 448 Not surprisingly, dead things are ugly to look at. But that does not mean living things are ugly too. As Reason tells John, a man cut open is not a man. "Is it surprising that
things should look strange if you see them as they are not?"449
If the man is not sewn up quickly, he will die. Only one who
seeks to heal and restore the natural form should ever desire
the transparent pictures which analytic dissection can give.

The abstracting process in theology has left many strange
sights of things as they are not. An early misunderstanding
occurred when the idea of grace was abstracted and detached
from God's activity in Jesus the Christ.450 Perhaps the most
towering abstraction of recent Biblical scholarship is the
so-called historical Jesus and the concomitant quest to dis-
cover it. Improper theoretical structures about Jesus are
built up by abstracting our favourite ingredients out of the
living New Testament empirical reality of Christ 'clothed with
his Gospel' (Calvin) and presenting them as the real, 'histor-
ical Jesus'. They amount to abstracted qualities reconstructed
in a personified form.451 Where the New Testament speaks of
Jesus concretely as the God-man, personified abstractions speak
of Jesus as merely human or merely spiritual.452 Similarly,
when the resurrection is no longer interrelated with the in-
carnation, Christ becomes interpreted docetically and lacks
concrete, empirical and historical authenticity.

Lewis asserts (through Screwtape) that such critical
reconstructions
direct men's devotion to something which does not
exist, for each 'historical Jesus' is unhistorical.
...Each new historical Jesus...is got by suppression
at one point and exaggeration at another...and
guessing....Such a program distracts men from who
He is and what He did.453

The abstracting process drives a deep wedge between the noetic
and ontic reality. Abstractions, that is, "detaching the great
features of Revelation from the living context of Scripture, do
by that very act destroy their life and purpose".454 This
destroy the spiritual life, for it replaces the real and
crude presence of Christ in Word, prayer and sacrament with
a shadowy, historical reconstruction.

It is not surprising to find that creeds which were
written when the process of logical abstraction was very pop-
ular, confess a God lacking "the kindness, humanity, familiarity
of the God of the Reformation", and tend towards impersonality and harshness. Lewis reminds us that it was only the Greeks who were primarily analytical. The Hebrews experienced worship as God's presence and beauty, drawing no distinction or dualism. The Hebraic joyful unity inhabits a different world from the divorce between knowing Christ's benefits and knowing Christ, which characterizes Bultmann's approach.

In the modern hermeneutics discussion, the wholesale appropriation of linguistic analytical methodology is seen when theological statements are treated merely as logical propositions to analyze and interpret in their syntactical interrelations detached from the acts of God. Such logical-syntactic relations analyzed in abstracto are valid only in an absolute, closed and inert system. Yet theology claims to be about the living God. What results is a mutilation of concrete and intuitive knowledge of the real for an abstractive formal knowledge of the ideal. In contrast, Christian theology seeks to look and hear through its theological statements to God's personal and divine being. For theology is personal encounter and rational cognition in a living unity.

The abstracting of theology into logical sequences or the in vacuo analysis of logical-syntactic relations begs the question of the appropriateness of using logical-causal patterns or merely analytical techniques to refer precisely to the real world which theology investigates. In the light of four-dimensional geometry, science now questions any logical-mathematical system or symbolic structures which disregard any concern for the intuitive-empirical contact with the actual world. This is artificial thinking based only in the mind, not empirically grounded in reality. In the wake of four-dimensional geometry, theology must learn to take seriously in its coherent statements the space-time referents of the cross and the empty tomb.

Torrance argues that our logical systems must have a natural and authentic co-ordination with existence. Abstract, causal relations grant us only an artificial comprehension which evaporates its own ontological reasons embedded within concrete reality. Form should cohere with matter. Science
seeks to discover natural form and integrate its abstract concepts with the concrete reality into which it inquires. The failure to do this leads to a loss of meaning. Too often in science, abstraction for the practical advantage of quantification has led to a logical manipulation of the empirical, with the empirical increasingly having less control over our conceptual forms. As a result, we progressively alienate ourselves from reality by our technological and pragmatic concepts. This is the heritage of an abstractive and positivistic science. To think away all empirical, inherent rationality distorts reality. In his study of mythology, Lewis came to the point where he had amassed a hoard of technical knowledge, but enjoyed the myths themselves very little.462 Something had gone fundamentally wrong. To think away the concrete activity of God in space and time, for the sake of analysis and systematizing, distorts the New Testament and leads to scepticism without joy.

The implicit dualism of abstractive thinking has created serious epistemological problems for theology. It led Aquinas to posit a knowledge of God in general, apart from knowledge of God as he is in himself as Father, Son and Spirit. That is, he abstracted the existence of God from his activity in creation and redemption. This divorces knowing God in a general philosophical way from knowing God in his concrete and saving activity in atonement and reconciliation.463 But to know God in his being apart from his acts is to know an impersonal God. The lure of the impersonal in theology is bound up closely to abstractive thinking.

Historically, abstract and impersonal notions of God arose when Europe, influenced by the universalizing and abstracting tendencies of its science, encountered other religions through increased travel. Its preference for the Greek abstraction of the universal out of the particular led many to interpret Christianity as the local version of a timeless and eternal truth which pagan myths reflect as well. Of course, local, particular miracles and personal revelation needed pruning.464 The result was deistic, liberal Protestantism with its rationalizing, abstractive movement and the triumph of
principles, generalities and abstract concepts over the particularities and concreteness of God the Father's self-disclosure in Jesus of Nazareth.

Within this cultural context, Hegel's philosophical idealism arose and grew to subsume all experience into a mentally imposed (hence abstract) conceptual synthesis. Owen Barfield's Anthroposophy stems from this movement. Lewis once criticized Barfield for being so abstract that he tended to intoxicate himself and others with words. He called this Barfield's balloon, for it was more like being snatched up in a balloon than going to heaven.465

The impact of idealism on European intellectual history has been quite damaging. Many post-Newtonians, Spinozans and pantheists have rejected tout court the knowledge of the personal, Biblical God and have rested contentedly with an exclusive conceptual interest in the functioning of God within variations on the deistic rational comprehensive system. Such a God is little more than "the attributes of space with a notion of power...a fate, in short, not a Moral Creator", and by no means the Father of Jesus Christ.466

Abstract thinking tends towards an impersonal and functional understanding of science and life as well as theology. We already noted how the abstractive transference of Biblical statements into logical-causal relationships creates a deterministic and impersonal understanding of election.467 The impersonalism which abstractions engender has been examined by Eric Kahler, who argues that the functional and technological terms we use to interpret life and culture cut off our communication and thinking from anything distinctively human.468 When in linguistic analysis, this procedure is let loose on language, we decompose language into its components, its phonic and graphic adjuncts. An abstractive parallel occurs in modern music when a John Cage seeks to give up everything that belongs to humanity and only talk of sounds. It ends in silence and the void. Syntax without semantics, form without content, abstraction without integration, theory without empirical grounding, reason without faith, all lead to the meaningless, depersonalization of life.469
The abstractive habit is a sin of the flesh as well as the intellect and does moral damage as well as foster intellectual and aesthetic sterility. Lewis interpreted lust as a personal mode of abstraction, akin to an abstract logic, for it singles out and abstracts sexual pleasure from its living coherence with commitment and love for a concrete, personal agent. Lust "seeks for some purely sexual, hence purely imaginary, conjunction of an impossible maleness with an impossible femaleness." 470

Undoubtedly the modern abstraction which we have personified and exalted above all others is—the self, or in other words, our personality and its assorted quests: the quest for self-knowledge, self-understanding, and self-realization. The self is the metaphysics of a culture which transfers transcendence from heaven to earth, from God to man. We regard the Human Self as the most real thing of all in itself, abstracted from right and wrong, personal relationships, humanity and God. 471 For Lewis, obsession with this abstraction, this self-preoccupation, is the ultimate metaphor for Hell; Hell is the inability to escape from self-will and self-understanding. 472

In summary, the abstracting process involves the analytical disjunction of pre-existing, mechanical-logical connections together with an abstraction from the inner organization in the field of study. This disintegrates natural form and replaces it with an unnatural form arising from this "artificial isomorphic framework of thought". 473

There is an alternative to the abstraction of concepts and their measurement against some self-chosen general principles of human reason. One may seek to integrate thinking in conformity to the nature of the object. That, argues Torrance, is the fundamental realist scientific procedure for all knowledge—the conformity of our concepts to the object. 474 Only in this way can an objective knowledge grounded in the ontological depth of things occur. 475 Lewis believed that science is composed of external, logical-inferential connections which he held to be valid, based on a doctrine of a harmony between logic and being. 476 Torrance believes science is based on interior,
intuitive rational relations and rejects the \textit{a priori}, non-
empirical harmony between logic and being. Einstein in
particular has shown that this logical-causal framework veils
our grasp of the real in all of its rational-ontological depth.

Once again, the epistemological value of relativity
theory emerges. By delimiting the range and utility of the
analytical method of classical physics, which created an atom-
istic understanding of nature, connected only by external
mechanical modes of thought, it challenges science's neglect
of "immanent patterns of dynamic connectivity", and classical
science's mechanistic universe which it created by extrapola-
ting the abstractive procedure into philosophy and cosmology.\textsuperscript{477}
The analytic, abstractive method has been found to be empir-
ically imprecise and ultimately misleading. But with Faraday's
discovery of the metrical field and a new comprehension of
the unity of form inhering within the being of the real world
(contingent intelligibility) in a "continuous indivisible
field of relations", a new Copernican revolution has occurred
in science. The emphasis has shifted from analysis to inte-
gration, from external and rigidly mechanistic connections to
inherent and dynamic structures.\textsuperscript{478} This can only spell a new
and hopeful day for all sciences and not the least for theology.

\textsuperscript{1}Herbert Butterfield, \textit{The Origins of Modern Science 1300-

\textsuperscript{2}Stanley L. Jaki, \textit{The Road of Science and the Ways to God},
The Gifford Lectures for 1974-75 and 1975-76, Edinburgh: Scot-

\textsuperscript{3}R. Hooykaas, \textit{Religion and the Rise of Modern Science},

\textsuperscript{4}Jaki agrees, Jaki, p. 89.

\textsuperscript{5}Butterfield, p. 70.

\textsuperscript{6}Torrance was following his venerated colleague, John
Baillie, who had begun to ask probing questions of the philo-
sophical and cultural matrix which gave birth to modern science.
cf. T. F. Torrance, \textit{Kingdom and Church, A Study in the Theology


8. Ibid., pp. 268-269.

9. Ibid., p. 63.


14. T. F. Torrance, Space, Time and Resurrection, Grand Rapids: Wm. Eerdmans Publishing Co., 1976, p. 8. As Lewis puts it, the theology behind Medieval science "is, however, not that of the Bible, the Fathers, or the Councils, but that of Aristotle". C. S. Lewis, Studies in Medieval and Renaissance Literature, collected by Walter Hooper, Cambridge: Cambridge University Press, 1966, p. 50. Elsewhere Lewis complains that Christians "unwisely" adopted too much of the earlier Greek cosmology. The lingering influence of ancient wisdom, whether Cicero's geographical speculations (which perhaps discouraged exploration for centuries) or the negative attitude to the body implicit in the doctrine of the immortality of the soul, was "an unfortunate legacy for Medieval Christendom". C. S. Lewis, The Discarded Image, An Introduction to Medieval and Renaissance Literature, Cambridge: Cambridge University Press, 1971 (1964), p. 27. Lewis himself confessed his own lifelong delight in many aspects of the older cosmologies, particularly Medieval Platonism. In Out of the Silent Planet, he makes special use of the Medieval notion that the universe is full
of non-human, but rational life. C. S. Lewis, Out of the Silent Planet, New York: The MacMillan Company, 1971, (1938), p. 153. But he admits that the Medieval model is not true. The Discarded Image, p. 216. This did not prevent him from making free imaginative use of these cosmologies in his novels, for "to imagine what God might have done does not seem to be wrong". C. S. Lewis, Letters of C. S. Lewis, ed. by Warren Lewis, New York: Harcourt, Brace and World, Inc., 1966, p. 261, 298. Lewis believed in angels because of Scripture; he only imagined as a "supposal" that they are related to Pagan gods as in his Perelandra. Letters of C. S. Lewis, p. 282.

15 Earlier, Athanasius had grasped that creation did not eternally exist in God's mind, but had an absolute beginning in God's free act of creation. This became overlaid in Medieval thought. T. F. Torrance, The Ground and Grammar of Theology, Belfast: Christian Journals Limited, 1980, p. 66.


17 Theological Science, p. 70.


19 Hooykaas, p. 15.


21 Hooykaas, p. 15.


24 Divine and Contingent Order, p. 31. Here lies the root difference between the Roman Catholic doctrine of analogia entis with its logical link between God and man, and the preference of Karl Barth for analogia fidei, the link being the gracious love of God. That is, the link between God and man is the creative Logos, not logic. cf. Theological Science, pp. 59-60.

25 Kingdom and Church, p. 2. As Jaki puts it, only when an entire culture shared very specific doctrines about the
universe as created by a universal, absolute and personal intelligence, did science grow. Jaki, p. 33. Eric Mascall has clearly seen the importance of contingency for science and argues that Medieval taught contingency too, but their emphasis was on the rationality of the world, theory not experiment. E. L. Mascall, Christian Theology and Natural Science, London: Archon Books, 1965, (being the Bampton Lectures, 1956), p. 98. But Torrance argues that even Medieval contingency was governed by a concept of Aristotelian potentiality. Ultimately, contingent events could only be known in so far as they contained elements of necessity. Theological Science, pp. 61-62. Torrance refers to Aquinas' Summa Theologiae I. a, q. 86 A. 3.

26 Theology in Reconstruction, p. 273.


29 Jaki, p. 59. Torrance would defend Bacon from this charge on the grounds that for Bacon knowledge is power only in so far as the inquirer approaches nature humbly as a servant or child. Theological Science, p. 71.

30 Such a science offers itself as a new credo, as Ernest Becker points out, which tries to absorb transcendence into itself. But it can do this only by ignoring the boundary conditions of life and denying the fear and mystery of life and death. Ernest Becker, The Denial of Death, New York: The MacMillan Company, 1973, p. 284.

31 Following Torrance, I will not push this into a logical argument. cf. Divine and Contingent Order, pp. 45-46.


33 Theology in Reconstruction, p. 67.
34 Butterfield, p. 70.

Ibid., p. 158. Jaki points out that laws of nature were thought of as in harmony with God her Creator. While this was very clear to Copernicus, a Christian Platonist, it was not to Plato.

The Road of Science and the Ways to God, p. 246.

Butterfield, pp. 178-179.

Jaki, Theological Aspects of Creative Science, p. 150.

Ibid.

Hooykaas, p. 26. Hooykaas notes that most scientists of the nineteenth and twentieth centuries are unconscious of the fact that the metaphysical foundations of their discipline stem from the Biblical concept of God and creation. One may without logical contradiction argue that science could have arisen differently, but historically, it is clear that science arose from the confrontation of Greek culture and Biblical religion. Hooykaas, p. 161.

The Road of Science and the Ways to God, p. 18.

In other contexts Jaki acknowledges and even strongly asserts that the awakening of modern science came about as the result of an "outburst of Christian faith" sparked by the Reformation, the key being "that powerful reassertation of the contingency of man and world as proclaimed through the history of salvation". The Road of Science and the Ways to God, p. 89.

The Ground and Grammar of Theology, p. 7.


Christian Theology and Scientific Culture, p. 20.

T. F. Torrance, The Integration of Form in Natural and Theological Science, Science, Medicine and Man, 1, 1973, p. 152. (Hereinafter referred to as The Integration of Form.)

Theology in Reconstruction, p. 276.

The Ground and Grammar of Theology, p. 113.


54. *God and Rationality*, p. 89.


57. *The Integration of Form*, p. 151.

58. Ibid.

59. Ibid.

60. Ibid.

61. *God and Rationality*, p. 103.

62. *The Integration of Form*, p. 152.

63. cf. Chapter VII. C. 1. Levels of Rationality.

64. *The Integration of Form*, p. 152.

65. This was then adopted by Aquinas and incorporated into classical Medieval thought. Newtonian physics accepted this absolute disjunction between subject and object from the Cartesian model. *Theological Science*, p. 306. *Theology in Reconstruction*, p. 181.


67. *Theological Science*, p. 93. This will be discussed in detail later.


70. *Theology in Reconstruction*, p. 71.

71. *Theological Science*, p. 306. This abolition of the subject from nineteenth century science was protested largely

72 The Integration of Form, p. 150.
73 Ibid., p. 167. cf. also The Ground and Grammar of Theology, pp. 3-4, where Torrance refers to Sir Bernard Lovell's discussion of the emergence of conscious mind as a necessary part of the universe, thus uniting man's and the universe's rationality in a startling way.

74 Christian Theology and Scientific Culture, p. 62. Also T. F. Torrance, The Place of Michael Polanyi in the Modern Philosophy of Science, Ethics in Science and Medicine, 7 (1) 1980, p. 72. (Hereinafter referred to as The Place of Polanyi.)
75 The Integration of Form, p. 167.
76 Ibid., p. 155.
77 Albert Einstein, Out of My Later Years, London: Thames and Hudson, 1950, p. 64.
79 The World as I See It, p. 165.
80 Northrup, Natural Science and the Critical Philosophy of Kant, p. 61.
81 The Place of Polanyi, p. 69. Bohr tried to understand not reality, but only our understanding of reality; for science knows only appearances. The Road of Science and the Ways to God, p. 212. For Bohr, one could only reason about aspects of reality, never reality itself, which was inherently irrational. His complementarity principle is designed to hold these together. This, says Jaki, is what provoked Einstein's reply, "God does not play dice". Ibid., pp. 202-207. Here we should note Einstein's free use of 'description' as a legitimate and necessary part of science. Torrance seeks to eliminate this term for it implies a too visual mode of thinking. cf. Chapter IV.
82 Heisenberg, p. 81.
83 Theological Science, p. xi. Owen Barfield (Lewis' friend), argues that modern science deals only with abstractions


85 The Ground and Grammar of Theology, p. 86. Jaki vigorously attacks Hume, pointing out that Hume's radical separation between sense and intellect led him to conclude in his own words "We never really advance a step beyond ourselves". quoted in The Road of Science and the Ways to God, p. 109. Nevertheless, Hume did make science face the fact that it is ultimately dependent not on logic, but on certain axiomatic beliefs, e.g., the rationality of the external world.


87 The Road of Science and the Ways to God, p. 56.


89 Ibid.

90 Ibid., p. 25.

91 Brown, pp. 186, 188.


93 Kingdom and Church, p. 5.


96 God in the Dock, p. 277.

97 Christian Reflections, p. 64.

98 Ibid.

99 The Ground and Grammar of Theology, p. 82.

100 God in the Dock, p. 46. 

102 Miracles, p. 90. This is a Thomistic objectifying realism as opposed to a Kantian objectifying idealism.


104 Miracles, p. 46.


107 This conviction, that man exists in a natural cognitive unity with nature is embodied in Thomas' five ways, argues Jaki. The Road to Science and the Ways to God, p. 37. Jaki's testimony confirms Torrance's point about the pre-established harmony between logic and being in Thomistic theology.

108 The Ground and Grammar of Theology, p. 82.

109 quoted in Theological Science, p. 74 note, from H. D. Lewis, Our Experience of God, p. 41. The belief in a logical bridge between being and thought also led to the recasting of Anselm's argument into logical form, "making it dependent on a logical-necessary relation between our idea of God and his reality, which was bound to fail but which reveals the weakness of the whole enterprise in that form". The Ground and Grammar of Theology, p. 80.


111 Butterfield, p. 170.

112 The Road of Science and the Ways to God, p. 382. cf. The Ground and Grammar of Theology, p. 80.

113 Studies in Medieval and Renaissance Literature, p. 42.


115 Theology in Reconstruction, p. 64.

116 Theological Science, p. 66.

117 Ibid., p. 191.

118 The Discarded Image, p. 216.


121. Ibid., p. 323.

122. Newton, Einstein and Scientific Theology, p. 240.

123. The Place of Polanyi, p. 64. Because the ontological connection in Medieval thought was a participation in the eternal reason of God, it broke off its empirical realism.


126. Out of My Later Years, p. 72.

127. Ibid., p. 73.

128. Ibid., p. 78.

129. Heisenberg, p. 5. Again, it was a strength of Kant to grasp that causality was not a concept given by sense experience. Northrup, Natural Science and the Critical Philosophy of Kant, pp. 58, 60.

130. The Integration of Form, p. 145.


132. The World as I See It, p. 136. Also Out of My Later Years, p. 78.

133. Butterfield, p. 36. Ptolemy rejected the hypothesis of earth movement because it contradicted Aristotelian physics, p. 45.

134. Ibid., p. 15.

135. Ibid., p. 18.


137. Butterfield, p. 5.

138. The Discarded Image, p. 222.

139. The Problem of Pain, p. 134.
140 Einstein and Infeld, p. 178.


143 The Road of Science and the Ways to God, p. 66.


145 Hooykaas, p. 36.

146 Miracles, p. 94. cf. Karl Barth, who notes that sola ratione is not solitaria ratione even as Luther's sola fide has works flowing from it as a necessary consequence. Karl Barth, Anselm: Fides Quaerens Intellectum, trans. by Ian W. Robertson. London: SCM Press, 1960, p. 43-44.

147 The Discarded Image, p. 121.

148 God and Rationality, p. 90.

149 Ibid.


152 cf. Heisenberg, p. 90. Also The Road of Science and the Ways to God, p. 185. Lewis criticized stream of consciousness writings (e.g., James Joyce), as deliberate disorganization devised only by a highly artificial introspection. An unselective chaos of images and devices is not the essential characteristic of consciousness. "For consciousness is from the outset, selective and ceases when the selection ceases." C. S. Lewis, A Preface to Paradise Lost, New York: Oxford University Press, 1969, (1942), pp. 135-136.

153 The World as I See It, p. 126. Einstein adds, "Physicists often accuse epistemologists of not paying sufficient attention to this fact. Here...lies the root of the controversy carried on some years ago between Mach and Planck."

154 Ibid., p. 141.

155 quoted from Leibnitz's System e Nouveau in the unpublished philosophical and political science lectures of C. S. Lewis. The lectures were given during the Michaelmas term, 1924, in Oxford, and are in the possession of Walter Hooper. ms. p. 3.

It is interesting to notice Lewis' exposition and comments on Leibniz from his unpublished philosophy lectures. Lewis says for Leibnitz, the mind is so constructed that it can generate from its own resources, certain truths. Though no knowledge is prior to experience, not all knowledge is derived from experience. While experience gives us objects to know, it is our own resources that enable us to know them. Knowledge is a co-operation with things. ms. pp. 24-25. Unfortunately, Lewis' lectures do not continue on to discuss Kant. We do see that for Leibnitz, the pre-established harmony is a link of innate ideas with empirical reality.

The Integration of Form, p. 151. Jaki commends Newton for recognizing the human mind as the intellectual principle in closest and most creative contact with external reality, though he did not speculate on the nature of the mind's creativity. The Road of Science and the Ways to God, p. 86. Torrance points out that Newton wrongly assumed an abstract, logical deductive connection between the mind and the world.

Kant's Critique of Pure Reason, p. 147. (A 126.)

God and Rationality, p. 9.

Brown, p. 28.

This is one of the great stumbling blocks to a universal way of knowing which Pannenberg seeks and not, as he alleges, the primacy of faith in theological epistemology. Wolfhart Pannenberg, Theology and the Philosophy of Science, trans. by Francis McDonagh, Philadelphia: The Westminster Press, 1976, pp. 273ff.


Here is the key to Einstein's rejection of Bohr's complementarity. He is a critical realist, not an instrumentalist and certainly not a determinist.

The Integration of Form, p. 162. cf. T. F. Torrance, Karl Barth: An Introduction to his Early Theology, 1910-1931, London: SCM Press, 1962, p. 107, where Torrance discusses Barth's rejection of theological prolegomena in the sense of an a priori epistemology. One must "take a preliminary leap into the midst of the doctrinal knowledge of God we have in the Church". (Henceforth referred to as Karl Barth: An Introduction.)

Torrance sees here a great contrast from Bacon's interpreting nature in humility as her servant, to Kant's treating nature as her judge. God and Rationality, p. 41. Newton, Einstein and Scientific Theology; p. 240. In Bacon's words, "Nature cannot be commanded except by being obeyed," quoted in Hooykaas, p. 65. This contextually becalms the problematical side of Bacon's 'knowledge is power'.

The Integration of Form, p. 160.
169 *The World as I See It*, p. 192.
170 *Ibid.*, pp. 180, 183. cf. *The Ground and Grammar of Theology*, p. 91. This is the key to Torrance's reconstruction of natural theology, in which Christology becomes a kind of four-dimensional theological geometry.

171 Locke was right to point out against innate ideas: 1) That universal assent is not equal to innate. 2) Such universal assent is not forthcoming. 3) In fact, particular truths come first. Unpublished philosophy lectures of C. S. Lewis, ms. p. 24. Leibnitz's restatement of innate ideas comes closer to the true issue, namely his distinction in kind between empirical and a priori truth and his argument that our minds are so constructed that we generate from our own resources certain ideas which happily harmonize with reality. Hence knowledge is a cooperation of our minds with things. (Lewis ms. pp. 24ff.) However, this does not establish clearly the epistemological priority of the ontic reality for disclosing the appropriate noetic forms. As Heisenberg notes, it is only when we "empiricize" an a priori that science progresses. Thus in Newtonian mechanics, gravitational forces were considered given, and not objects for further study. But in Faraday and Maxwell, the field of force itself became an object of investigation. As a result, physics learned how fields of force varied as functions of space and time. Heisenberg, p. 95.

173 The radical seriousness of the link between empirical and theoretical in the incarnation leads Torrance beyond Leibnitz's defense of innate ideas, grounding God's loving character in the revelation of his Son in space-time.

175 Newton, *Einstein and Scientific Theology*, p. 242. Also, *Theological Science*, p. 10. Heisenberg reinterprets Kant's a priori as having a practical value, with a limited applicability which may help us as lead-ins to a deeper knowledge (e.g., causality). Heisenberg, p. 92.

176 *The Integration of Form*, p. 149.

178 *God and Rationality*, p. 100.
179 *The Integration of Form*, p. 165.
Butterfield, p. 59.

183. Theological Science, p. 93.

184. The World as I See It, p. 62.

185. The Place of Polanyi, p. 80. cf. Theology in Reconciliation, p. 264, where Athanasius is singled out for his thorough openness and penetration through his object-informed axioms. This new empirically flexible understanding of objectivity lies behind S. M. Thompson's criticism of Kant: "If we are willing to abandon any claim of certainty with respect to specific items of scientific knowledge, the separation of the phenomenal and the real no longer will be necessary". S. M. Thompson, The Doctrine of Objectivity in Locke, Hume and Kant, The Heritage of Kant, p. 83.


187. Theology in Reconciliation, p. 74.

188. The Integration of Form, p. 147.

189. The World as I See It, p. 64.


191. Christian Theology and Scientific Culture, p. 124. Torrance calls this 'justification by reality alone'. Radhakrishnan has not taken with sufficient seriousness the empirical control in Judaeo-Christian, non-dualist thinking.


193. Theology in Reconstruction, p. 262.


195. The Ground and Grammar of Theology, p. 73.

196. The Integration of Form, p. 151. cf. the naïve realism of Bertrand Russell when he discusses the coherence and correspondence theories of truth: "What makes a belief true is a fact, and this fact does not...in any way involve the mind of the

197 God and Rationality, p. 42.

198 The Integration of Form, p. 150.

199 The Place of Polanyi, p. 64.

200 God and Rationality, p. 91.


202 The Integration of Form, p. 163.

203 Divine and Contingent Order, pp. 15-16.

204 The School of Faith, p. xlv. cf. Theology in Reconciliation, p. 126.

205 Theological Science, p. 10. However, Torrance does commend Thomas for refusing to separate form and matter, soul and body, letter and spirit. Hermeneutics According to Aquinas, pp. 260-262.

206 Newton, Einstein and Scientific Theology, p. 247. Torrance highly commends Barth for his attempt to overcome both Roman Catholic and Protestant dualisms by integrating ontic and dynamic, form and being, cf. the elderly Barth's confession, 'In theology the terms 'form' and 'content' have no place, for they are philosophical distinctions. I am sorry I ever used them'. Karl Barth, Karl Barth's Table Talk, recorded and ed. by John Godsey, Scottish Journal of Theology Occasional Papers, no. 10, London: Oliver and Boyd, 1963, pp. 173-174.


209 Theology in Reconciliation, p. 61.

210 The World as I See It, p. 78. In regard to the issue of form, when we come to 'theology as art', I will discuss the propriety of art as a mode of Gospel proclamation as well as a paradigm for the theological enterprise itself. (Chapter VIII.)
211 Newton, Einstein and Scientific Theology, p. 247.


213 The Integration of Form, 152.

214 Out of My Later Years, p. 61.

215 Theology in Reconciliation, p. 137.

216 The Road of Science and the Ways to God, p. 348. The Ground and Grammar of Theology, p. 127.

217 Kant's Critique of Pure Reason, p. 668. (A856).

218 The Ground and Grammar of Theology, p. 73.

219 Einstein mentions Occam's razor as one of his presuppositions. "Simpler fundamental principles make a new theory preferable to the older..." Einstein and Infeld, p. 238.

220 The Integration of Form, p. 145.

221 The Place of Polanyi, p. 58.

222 The question for Torrance is then what is the connection between pure and applied, and can they really be so strongly differentiated?

223 Theology in Reconciliation, pp. 15-16.


228 The Integration of Form, p. 144.

229 That Hideous Strength, p. 203.

231 That Hideous Strength, p. 203. Even here, the book that epitomizes Lewis' dislike for scientism, depicts two untainted scientists, McPhee and Hingest, while the evil Belbury group are not scientists at all.

232 Miracles, p. 110.

233 Studies in Medieval and Renaissance Literature, p. 56.

234 English Literature in the 16th Century, p. 7.

235 The Abolition of Man, p. 48.

236 English Literature in the 16th Century, pp. 4-13.

237 Studies in Medieval and Renaissance Literature, p. 56.


239 English Literature in the 16th Century, pp. 13, 525. Bacon believed the magicians had noble aims, says Lewis, for man shall be raised to perform all things possible. p. 14.

240 Theological Science, p. 90. (Nov. Org. I. cxvi.) Hooykaas rejects Lewis' criticism of Bacon as Romantic disapproval, that Lewis condemns man's dominion over nature. Hooykaas, p. 72f. But Lewis is not so much critical of dominion as he is of the tyranny and plundering of resources in the name of dominion.


243 Ibid.


245 T. F. Torrance, Calvin's Doctrine of Man, London: Lutterworth, 1949, p. 66. (Torrance refers to III. XXIV. 5, II. XVII. 1.)
246 cf. William Perkins' Golden Chain, where God's eternal decrees are placed directly below God's essential nature and the second person of the Trinity is many chain links away. God's decree is seen as the cause of salvation. Christ is subsumed as the mechanism by which God works out his plan. See R. T. Kendall, Calvin and English Calvinism to 1649, Oxford: Oxford University Press, 1979.


248 In Kingdom and Church, pp. 1-2, the early Torrance speaks of contingent creation's dependence on God's will, but does not mention the creative Logos of God as he does later.

249 Miracles, p. 154.

250 Ibid.

251 The Place of Polanyi, p. 58.

252 Science, Faith and Society, pp. 70ff. That is, commitment is the responsible decision and submission to the compelling claims of what in good conscience I conceive to be true. cf. Personal Knowledge, p. 64. Similarly, Lewis finds that all forms of subjectivism give power philosophies of totalitarianism their golden opportunity. Christian Reflections, p. 72.

253 The Place of Polanyi, p. 59.

254 Personal Knowledge, pp. 64, 312.


256 The World as I See It, p. 30.

257 Out of My Later Years, p. 227.

258 quoted in The Road of Science and the Ways to God, p. 309.

259 The Road of Science and the Ways to God, p. 305.
260 Ibid., p. 399.
261 The Place of Polanyi, p. 85.
262 God and Rationality, p. 94.
263 Einstein and Infeld, p. 296. cf. The World as I See It, p. 27.
264 Christian Theology and Scientific Culture, p. 57.
265 quoted in Olson, pp. 86, 142, from William Hamilton's Discussions. cf. T. F. Torrance, Review of N. Kemp Smith, The Philosophy of David Hume, The British Weekly, May 15, 1941, p. 48. Smith interprets Hume's metaphysics as one determined by a basic decision of an existential character. Torrance agrees that such crucial decisions do not rest with reason as much as with feelings. As Hume puts it, "Reason is and ought only to be the slave of the passions". Ibid. Torrance thus approves Hume's inchoate insight that truth is fundamentally a form of being and is not a merely cerebral affair of logic. Lewis has no wish to defend Hume. He points out that Hume's rejection of miracles entails a rejection of rationality in nature, for both require beliefs which do not spring logically from experience. Miracles, p. 106.
266 The Road of Science and the Ways to God, p. 45.
267 Heisenberg, p. 73.
268 Pannenberg, pp. 265ff.
269 Ibid., p. 273.
270 God and Rationality, p. 196.
273 God in the Dock, p. 141.
274 Arthur James Balfour, Theism and Humanism, The Gifford Lectures, 1914, London: Hodder & Stoughton, 1915. Balfour explicitly claims his argument is "not bound together by a formal chain of inference" (p. 46). Balfour argues from meaning (value) to truth (design) (p. 274). Naturalism destroys value, not truth (p. 50). Because naturalism destroys value, design alone preserves value. Though earlier Balfour denies dependence on formal logic, he weaves inference into his thesis: "In the order of logic they base reason upon unreason. In the order of logic, they involve conclusions which discredit their own premises" (pp. 257ff). cf. Reardon, p. 316.
275 G. E. M. Anscombe, A Reply to Mr. C. S. Lewis' Argument that 'Naturalism' is Self-Refuting, Socratic Digest, no. 4.
276 Christian Theology and Scientific Culture, pp. 63-64.
277 Ibid., p. 61.
Lewis was well aware of the regulative role of interpretation or belief frameworks in assessing facts. However, in regards to the impact of scientific change on art, he was content to speak of 'models', and the various insights each contains based on its particular imaginative appeal and satisfaction. *The Discarded Image*, p. 221.

The Abolition of Man, p. 46.

Christian Theology and Scientific Culture, p. 57.


This facet of the new objectivity will be explored in Chapter V.

The World as I See It, p. 128.


Theology in Reconstruction, p. 268.

Theological Science, p. 76.

The Place of Polanyi, p. 84.


The World as I See It, p. 156.


Studies in Medieval and Renaissance Literature, p. 44. cf. English Literature in the 16th Century, p. 29. Lewis reckons that the 16th century was not, generally speaking, influenced by the new science. p. 4.

The World as I See It, p. 133.


Theology in Reconstruction, p. 64. In this regard, Torrance contrasts the clarifying, unempirical quaestio of Boethius, with Valla's *interrogatio*, which leads to new knowledge not inferable from the already known. Newton, Einstein and Scientific Theology, p. 237.

Theological Science, pp. 253-254.

299 Ibd., p. 272.
300 Ibd., p. 225.
301 Ibd., pp. 256, 346. cf. Theology in Reconstruction, p. 264.
303 English Literature in the 16th Century, p. 29.
304 Radhakrishnan, p. 105.
305 God in the Dock, p. 272.
306 The Personal Heresy, pp. 50ff.
307 "I can never resist a ludicrous piece of logic", he tells Greeves. C. S. Lewis, They Stand Together, The Letters of C. S. Lewis to Arthur Greeves (1914-1963), ed. by Walter Hooper, London: Wm. Collins and Sons Limited, 1979, p. 400. (Hereinafter referred to as They Stand Together.)
308 See J. R. Christopher, A Brief Study in Implic- disjunctive Syllogisms, New York C. S. Lewis Society, 2, (3), Jan. 71, p. 415. Christopher attempts to formalize Lewis into syllogisms and then points out that each argument fails. Hence Lewis' argument leads logically to agnosticism, not faith. But I have argued Lewis never intended to set up a formal-logical argument. Lewis' explicit intention is stated in Mere Christianity, pp. 38-39.
309 Theological Science, p. 247.
310 Ibd., p. 255.
312 Theological Science, p. 181.
313 Space, Time and Incarnation, p. 67.
314 T. F. Torrance, The Hermeneutics of St. Athanasius, Ekklesiastikos Pharos, 52, 1970, pp. 446-468; 53, 1971, pp. 133-149, p. 453. cf. the similar train of thought in Anselm: Fides Quaerens Intellectum, pp. 23-25, where Barth sees faith as rational because it is related to, conceived, acknowledged and affirmed by the 'word' of Christ. What is conceived by the Logos of God cannot be illogical.
315 Theological Science, p. 181.
316 Theology in Reconstruction, p. 129.
317 Conflict and Agreement, I, p. 92.

Aids to Reflection, pp. 120-121.

English Literature in the 16th Century, p. 446.

Aids to Reflection, p. 112.

The Problem of Pain, p. 119.

The Hermeneutics of St. Athanasius, p. 97.

The School of Faith, p. lxi.

The Ground and Grammar of Theology, p. 96.

Christian Theology and Scientific Culture, p. 131.

Ibid.


This respect for inner logical connections prevents us from simply transferring concepts attained in physics to other fields. The Integration of Form, p. 160, where Torrance refers to Stanley L. Jaki, The Relevance of Physics.

The Ground and Grammar of Theology, p. 69.

Christian Theology and Scientific Culture, p. 15.

Butterfield, p. 85.

Ibid., pp. 131-132.


Space, Time and Incarnation, p. 38.


Ibid., p. 9.

The Road of Science and the Ways to God, p. 282. Jaki seeks to discredit Darwin because his interpretation makes his own mind untrustworthy for it too ascended from apes. But this applies logical form to empirical events in the manner of Lewis' argument that naturalism is self-contradictory. It is better to say that Darwin's mechanism of natural selection has all the
problems that Newton's mechanical universe had, while lacking Newton's brilliant mathematical creativity and precision.

339 quoted in unpublished lectures of Lewis, ms. p. 41.

340 *Christian Theology and Scientific Culture*, p. 46.

341 *Divine and Contingent Order*, p. 16.

342 *Christian Theology and Scientific Culture*, pp. 18-20.

343 *The Ground and Grammar of Theology*, p. 72.

344 *Christian Theology and Scientific Culture*, p. 20.

345 cf. also *Divine and Contingent Order*, p. 16.

346 *Einstein and Infeld*, p. 53.

347 *God and Rationality*, p. 7.

348 *Heisenberg*, p. 88. As Heisenberg points out, on the basis of experience, "we know that a foregoing event as cause for the emission [of a particle] at a given time cannot be found". (p. 89).

349 *The Integration of Form*, p. 156.


352 *The Allegory of Love*, p. 11.


356 *Christian Theology and Scientific Culture*, p. 15.


358 It is important to contrast Newton's mechanistic God-world field relationship with Maxwell's relational understanding which seen in the light of the incarnation, is more transcendent and more intimate than Newton. God is neither a final factor in the conceptual structure of the universe, nor the Agent regulating a chain of efficient causes. See *Christian Theology and Scientific Culture*, p. 55.
Newton himself reckoned that a non-mechanical agency (God) was ultimately required to offer a sufficient reason for the world.

Biographia Literaria, p. 213.


Also cf. *Kingdom and Church*, p. 5.


382 The Allegory of Love, p. 188. cf. C. S. Lewis, Of Other Worlds, ed. by Walter Hooper, New York: Harcourt, Brace and World, 1966, p. 74, where Lewis criticizes Paley's ethics. In Reflections on the Psalms, p. 55, he fiercely rejects those who would suggest God could have easily willed us to hate him as to love him. "It would be better and less irreligious to believe in no God and to have no ethics than to have such an ethics and such a theology as this." God commands us to love him because love is rooted in his nature.


384 Lewis notes that astrology was the determinism of the Medieval and Renaissance age. But only a modified astrology was permissible for a Christian poet. He must leave some room for "free will". Studies in Medieval and Renaissance Literature, p. 91. In this light, Torrance regards Marxism as embedded in the obsolete foundations of the closed mechanistic universe. Science is now free at its foundations from this impersonal, mechanistic view. The hunger for spiritual realities will not go away by the efforts of technological or social reorganization. The Centrality of Christ, pp. 23-24. cf. also Divine and Contingent Order, p. 5.

385 Out of My Later Years, p. 18.

386 English Literature in the 16th Century, p. 4.

387 Christian Theology and Scientific Culture, pp. 124-126.

388 Following Lewis, I will argue that moral and aesthetic qualities inhere in creation, no less than rationality.

389 Christian Theology and Scientific Culture, p. 133.

390 Torrance sees a similar problem in Augustine's sacramental universe, especially the identification of rationality with the soul or final cause of the universe. It led to understanding God's acting in the world only indirectly by inducing a change from potentiality to actuality and thus a covert Aristotelian deism. The Ground and Grammar of Theology, p. 63. In our own day, culture continues to be dominated by functional and mechanical modes of thinking, which banish beauty and ethics from any objective inherence in reality. In art, the loss of
natural form has led to numerous non-radical reactions which ranged from pop art and spatial poetry to punk rock. Because they lack any natural, organic coherence, they remain frustrated attempts at aesthetic self-realization. Without any objective form and inherent beauty, the result is a courageous but overcompensating and hostile irrationality or glorification of ugliness. See Erich Kahler, The Disintegration of Form in the Arts, New York: George Braziller, 1968, pp. 81-82.


The Ground and Grammar of Theology, pp. 64, 143.


The Place of Polanyi, pp. 69-70.

Divine and Contingent Order, p. 47.

The Ground and Grammar of Theology, p. 112.

Heisenberg calls Einstein a "dogmatic realist". Heisenberg, p. 82.

The Ground and Grammar of Theology, p. 113.

Divine and Contingent Order, pp. 13ff. Torrance notes that quantum theory is changing and rethinking the question of the unity of field and matter.


Miracles, pp. 16-17.

Born, ed., p. 82.


Here we recall Lewis' remark that freedom and determinism may not be our only alternatives. Surprised by Joy, p. 179.

Divine and Contingent Order, p. 48. cf. Chapter II. A.

The Ground and Grammar of Theology, p. 28. Torrance credits Aquinas for inferential reasoning from which emerged his


408 Space, Time and Resurrection, p. 8.


410 Ibid., p. 100.


413 The Abolition of Man, p. 49.

414 Kitto, p. 28.

415 The Allegory of Love, p. 245.


417 Tolkien, pp. 21ff.


419 For example, this is the recurring error of those who comment on Barth. A theme or principle is selected, other than Barth's own, by which he is then analysed. See even the irenic, thoughtful work of G. C. Berkouwer, The Triumph of Grace in the Theology of Karl Barth. The triumph is that of Jesus Christ, not some abstract principle. See Barth's response to Berkouwer, Karl Barth, Church Dogmatics, ed. by G. W. Bromiley and T. F. Torrance, trans. by G. W. Bromiley, IV/3, The Doctrine of Reconciliation, pp. 173ff.

420 Kahler, p. 42.

421 Einstein and Infeld, p. 177. See Barth's remark that theology could just as easily begin with analysis and end with synthesis. Karl Barth's Table Talk, p. 25.

422 Studies in Medieval and Renaissance Literature, p. 1.

423 The Place of Polanyi, p. 78.

424 The Personal Heresy, p. 110.

425 The Place of Polanyi, p. 63.


Divine and Contingent Order, p. 49.

Ibid., p. 50.

Kitto, pp. 187-188. Kitto records the protest of this tendency by certain Greeks such as Hippocrates.

The Place of Polanyi, p. 59.

Christian Theology and Scientific Culture, p. 57.

Theology in Reconciliation, p. 280.


The Abolition of Man, p. 49.

The World as I See It, p. 125. Similarly, I shall argue theological science would be incomplete if it is not also theological artistry.

The Integration of Form, p. 157.

Ibid.

Ibid., p. 156.


The Place of Polanyi, p. 65.

Ibid., p. 64. cf. The Ground and Grammar of Theology, p. 11.

The Place of Polanyi, p. 60.

"However adequate we may think the Chalcedonian formula about the mystery of Christ's Person may be (and we believe it is) its weakness is that it is too static and abstract...too divorced from a New Testament understanding of the historic life and work of Christ in terms of His birth, death and resurrection." J. B. Torrance, The Priesthood of Jesus, Essays in Christology for Karl Barth, ed. by T. H. L. Parker, London: Lutterworth, 1958, p. 157. cf. the comment by F. W. Hort, that the clauses of the Athanasian Creed "substitute geometry for life". quoted in Reardon, p. 430. In Mimesis, Auerbach sees doctrine as "incarnate" within the narrative story and is not separable. When due to the rise of modern criticism doctrine became severed from the story (now seen as legends) doctrine lost its credibility, (or as Torrance would say, it lost its connection to

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empirical reality) and became a disembodied image. Auerbach, p. 16.

445 Theology in Reconciliation, p. 274.


448 T. F. Torrance, Reason in Christian Theology, Evangelical Quarterly, 14, 1942, p. 28.

449 The Pilgrim's Regress, pp. 91-92.


451 Theology in Reconciliation, p. 281.

452 Theological Science, p. 178.


454 Aids to Reflection, p. 112.

455 The School of Faith, p. 1xxix. So Torrance on the Westminster Confession.

456 Reflections on the Psalms, p. 45.

457 The Ground and Grammar of Theology, p. 36.

458 Theological Science, p. 143.

459 Ibid., pp. 251-252.

460 See Theology in Reconstruction, p. 59.

461 Space, Time and Resurrection, p. 185.


463 The Ground and Grammar of Theology, p. 89.


466 Aids to Reflection, pp. 308ff.

467 Reason in Christian Theology, p. 28.

468 Kahler, p. 92.
469 Ibid., pp. 88-90.

470 The Allegory of Love, p. 96.

471 Ibid., p. 61.


473 The Integration of Form, p. 156.

474 The School of Faith, p. lxv.

475 The Integration of Form, p. 161.

476 Miracles, p. 70.

477 Christian Theology and Scientific Culture, 51.

478 The Integration of Form, p. 160. Also Christian Theology and Scientific Culture, p. 52. This will be explored further in Chapter V.
CHAPTER II
INTUITION AND RATIONALITY

A. Intuition: The Bridge Across the Thought-Being Gap

1. A Reconstructed Framework

With the dethronement of an extrinsic and logical-causal link-up of theoretical and empirical, science has discovered a profounder integration which grasps the theoretical embedded within its own empirical reality. Newtonian objectivity was created when the artificial concepts of absolute space and time were used to give the universe a rigid causal framework. Einstein replaces this with an objectivity grounded in the invariant relatedness inherent in the universe, where form and being coinhere in space-time. As we have noted, this new path rejects Kant's synthetic a priori as an 'order without penetration' (Polanyi), that is, penetration into the internal structures of the empirical world. Einstein also rejects Ernst Mach's positivist philosophy and its offspring, the Vienna Circle, which understood scientific theory to be merely convenient functional arrangements with no relation to reality. Einstein argues that a direct, intuitive structural kinship exists between our primary concepts and reality, with the rest of scientific concepts being connected to this primary basis by means of theorems. But no logical investigation reveals this connection; it can only be experienced.

The intuitive experience of the factual-conceptual connection requires seeing the whole field in a new theoretical framework. Within a unified structure of form and being, this means the former notions, 'solutions and structures must undergo
a transposition. Old problems cannot be solved by closer observation within the old framework because the significance of the facts can only be seen correctly by the new framework of correlation.\textsuperscript{8}

Lewis was sensitive to the controlling power of our theoretical frameworks. "What we learn from experience depends on what kind of philosophy we bring to experience."\textsuperscript{9} One cannot judge the reliability of a miracle story, Lewis remarks, without first estimating the intrinsic probability of such an event. But what criteria could determine the intrinsic probability of such an event?\textsuperscript{10} Facts and theory, knowing and being, are deeply and indissolubly intertwined. The facts themselves are known only within an interpretive theoretical construction.\textsuperscript{11}

Under the pressure of empirical relation to the object, logical causality was abandoned and new, intuitive connections were discovered. This is good news for theology as it is for all sciences. Theology should not be afraid to seek new empirical connections in its field nor be content with connections operative elsewhere. Theological connections should be rational in that they are precise and appropriate to the God-man interaction.\textsuperscript{12}

We should also note the impact of the dethronement of classical physics on the subject-object relationship in science and theology. Though modern physics has limited the range of classical physics, it has grounded the classical view more firmly within a limited sphere. Similarly the distinction and nature of interaction between subject and object needs modification, in accord with its subject-matter, but without becoming an identity.\textsuperscript{13} Theology, for example, replaces the disjunction in the subject-object relationship for a cognitive union in love.\textsuperscript{14}

Though the subject-object relationship remains complex and intimate, it is not utterly mysterious. Jaki notes that whereas empiricism assumes a complete independence of mind from nature, idealism assumes a complete identity of mind and nature. In fact, there exists a relational, intuitive connection with man occupying a special bridging role. Such a view seems
unclear only if we assume there can be no organic relation between form and being.\textsuperscript{15}

2. Transition from Mechanical to Relational Thinking

Intuitive thinking is essentially relational, connectonal and synthetic as opposed to mechanical, digital and abstractive thinking. The latter view detaches the rational structure of science and theology from its empirical reality and examines the mathematics (number) or statements (word) \textit{in abstracto}, as a geometry antecedent to science, or as a philosophical theology antecedent to dogmatic theology.\textsuperscript{16}

This creates an inert and deterministic framework within which we conceive of the universe.

With James Clerk Maxwell, the mechanical framework of science began its decline. When Maxwell failed to interpret electricity and magnetism within Newton's mechanical model, he proposed a 'relational' model which brought electricity, magnetism and light into a coherent, unified framework through his use of partial differential equations. Within this new frame of linked equations, Maxwell assumed that the relations between things belong to the essence of what things really are.\textsuperscript{17} Torrance argues that this perspective transformed not only the basic structures of science, "but our basic ways of knowing".\textsuperscript{18}

In relational thinking, unlike mechanical-logical thinking, \textit{connections themselves} have an integral, organic link to objects, and are not prior mechanical conceptual systems applied to reality.

Modern physics seeks to understand its concepts in the totality within which events are found in their inherent connection. No single event is apprehended or particularized except in relation to the whole. The field replaces the material point. Natural and inherent relations replace those artificially developed from observation, particularization and abstraction.\textsuperscript{19}

The Maxwell-Faraday discovery of the relational and dynamic quality of space meant that science could no longer view space as discontinuous particles related mechanically and statically. This former spatial concept saw the universe as an infinite receptacle with an independent and absolute status.
unintegrated with time, and independent of material events contained in space and time. Science now operates with fields of connection where things are not related like discrete bodies, but are connected in a continuous flow of motion. The differential equations developed by modern physics are interrelated with space and time, making each relative to the other.

B. The Intuitive-Empirical Connection

For Torrance, following Polanyi, the structure of scientific knowledge resembles that of perception. That is, knowing takes place through implicit, tacit and intuitive processes. It is an essential component of this intuitive knowing that the truths we know are objectively grounded in reality. Therefore, the truth of a proposition lies in its bearing on reality. There is no empirical nature distinct from a theoretical structure, but only an empirical-theoretical nature in which knowing and being inhere. The meaning, success and validity of a theory rests on its ontological import or power of objective reference.

It is not easy to switch from the ingrained mental habit of thinking in terms of particles and external, imposed connections to dynamic and continuous field and relational connections. But this "onto-relational" thinking has been forced upon physics by relativity. With the phrase "onto-relational" thinking, Torrance calls on science, within its thought structures, to take full account of the indivisible connections between particles and field. For interrelations between particle and field are as significant as the particles themselves. Science is not about uninterpreted facts or theory abstracted from facts, but rather theoretical-empirical and onto-relational realities.

Field concepts become vague and unproductive if we detach them from the field because their meaning consists in their connections with the field. When we detach concepts from their natural field and analyze them merely in terms of their grammatical-syntactical connections, inevitably their
meaning is altered. We thereby "snap their line of intelligible connection with reality, for it is through the field that they are correlated with reality". When this occurs, meaning is derived without objective reference by referring to the subject who makes the statements, and the concepts are left bereft of any objective claim to reality. This drives a wedge between subject and object, phenomena and noumena. Concepts which are abstractly created by logical deduction from the original field are no longer empirically grounded. No science operates with ideas that are merely the offspring of logical necessity. Once abstracted from its empirical field, formal logic can make nonsense out of many empirically meaningful statements. Hence in theology, when we make God's love logically necessary, we create a determinist 'irresistible grace' which empties love of its relational and personal content, and substitutes the irresistible forces of Newtonian physics. Ironically, we now know such logical-mechanistic connections are of only a limited value in comprehending physical, let alone spiritual, reality.

We find a parallel in Lewis' philological criticism. If a word is read out of its living context (its natural habitat), it leads to misreading and eventually the loss of meaning. Only syntax remains. Ironically, it is the more recent uses of words which are more often misunderstood because we think we already know their meaning through years of contented misreading. We blissfully interpolate senses which could only have existed much later than in the author. This is one of the problems with the existentializing of Biblical statements.

The utter empirical priority of science keeps it objective and not speculative. The universe does not yield its secrets "under the coercion of logical-deductive operations". We empirically discover which theoretical possibility is the true one. True physical laws are chosen under the compulsion of empirical evidence. In heuristics we leap across a logical gap in our knowledge as experience suggests the appropriate concepts. Thus, true theories are a posteriori 'wormed-out' of nature. The relentless confirmation of intuitive theory
by experiment keeps science creative but not fantasy.  

An implication of this truth is that someone's beliefs are not changed by relentless logical criticism. Only an "extension of his experience" will change belief by introducing a new factor which is incompatible with some part of his previous aggregation of beliefs.  

C. The Intuitive-Empirical Connection in Theology  
The intuitive-empirical connection is no less important in theology. One cannot without loss of meaning detach one's thinking and one's self from the field's own proper object to think abstractly about God as if the empirical reality of God were not present to us in Word and sacrament. In accord with its uniquely personal relational field, theology can only be dialogical and proceed by constant reference to its object. It cannot step outside the dialogical relationship, but requires a personal 'community of verifiers', the Church, in which to pursue its task.  

Theology needs the courage not to shy away from the concreteness of revelation—God's being in space-time, where he comes to us not in naked majesty, but in the space-time medium of Israel and through Israel in the concreteness of Jesus. For in him God has objectified himself for us. Jesus Christ as the Word made flesh "constitutes the ontological bridge in which human knowing of God exists".  

Phantom problems occur when we abandon our theological statements' empirical reference to Christ. This cuts off redemption from the realities of creation and creation from redemption, and transforms the concrete, empirical acts of God in Israel and in Christ into the secret wisdom of the devout. That is, God's acts are removed from the empirical realities of history and become spiritualized experiences within man's own pious heart. If we detach our concepts from their organic and empirical contact with Jesus of Nazareth, their meanings can only be found within either the self or the logical-grammatical propositions of the Bible without regard to their empirical referents. Along this sterile avenue theology returns to all the old problems with which science and theology have struggled.
for so long. Theology labours under the axiomatic disjunction between God and the world, sensible and intelligible, form and being. This ignores the whole thrust of the discoveries of modern physics as well as the organic order of classical Patristic theology, where form and being are inherently intelligible and where theoretical structures are derived from the actual field. Artificial frameworks which break apart form and being, break themselves apart in the face of empirical reality.  

Michael Polanyi has sought to explore the intuitive powers of the mind without reducing intuition to abstract, discursive structures. Though aware of a 'creative intuition', Karl Popper describes it as did Bergson, as an irrational element. But Einstein, like Polanyi, interprets the intuition cognitively, and calls it a sympathetic understanding of experience (Einfühlung). Polanyi aligns the intuition very closely with what he calls 'participation' or 'indwelling'. For Einstein and Polanyi, intuition is a rational apprehension, though not an inference or completely reducible to formalization.

Popper has clearly seen the limits of what he himself calls 'the myth of inductive logic'. With Einstein he agrees that theories do not start as deductions from particular observation, for the theory decides what we observe. Therefore, Popper argues, theories arise as inventions of the creative imagination and are put forward as conjectures. Science proceeds by critically testing each conjecture and asks for evidence which counts against them. This is Popper's famous falsification principle, which leads, if not to verification, at least to objective probability.

Torrance criticizes Popper because he ignores the importance of ontological reference in scientific statements and avoids examining the heuristic act by calling it an irrational element. Unlike Polanyi and Einstein, Popper was not an empirical scientist. By scholastically distinguishing between logical processes and psychological states, he defines away the heuristic process as psychological, highly informative guesses, ultimately irrational. As a philosopher, Popper
prefers to focus on formal epistemological decisions reached irrespective of content or empirical import in accordance with accepted procedural rules.\textsuperscript{49} That means he prefers an abstract criteria with no appreciation for any organic connection with the special field of inquiry. Polanyi rejects Popper's refutationist method for other reasons as well. For one thing, it was contrary to his experience as a scientist. Theory is the work of scientists, born of imagination seeking discovery. Such effort may risk defeat, but never seeks it.\textsuperscript{50}

There are other non-cognitive interpretations of the intuitive faculty, besides Popper and before him, Kant. Henri Frankfort describes intuitive thinking as pre-scientific, by which he means pre-formal, non-inferential thinking. It is essentially emotional, direct and inarticulate 'thou' thinking, unlike detached and articulate 'it' thinking.\textsuperscript{51}

Radhakrishnan prefers his native Hindu way of knowing to Western knowing; he calls it creative and intuitive thinking.\textsuperscript{52} He describes it as a direct knowledge, incapable of growth, because it is individual and incommunicable. "We cannot verify it and therefore cannot dispute it,"\textsuperscript{53} It is ineffable, non-propositional and non-conceptual, but he denies it is non-rational. He contrasts it with the Western critical intelligence.\textsuperscript{54}

Similarly, Edwyn Bevan links intuitive knowledge with mysticism and sees it as knowledge in a supreme degree, yet without conceptual content. It is therefore not essential to Christianity but only an occasional gift.\textsuperscript{55} The great contrast with Torrance and Einstein is their commitment to a rigorous empirical fit whereby they see intuitive knowledge as conceptual and as having an essential ontological referring quality, though it is not ultimately formalizable.

For Coleridge, the term 'intuition' "comprehends all truths known to us without a medium".\textsuperscript{56} Kant denied there were any intellectual intuitions, \underline{but Coleridge disagreed}. Bernard Reardon identifies Coleridge's commitment to an intuitive knowledge of God as essentially subjectivism and contrasts this with 'objectivity' which he depicts as the calculation of probabilities on the basis of adducible evidence.\textsuperscript{57} This may be
subjective for Reardon, but intuitive knowledge for Calvin as well as Coleridge, is the very opposite of subjectivity. Einstein's intuitive grasp of relativity theory is more objective and empirically fitted than the calculated probabilities and causalities of Newtonian objectivity.

D. The Nature of Intuition

Let us further explore the intuitive activity which for Einstein, Polanyi, and Torrance is essential for scientific progress. Torrance describes the intuitive faculty as an "implicit integrative activity of the mind" in which we discern the ontological reference and distinguish right surmises from wrong ones. Polanyi refers to it as the 'tacit coefficient' of a scientific theory by which it bears on experience. That is, it is the intuitive approach, unaccountable in logical inferential terms, by which we apprehend the inherent structures of reality. And it develops our knowledge by integrating largely unspecifiable clues which we organize in response to intimations of nature's true coherence. We grasp the natural form which inheres in being not abstractly, but through this intuitive, constructive and interpretive activity of the mind.

Though relativity and quantum theory have no logical or a priori connection to reality, the fact remains we cannot make sense of the world without them. Intuitive rationality cannot be logicalized. No formal rules can account for it. Why? I would suggest it is because by its very nature, we rely on intuitive rationality as it attends to something else, namely, its ontological referent. That is, its very difficulty to delineate precisely and sequentialize its insights is due to its object-centredness, for it clarifies and reveals the structure of its object, not itself. It has only a subsidiary awareness of its own structures.

Genuine knowing always has an element of implicit knowledge or foresight, an intimation of truth which only later is specified. By intuition the scientist surmises with a fair probability the presence of a hidden coherence in nature. The Greek term 'prolepsis' connotes this idea of anticipatory glimpse, that is, a tentative, subtle reaching out of the mind.
toward something quite new. This leap across a logical gap is an intuitive anticipation of a hitherto unknown pattern which arises compellingly under the surprising disclosure and intrinsic claim of the subject-matter.64

Einstein gave these intuitive links the distinctive description of "free creations of the intellect" because they are obtainable not through induction from sense experience, but only by "speculative thinking consistent with observation". They are rational, but non-logical. And yet they are natural and true because they arise in the mind under the impact and authority of the object's intelligibility.65 As Einstein puts it, the liberty of science's free creations is of a special kind, not at all like the liberty of a fiction writer. It is like the freedom of a man trying to solve a well designed crossword puzzle. He may propose any word, but only one really solves the puzzle in all its forms.66 Einstein immediately adds that this intuitive process is grounded on the faith that nature has the character of a subtle (but not arbitrary) and well designed puzzle.67 The intuitive mental creation is validated by its empirical fit.

E. Intuition in Latin and Reformed Theology

In theology, Torrance sees the issue of intuitive knowledge as one of the striking contrasts between Reformed and Thomist thinking. For Calvin, theology has to do with a direct intuitive knowledge of God through his Word.68 This implicitly shifted theology to an object-centred form where Christian faith is concerned with the intuitive and evident knowledge of the actively present God which is brought about by his own personal act upon us.69 In contrast, Thomism argues that God is known only from the sense experience of created realities above which we cannot rise.70 Torrance cites the Medieval neglect of a doctrine that God as Spirit presents us with an immediate intuitive knowledge, as the source of its rejection of intuitive knowledge.71

In the light of Torrance's own emphasis on Jesus the Word made flesh as the organic and personal form through which our thoughts are connected properly to God, I would argue that one must embrace in unity with the work of the Holy Spirit, the
historical and empirical reality of Jesus Christ as the mediator of God in space-time. That is, God is not known immediately, for the Word has become flesh. We do not bypass the flesh of Jesus to know God immediately. The intuitive priority of Calvin and Torrance may thus legitimately be integrated and not contrasted with the Thomist sense-experience emphasis if Christologically and not inferentially understood. Jesus Christ is the essential sense experience or empirical base for knowledge of God. That is, theological knowledge is intuitive and grounded on the empirical life, death and resurrection of Jesus, whom the Holy Spirit brings immediately to our remembrance. We may then proceed to understand the Holy Spirit as the humble, imageless and immediate pointer to Christ, the One who brings our minds and whole beings into a face to face empirical relationship with Christ. That is, the Holy Spirit is the work of the living God intuitively bridging the two-fold gap between the historical and eternal Christ and between Christ and man in his space-time empirical-historical habitation.

If we may legitimately argue for intuitive, rational knowledge in science and in theology, it is natural to argue mutatis mutandis, that through intuitive, cognitive thinking we also perceive beauty and goodness. We cannot prove the value of goodness or the beauty of beauty, for "there is no possibility of proving value or beauty to the man who does not see it".73 In case of disagreement here, Bevan suggests all one can do is to ask the person "to acquaint himself with it further, to go on looking at it".74

F. Intuitive Knowledge in Lewis

Reason and religion are their own evidence.
The natural sun is in this respect a symbol of the spiritual.

―Coleridge75

There are few places where Lewis explicitly discusses intuitive knowledge, but there are many places where he describes immediate, 'knowledge by acquaintance' or connaissance. In the realm of scientific knowledge, Lewis was aware of a deeper intuitive level as well as the more usual logical-causal level. He refers to scientific thinking as being more than a succession
of linked concepts and sees it as the translation of a prior activity. But this hint is not expanded in the context of science.

Did Lewis affirm that theology entails an intuitive knowledge of God? Concerning another affair of the higher or Practical Reason, Lewis argues that knowledge of moral truth or value cannot be deduced; its rationality must be perceived. In Lewis, all the highest truths are known intuitively. "We must be content to feel them in our bones." Moreover, moral and theological judgements are intuitive and rational. "I believe that the primary moral principles on which all others depend are rationally perceived." Moral truths are self-evident; we "just see" there is no reason why a neighbour's happiness should be sacrificed to my own as we "just see" that things equal to the same thing are equal to one another. The lack of a formal logical proof does not imply that moral truth is irrational. "Their intrinsic reasonableness shines by its own light."

However, to assert the legitimacy of certain claims to intuitive knowledge does not imply that for Lewis all knowledge occurs through the intuitive faculty, only knowledge of the higher truths. Man has immediate intuitive grasp "only of axioms and must seek all other knowledge by the laborious process of discursive thinking.

As for intuitive theological knowledge, Lewis explicitly denies direct knowledge of God in terms of vision. Instead, he affirms "a kind of direct experience of God, immediate as a taste or a colour. There is no reasoning in it". And yet many would describe it as "an experience of the intellect--the reason resting in the enjoyment of its object." That is how Lewis interprets Anselm's ontological argument. One could argue that for Lewis this intuitive knowledge of God is not an essential aspect of Christianity. But if we recall Lewis' general Platonic frame of mind, his stated argument for intuitive moral knowledge, and his denial of the lower, 'knowledge about' (savoir) of God, one must conclude that an intuitive theological knowledge is an integral part of his thinking.

Lewis was never entirely at ease with an appeal to
intuition in preference to sense experience and inference because of Owen Barfield's intuition grounded anthroposophic claims. In rebutting Barfield's claims, Lewis preferred to answer materialism, Freudianism and empiricism not by an appeal to intuition, but by better reasoning (i.e., logical argument). As for the convicting quality of intuition being as certain as sense experience, Lewis reminds us that even sense experience can be rejected by science when it conflicts with other hypotheses or intuitions. Thus because of Barfield's self-evidencing arguments for anthroposophism, Lewis was hesitant to expound Christianity explicitly on the same grounds but his discussions of Christian doctrine imaginatively embody Christian faith and invite the reader to 'taste and see' the self-evidencing reality of Christ.

Einstein would fully agree with Lewis' concern. He endorses intuition as the key to science, but readily admits that intuitive explanations are often wrong. His letters to Max Born reveal a deep longing for a more mechanically precise and logical-inferential path to a unified field theory and thus he bemoans how he is left only with endless probings, speculations and intuitive searches for the proper formula of connection.

Jaki protests against an overly zealous claim which makes intuitive knowledge exclusively valid. This was Occam's error. Occam's exclusivist intuitionism was another scientific dead end. Historically, the use of generalization on the basis of sense data has been an essential scientific tool. Science observes regularities in nature and isolates key factors which give rise to abstractive notions which Jaki calls fact-laws. The mind discovers these theories by a process of idealization and creative postulation. Jaki agrees with Torrance that there are no logical rules for discovery, but this does not mean discoveries are closed to any form of discursive analysis, unless logic refuses to see its own incompleteness (Gödel). Thus inference and intuition work together as two levels of rationality actually confirming one another. This is similar to Lewis' intuitive-inferential approach to theological knowledge. Einstein asserts that basic laws are wormed out of
nature. "by perceiving certain general features". But abstractive thinking is intimately involved, for "inference follows inference, often revealing relations which extend far beyond the province of reality from which the principles were originally drawn". In redressing the cognitive balance of the mind and limiting the authority of logical-inferential thinking, we must not deny, but affirm, the value and propriety of abstraction, (particularly in natural science), generalization and sequential connections as they co-operate with integrated and participatory thinking.

Torrance himself points out a further limitation of intuitive physical concepts. Though grounded in inherent structures of the universe, these structures are themselves contingent, and thereby finite and limited. That is, no final formalization is possible as there would be if the universe were ultimately necessary. This does not make Einstein's quest for a unified field theory quixotic, but Torrance recognizes it would be at best a co-ordinated series of equations linking all physical laws. These field laws would be limited and have a measure of freedom and spontaneity and would not be as predictable as mathematical projections and necessities might prefer.

G. Lewis on Intuition: Further Remarks

By his own confession, the central and primary man in Lewis is the intuitive or imaginative man, not the logical or dialectical. This is his great strength and because he gave this side full play, he has made a profound impact on millions of readers. For Lewis, the intuition plays the primary role in both enjoyment of literature and in literary criticism. For a reader to grasp the meaning of the Medieval theory of planets, the notion must be "seized in an intuition rather than built up out-of concepts; we need to know them, not know about them". We rationally comprehend things immediately and prior to linking them up by concepts. Concepts are the aftermath of this cognitive, intuitive grasp.

At times Lewis' logical rigour 'falls short' of his intuitive feel for reality. By his own admission, his initial argument for the 'self-contradiction of the naturalist' in Miracles
failed. When he rewrote it as 'the cardinal difficulty of naturalism', his expression was never more opaque and the real problem was left unsolved. I would argue, however, that the fundamental power of his thinking in that book lies not in the admitted deficiencies of his logic, but in his intuitive grasp that no forms of the one-dimensional superficialities of materialism and naturalism (or more precisely positivism) with their denial of transcendence and ontological reality can have the last epistemological word. In the majority of his writings—-theology, literature and especially his criticism, the dialectician never dominates, but brilliantly supports his powerful imaginative-intuitive grasp of reality.

Lewis gave priority to the imaginative "feeling intellect" which roughly corresponds to intuition. He calls the discursive intellect an "understanding from without" but the imagination an "understanding from within". He tells Barfield "that the discursive reason always fails to apprehend reality, because it never grasps more than an abstract relational framework". Therefore Lewis agrees with Torrance that logical thinking and its connections are extrinsic and abstract. He would argue, however, that in the lower rational realm of natural science there is a harmony between laws of logic and laws of nature. External and abstract rational knowledge is the best rational connection for which science can hope. But in the light of his Einsteinian studies (among other things) Torrance cannot accept this.

Here, I believe, Lewis is using his feeling intellect in search of a rational connection just as organically linked to concrete reality as Einstein's mathematical and imageless relational framework of four-dimensional geometry, (which for Torrance is such an all-important epistemological paradigm). There are rich deposits of reality which Einstein's mathematical tools have left unmined. Thus imageless mathematical relations are not in competition with, but are complemented by, the 'image-ful' relations of the imaginative faculty. Lewis' theological artistry complements Torrance's theological science.
H. Intuitive Rationality

1. Discovery

When science discovers new knowledge it is not primarily an act of logical inference, but a forward leap of the mind which apprehends the radically new. "There is no such thing as a logical method of having new ideas," says Popper. There is no logical path to the elementary laws of physics, claims Einstein, for "only intuition resting on a sympathetic understanding of experience, can reach them." The scientist "worms these general principles out of nature by perceiving certain general features". Only then does "inference follow on inference". We cannot reduce the discovery of new facts to logical forms, for logic consists of unbroken links with conclusions lying in the premises. But to discover the new involves what we do not know. That is the mystery of knowledge.

In That Hideous Strength, when Jane is asked to join Logres, she complains that they will not tell her much until she has joined; she complains it is like a leap in the dark. Lewis states that this is the way of concrete, empirical knowledge in all walks of life. So it is with getting married, going into the Navy, becoming a Monk, trying a new food. "You cannot know what it's like until you take the plunge."

2. Rationality as Miracle

In order for scientific and theological concepts to be rational, they need an empirical and ontological referent which is the controlling factor. This implies an astonishing harmony between the world and our minds. "It is an outcome of faith that nature—as she is perceptible to our five senses—takes the character of such a well formulated puzzle." For Einstein, the comprehensibility of the world is a miracle. This left him with an orientation of mind filled with wonder and mystery, which he describes as "the fundamental emotion which stands at the cradle of true art and true science."

How different from Einstein's relativity is the order in Kant's universe, which "we ourselves introduce". Kant posited a necessary connection between the mind and the world
based on our *a priori* thought forms. But for Torrance, these connections exist not through *a priori* logical necessity, but in the wonder of the harmony between our minds and the world.

Modern science has shown that we cannot bridge the gap between thought and reality by logical thought alone. The abstracting habit which disconnects by extracting mind from matter, creates an artificial gap between sense and intellect. When we remove this *a priori*, theoretical bridge we do not become sceptics, but recognize that though we cannot account in a theory for the comprehensibility of an object, we may stand with awe before the mystery of the rational link between thought and being.109 We recognize with Einstein that this is a matter of faith. But we share his smile of confidence when he wryly admits that "the successes reaped up to now by science, do, it is true, give a certain encouragement for this faith".110

Similarly, theology cannot give a fully formal explanation of how theological knowledge arises in our minds. We declare that fundamental concepts come to us under the generative power of the Word of God. But the mystery of rationality cannot ultimately be accounted for in a logical and formal way in the natural world or in theology.111 Here the activity of the Holy Spirit is epistemologically relevant, for at least it explains our knowledge from the object's side.112 That is, though we cannot reduce the relationship between our thoughts and God's being to thought, we recognize that thought attains its true form only as it submits to the impact of God's being upon it and seeks to be conformed to the inherent and God-given rationality, the Word made flesh.113

It is proper for a realist theology to give priority to the objective pole of knowledge, for it fundamentally claims that God, and not man, activates and sustains the relation between human knowing and divine being. In the wake of man's estrangement in sin from God, theology acknowledges that any reconciliation between our knowing and God's being must be God's act.114

3. Kinetic Logic

Though we cannot completely formalize or logicalize the
leap of knowledge, Torrance maintains it is rational because it is open to description and comprehension, and it truly bears upon empirical reality. It is important, therefore, for theology to seek to describe the dynamic and kinetic logic which binds thinking and being together.

If theology claims that, in Barth's phrase, the Logos cannot be illogical, let us rehearse the grounds on which theology refuses to allow its rationality to be judged at the bar of formal logic or be reduced to the logical processes of thought. Christianity declares that in the incarnation, the eternal truth and being of God has entered into time and space. The truth and mode by which God chooses to disclose himself to man is Jesus Christ. For our minds to act rationally here, we must allow the nature of that truth to prescribe the appropriate mode of thinking. If the eternal moves into time, then our reason must move with it in order to know it. Similarly, in modern physics we know that light is never at a static point of rest. To understand it we must abandon all points of absolute rest, except light itself, and travel with it.\textsuperscript{115}

This cannot but involve a break with routine habits of thought. Static categories of understanding, Aristotelian or Kantian, will need to be abandoned if and when they wrongfully convert the temporal, active and personal movement of God in our space and time into the formal possibility of logical relations.\textsuperscript{116} In the wake of such an event, we must seek a mode of rational thought which inheres within the actualities of revelation, not in the possibilities of idealism or rationalism. That is, we must modify traditional logical thinking in order to accommodate actual existence and not covertly convert existence into necessities and possibilities.

So it was that Einstein broke with static categories of thought in classical physics where space and time were understood from a point of absolute rest. So it was also, that Søren Kierkegaard sought to acquire a truth that had left the eternal and had come and acted in history.\textsuperscript{117} Torrance calls this 'kinetic thinking', for it pursues the inner or inherent logic which dynamically coinheres with being.

It is not accidental that formal logic arose from Greek
thought. Their concern was with truth as ideas and abstract concepts, not dynamic, historical action. In fundamental contrast, Hebraic thinking is concerned with historical action and personal relations, not logical relations between concepts. Torrance argues that Greek ideas of God are derived from finite existence which are then raised to the nth degree and posited as God's attributes. But Hebrew thoughts about God are not primarily ideas, but describe God's activity in his creation and in the redemptive history of his people. "He is the Living God and we know Him not as we know ideas, but as we know people in love and meeting."118

The object of theological knowledge is truth in the form of personal being, Jesus Christ. Therefore the truth can be known only in an appropriately personal-rational mode, the logic of personal relationships. Otherwise the knower will not be in a true relationship to the truth. "The very mode of apprehending truth belongs to the truth."119 As Lewis puts it, in relation to logical thought a Christian's faith "is of course excessive".120 But our knowledge of God is more like a "knowledge by acquaintance" of a person we believe in.121 Lewis reminds us that "no man is our friend who believes our good intentions only when they are proved". A suspicious friend is blamed for his meanness of character, "not praised for his excellent logic".122 Christian faith does not present us with an argument which demands our assent, but with a person who demands our confidence.

Coherence, correspondence and pragmatic theories of truth contain valuable but partial insights into the nature of truth. They presuppose a damaged relationship (often a Kantian dualism) between form and being. But a non-dualist, referential theory implies a fundamental harmony between the empirical (correspondence) and the theoretical (coherence) criterion. For example, Athanásius' non-dualist notion of meaning saw that meaning did not reside "in letters as such but in the divine actions which they express".123 Therefore the empirical and theoretical are intuitively held together in reference to and under the control of, their empirical object.124 The fundamental shift here from both coherence and correspondence theories is
that the ultimate judge of the theory is reality itself. Torrance describes this as justification by the object alone—in science and theology. For Hebraic thinking, God's truth is rooted in his nature. 125

If we seek to form a logic or rationality of response to God's real involvement in space-time, our reasoning must receive its structures not from behind by a priori axioms but a posteriori from the object itself. Thus 'God is love' must take its content from the Bible. We cannot abstract it from Jesus Christ, or reverse the equation and say 'Love is God'. 126 We cannot transpose what a posteriori is universally true, namely, that God loves us in Christ, into what is necessarily true a priori. The love of God, his justice and his mercy are grounded in Christ's life, death and resurrection. They are not premises or innate truths, but a posteriori knowledge based on the empirical Christ of the Gospels. We turn God's love into a necessary and deterministic universalism at the loss of its inherent meaning in the living Son who bears the Father's love to man through the Holy Spirit. 127

Kinetic thinking is a movement in response to the temporal, historical movement of the truth of the incarnation. It seeks a logical mode arising under the impact of its object. 128 We do not apprehend the truth by sitting back and thinking ideas, but only in an act or movement in which we participate in what we seek to know. 129 Our cognitive movement responds and corresponds to the movement of the Spirit and participates in the Spirit's love. Theological thinking therefore thinks from out of (not towards) the eternal-temporal movement of the incarnation. Torrance likens it to Einstein's abandonment of Newton's absolute rest concepts of space and time, and to the physicist's heuristic leap across a logical gap. 130

Sadly, church history bears witness to the unchecked codification of theology into rigid logical structures which led to an open tension between a Christological, spiritual form of the Church and the Roman juridical, legally dominated ecclesiology. 131 Similarly, the static, Medieval doctrine of God as impassible and immutable needed to be transformed into a dynamic understanding of God as known in his acts. 132
Erich Auerbach's work on the development of Western literature confirms Torrance's views in an interesting and unexpected way. In *Mimesis*, (a book Lewis highly recommended), Auerbach argues that the Christian belief in the incarnation created a new respect for history and brought about a new life and freshness in the basic conceptions of life in Western literature. The rigid, idealized and preordained thought forms of the Greek culture vanish in the realist and dynamic literary form and emotional expression of Christian art. However, Auerbach points out that Christianity soon became caught up in the senility of classical culture and suffered, less in Germanic, but more so in Romantic countries where classical thinking was stronger.\(^{133}\)

Even when theology frees itself of static and mechanical-logical concepts in favour of dynamic and kinetic thought which moves with its object, there is a danger, as Bonhoeffer notes, (echoing Barth's concern), that we can still make God into an object of thought, into a principle which serves "as an ultimate protection against God and his intervention in our lives".\(^{134}\) Nevertheless in the face of this danger, Torrance pursues dogmatic theology as did Barth, in the belief and hope that the concrete Word can and will be spoken by the Holy Spirit. Without the Spirit's active presence, all concrete words of human speech remain abstract and unreal.

The quest for an interior and indwelt logic in theology finds itself driven to the incarnation as its datum point which prescribes for theology its matter and method.\(^{135}\) This does not reduce theology to Christology. Rather it orders and presents doctrine within the trinitarian coherence of the Father's movement in the Spirit and through the Son outward to the world, lifting up all the fallen creation with him and through him and in him back to the Father.

Because Jesus Christ in his own flesh concretely bridges the eternal reality of God to the contingent reality of the world, the proper method of theological inquiry is prayer to the Father through Christ.\(^{136}\) Torrance relentlessly pursues the implications of this upon us. Thus we must not come to God in prayer apart from the human mind of Christ, for in theology
and worship Jesus constitutes the place where God and man meet.  

In each step along the way, theological activity strives to reflect the inner structural coherence of its object. Torrance commends Karl Barth for his sustained integration of content and method as he sought new logical forms derived from the Word of God which go beyond and behind the traditional antinomies of traditional logic. It is in this sense alone that theology should be systematic, that is, in its relation to Christ. The logic of incarnate love and grace judges the logic of causal inference as a foreign and artificial criterion. Doctrines should not be related to one another along the lines of causal inference, but in relation to Christ.

Therefore, theology must give priority to an inner logic of grace in Christ over an external logic of necessary causal connections. Otherwise, we convert grace into its opposite. Here, Torrance has in mind the Roman Catholic understanding of grace whereby grace is construed in terms of metaphysical relations with God as cause and his work in creation as operation. Grace flows from the divine to the human and humanity becomes divinized. Torrance argues instead for personal-dynamic concepts in which grace is not a principle or a concept, but is Jesus Christ. That is, grace is God's direct act of personal love in Jesus whereby man shares in grace through our participatory union with Christ.

When it grasps the truth of contingent things, science seeks to know them in their internal relations and not simply their external relations to other things. The great shortcoming of modern biology is its failure to lay bare the inner order of organic fields in accord with the dynamic laws of living organisms. For too long Darwinistic mechanism has wedded biology to nineteenth century deterministic mechanisms through its unwarranted idealized quantification. Again and again it is imperative to seek a more organic and inherent order without recourse to abstract frameworks imposed by those outside who lack confidence that the object into which they inquire has any inherent rationality of its own.

A certain kind of logical clarity and simplicity may be more easily arrived at if concepts are abstracted from nature.
and deductively worked into a formal system. But this clamps down an artificial unity on nature. In contrast, theology seeks to co-ordinate its concepts and structures as fully as possible with the given reality. Torrance believes the future of ecumenical theology lies in devoting our attention to the "nature of logical structures" which spring from the intelligible reality of God's own being.

In this context, we should mention Torrance's reconstruction of natural theology. Let us recall that Einstein refused to accept an idealized geometry detached from experience and interpreted as an independent conceptual framework within which physics is pursued and organized. Instead, he brought geometry into the midst of physics, indissolubly united it to physics and made it the epistemological structure within the heart of physics. So too, natural theology, as an independent conceptual system antecedent to knowledge of God, is refused in order radically to transpose it into the material content of theology where, in this changed form, it constitutes the epistemological structure of theology.

Ultimately, the various logical levels must seek to be co-ordinated within fluid empirical relations. Torrance proposes at least three conceptual-logical levels— the actual knowledge, the formalization of this knowledge and the more general interpretation of the system and mode of connection. As new empirical inquiry alters our ground knowledge, the other levels must be sufficiently tentative in order to be open to these changes.

Torrance himself displays a personal flexibility and openness when elsewhere he speaks of two logical levels, where one is a meta-language to the other. For Torrance, the working out of this hierarchical epistemological structure is an organic task of both the scientific enterprise and theology. Torrance's goal is to reduce the inter-connections and relations down to some unitary logical basis in order to illumine the entire field of experience. Inevitably, such a movement to total comprehension leads one away from the initial concrete knowledge into a more generalized conceptualization of the whole. I will argue that it is equally
essential to see theology as an art in order that the focus and concern of theology is never dominated by the ultimate comprehensive urge of science, but returns again and again to the concrete reality, communication and representation of theology's object, Jesus, the Father's Word made flesh, whom we know in the power of the Spirit.\textsuperscript{151}

I. Contingent Rationality

To the Medievals, following Aristotle, the air of earth is below the moon and excluded from the heavenly region of necessity and regularity: contingency and irregularity reign.\textsuperscript{152} The Greek view sees contingency as the realm of accidental events, the opposite of the rational and necessary. The sensible world plays an illustrative role which is left behind when we turn to the real and rational. Though the world embodies the divine forms, they themselves are known only as we reflect upon the heavenly intelligible form and changeless essences which the world imitates.\textsuperscript{153} That which is real is only conceivable in terms of changeless, eternal patterns.\textsuperscript{154}

William of Occam first challenged this framework when he denied the reality of the eternal and universal focus. However he also drove a wedge between the natural and the eternal by making nature the arbitrary product of God's inscrutable will.\textsuperscript{155} Earlier, Duns Scotus had questioned whether creation was causally connected to timeless ideas in God's mind. He suggested rather that God freely produced creative ideas when he created the world.\textsuperscript{156}

At the Reformation a change came. The new creation doctrine stressed that creation was \textit{ex nihilo}, not made out of anything. Creation was utterly distinct from God and yet not arbitrary, for it originated in God's loving will and was grounded ultimately in God's eternal truth and rationality.\textsuperscript{157} For Calvin; creation owes its moment-by-moment existence not to the mind of God thinking it (as with Berkeley) but by the gracious will and power of God through his Word.\textsuperscript{158} The point of agreement with Medieval thought is creation's dependence on God; the difference is that in a contingent rationality, the rational form must be worked out of the empirical world, not applied \textit{a priori} to it.
This new understanding of creation's contingent rationality finally broke away from the Greek orientation whereby mind and world spring from God's mind and in the fall-out man receives a divine spark. A new, clearer distinction between created and uncreated light and rationality was articulated. Creation derives from the uncreated not as an extension or emanation, but quite independently. Yet creation is not self-sufficient. Its rationality is not arbitrary, but stands in 'contrapuntal accompaniment' to God's uncreated rationality. Yet it is not essentially one with it. It is created light, contingently intelligible and possesses a God-given independence. In Christendom, the contingent world was seen as rational in its limited and contingently intelligible way. Here then, was the groundwork for modern science.

For Torrance, contingent intelligibility grew out of a freshly integrated understanding of the doctrines of creation out of nothing and the incarnation of the Creator Word of God. However, it soon became overlaid with Aristotelian and then Newtonian necessitarian forms. Fortunately modern physics has led to a fresh understanding of the spontaneity and order within the universe.

"The intelligibility of the universe provides science with its confidence, but the contingency of the universe provides science with its challenge." When science tries to logicalize contingency into a closed and necessitarian system, its progress ceases. For the order of the universe takes on unpredictable shapes and reveals an intricacy which only empirical investigation can discover.

The empirical directness implicit in contingent rationality tells us the creation process cannot be known deductively from our knowledge of God. Rather, nature is known empirically, out of itself. This same way of knowing holds true for theological epistemology. God is not known from out of man or nature, their ideas or self-understanding, but only out of God and how he reveals himself.

Contingent intelligibility freed the world from the determinism wherein God inertially and immutably relates to a mechanistic universe by necessary causal relations. Rather,
God confers freely on nature a created rationality of its own, derived from but not participating in, God's own rationality, and yet transcendently grounded on it. Unfortunately, this empirical openness demanded by contingent rationality became absorbed by a secularising tendency wherein many scientists saw the world as a wholly self-supporting, self-explaining and necessary system. This turned science back into rationalism and ultimately into a self-contained and hence, meaningless system.

When Newton framed science within an antecedently conceived system of Euclidean geometry in which rigid bodies were related independently of time, it led to a mechanistic and rigid determinism of physical law. In the wake of Hume, it was Kant who restored rationality to science, but only by means of necessary a priori mental categories. For Kant, contingency exists only within a series of causal links, which eventually reach back to what is unconditionally necessary. This undercut empiricism. When a logical-causal necessity is read back into contingent necessity, determinism arises. In effect, this inverts the laws discovered a posteriori into a priori regulative principles. This reverses the movement of their actual happening.

Due to the irreversibility of time, however, we can speak of a contingent necessity. Once events transpire they cannot be changed. But it is philosophical determinism, not empirical science, which says that such events had to happen. This translates a limited, dynamic pattern of events into a static, deductive order. Though determinism may simplify and clarify by formalizing away irrelevant data, it resolves away contingency for it converts a dynamic account of the expanding universe into a non-dynamic and necessitarian account. This severely restricts the scope of science and contradicts its empirical base.

A contingent universe with a contingent order points to a singular and particular origin. Greek thinking with its abstracting process tends to universalize and generalize from particulars and thereby ignores this singularity because of its "scientific horror of unique events". In such a
framework, scientific truths are reckoned to be universally and necessarily valid, for it identifies the rational with the necessary and logical. But in the new science, the singularity and contingent intelligibility of the universe has forced itself upon us. For instance, today science must reckon with the "inescapable singularity of the invariant, finite speed of light". Relativity theory points to a finite, but unbounded universe, understood as a coherent singularity.  

To underscore the cosmic singularity implicit in contingent intelligibility, Torrance discusses the accumulation of scientific evidence for the singularity of the cosmos, such as the fossil radiation work of Penzias and Wilson which, following Einstein, argues that the universe is finite and inherently temporal and limited. 

Thus the expansion of the universe is to be regarded as a vast temporal singularity, in fact an immense unique historical event characterized by irreversibility.  

For Torrance this destroys the old rationalist-idealist dichotomy between the accidental truths of history and the necessary truths of reason. This dichotomy sprang from eighteenth century rationalism which viewed science as concerned with timeless and necessary truths which are causally related to nature. But as Torrance points out, it now appears that all scientific truths and physical laws "belong to and emerge with the expansion of the finite universe, and are as contingent as the universe itself". It is very troubling for those who desire to identify empirical science with logical necessity to hear that creation is apparently unnecessary but contingent on the gracious activity of God. 

This contingent intelligibility throws us back upon the Christian foundations of science. The new openness of science to the rationality of particularity throws fresh light on the incarnation as the particular and singular way God has chosen to reveal himself. Jesus Christ embodies God’s singular rationality, but in such a way that his love and life has a universal range of applicability to mankind. As modern science teaches us that the singularity of natural law rules out other possibilities, so we see in new depth that the uniqueness of
God's incarnation in Christ is the definitive, final and full expression of his universal rationality and love.174

For theology, creation's contingent intelligibility means that the spatio-temporal field is the carrier of order within the universe. Therefore if God acts within time, he must also act within space; and if God acts within space, he must also act within time. For post-Einstein, we know that time is a function of our spatial frame of reference. Theology sees with new clarity and boldness that Jesus Christ is the divine-human axis. That is, he is the actual, empirically particular and singular place in space and time where the world is made open to God.175 God's rationality is therefore not an immanent cosmological principle but the uncreated Logos in whose image by grace we have been created and who became incarnate in space-time and history to redeem us.176

With the mechanical-causal determinism now abandoned, science has begun to speak of the freedom and spontaneous order of the world. The universe appears to be both free and rational in a creaturely, non-necessitarian way. Creation's gift of rationality is an act of grace, not necessity; it is a contingent act unconditioned by any necessity in God.177 The freedom of the universe is thus grounded in God's own transcendent freedom. Therefore the world has a spontaneous order which we "cannot anticipate with any kind of a priori method operating with logical-causal continuities".178

The new respect for the freedom of creation's contingent order solves an aesthetic coherence problem observed by Lewis in the change from the teleological universe of Aristotle with its influences, strivings and yearnings to the non-teleological Newtonian universe of mechanical laws with its images of obedience to traffic regulations.179 The older system reflected a continuity between the physical world and our own most spiritual aspirations. But with the post-Reformation de-divinizing of the world we seem to be thrown into a cheerless, impersonal technological and mechanical rationality. Does the contingent intelligibility of the created world further this de-personalizing tendency or resolve it?

I believe the new science resolves it in several ways.
First, whereas Newton's cosmology imposes a rigid mechanical coherence, Einstein's cosmology points to an organic, living order in which man is a partner. Secondly, the new science does not deny that the whole creation groans until its culminated redemption. Einstein's coherent universe with its spontaneous order is still only a thin, albeit accurate, account of the universe's rationality. For the sake of mathematical precision, much harmony and richness is left out. There remains another primary form of the world's rationality, namely, word, corresponding to the personal reality of the world, even as number rationality corresponds to the impersonal reality of creation. In man, the two are brought together and integrated. Through man alone do both emerge and become audibly expressed in the universe. In man's stewardship and servanthood, creation's birthright of rationality obtains its inheritance.¹⁸₀

And yet even within numeric order and its coherence of quantification, we must not neglect other rational forms. The universe may not be full of the fairies and spirits of Medieval lore, but its colours, smells and tastes are charged with the grandeur of God. Its beauty and coherence constitute an aesthetic rationality, no less essential if unquantifiable, than numeric rationality. And unlike the Romantic, the Christian artist does not project beauty into a colourless world, but delights in and playfully rearranges the inherent beauty of creation. The universe's beauty inaudibly points to Christ while breaking off in its contingency, so that no logical-causal bridge can link us formally from below to God. The weakness of traditional cosmological or sufficient reason arguments lies in seeking to encapsulate the rationalities of creation's cry for meaning and purpose within a formal logical syllogism. This transposes their true order from grace to necessary laws of logic, or to put it another way, from a hierarchical rational explanation from above to a logical-causal ascent from below. As Lewis would say, it becomes all ἐρῶς climbing up and no ἀγάπη darting down.¹⁸¹

General relativity understands the universe as a continuous, harmonious whole, with an inherent form and order. This reinforces the Christian doctrine of the creation of all things
by God and its resulting unitary and singular rational structure. But its principle of order is characterized throughout by the higher explaining the lower, not the lower explaining the higher. It is the weaver who creates the rug, not the man who pulls it apart. The most erudite limpet is explained by man, not the man by the limpet. The teleology and rationality of the universe comes from God to man, not logically from the world to God.

1. Contingence in Lewis

When we turn to Lewis' understanding of creation and creation's rationality, we find him feeling his way along the chasm which had opened up within his lifetime between scientific discoveries and their theological and philosophical implications. Lewis lives between two theological understandings of creation. With no difficulty he can say with Augustine that all theists must assert that the "world was modelled on an idea existing in God's mind". The early chapters of Miracles reveal a mind engrained in understanding the laws of nature in a logical-causal way. This creates the charge that the incarnation is an insufferable interference with such laws.

And Lewis seeks to answer this objection in the following way. He distinguishes three ways to understand natural law: brute facts, laws of averages, or necessary truths. Though the incarnation appears to break the rule of necessary truth, it rather changes our understanding of what those necessary truths are, and enables man to see how rules may be arranged within a hierarchy of laws within laws. Most importantly, Lewis displays his own tacit awareness that the object of inquiry may change or prescribe a reorientation of our cognitive constructs in order to apprehend the object appropriately. This explanation implies a conceptual and co-ordinated interaction between levels of order similar to Torrance and Polanyi.

In spite of his acceptance of Augustine's dictum of the world's eternal presence in God's mind, Lewis also perceives and exults in creation's novelty. "Was not creation itself unnecessary?" he rhetorically asks a friend. Lewis the poet describes creation's lack of necessity as "the doctrine of
largesse" which sets man free. "It's not chastening but liberating to know that one has always been almost wholly superfluous..." Lewis also recognizes that we may be dealing with a rather 'untidy' rationality; it is much less tidy than the logical-causal framework permits.

Science has already made reality appear less homogenous than we expected it to be: Newtonian atomism was much more the sort of thing we expected (and desired) than quantum physics.

Lewis realized the inadequacy of Newtonian physics, and by analogy, its contrast with the rationality of the incarnation. For quite unlike an idealist construction, the incarnation is not transparent to the reason, we could not have invented it ourselves. It lacks the suspicious a priori lucidity of pantheism or Newtonian physics.

...It has the seemingly arbitrary and idiosyncratic character which modern science is slowly teaching us to put up with in this willful universe, where speed is not unlimited, where irreversible entropy gives time a real direction and the cosmos no longer static or cyclic, moves like a drama from a real beginning to a real end.

Written prior to Miracles, this argument shows an openness to understand the contingency of rationality and an instinctive or intuitive guess that there must be a closer empirical fit than causality permits even in science. However, the formal argument for naturalism had been a piece of Lewis' mental furniture since his reading of Balfour's Gifford lectures, Theism and Humanism. He was loathe to give it up and it remains unclear whether he did so, even when pressed by Anscombe. Though privately he admitted defeat, he tried to clean up his argument by some formal reworking.

Lewis never hesitated to reject any suggestion of an ultimate arbitrariness in the universe. He was troubled by the apparent irrationalities of certain interpretations of quantum physics. With Einstein and Torrance, he was not satisfied with a dice-playing God.

Nor was Lewis unfamiliar with the notion of the singularity yet coherence of the universe. He judged Hume's probability argument against the incarnation to be inadequate, for "its very nature is that it happened only once (as so also
Therefore Lewis sees the incarnation as the event of controlling coherence in a multidimensional approach where ultimately transcendence alone gives semantic coherence to all science. For if the incarnation happened at all, it is the central chapter of history.

2. Closed and Open Systems

What do we mean by a closed system of thought? Heisenberg describes Newton's *Principia* as a closed system. That is, it begins with a group of definitions and axioms which are interconnected. Each concept is represented by a mathematical symbol, such that any change in any one of the symbols destroys the system. Heisenberg similarly argues that Einstein's new system is coherent in the same way. For this is an inevitable and essential part of science.

Torrance rejects this interpretation of Einstein and Heisenberg's scientific imprimatur for closed systems. Following Gödel's mathematical research, Torrance argues that any system which is complete and consistent within itself and abstracted from any ontological reference in a system or reality beyond itself, is a meaningless game. The issue is the wedging of structure to reality or the theoretical to the empirical. Rather than begin with axioms and definitions as did Newton, science should construct its axioms and frameworks within an intimate, *a posteriori* contact with the empirical world. Any form which is not so wedded to and filled by reality is out of empirical touch. It may have internal consistency, but only in an idealism unconnected to the empirical world. Similarly, theology seeks a rational structure appropriate to God which arises under the compulsion of God's own self-disclosure.

In art, this essential lack of empirical contact in all closed or ideological systems of thought is illustrated by Cervantes' *Don Quixote*. Quixote dwells in an enchanted world of princesses and noble warriors. When he finally sees Dulcinea as undeniably ugly, he nonetheless maintains his illusion by concluding she is enchanted. There is no logical exit from one internally consistent framework to another. Polanyi and Kuhn have shown that only a conversion to another paradigm can
alter one's perception of facts and of interpretation. 197

Quixote's experiences are genuine. His love is unconditional, ideal and heroic. But his object is not genuine. It has no contact with reality. It is love and grace "poured into a void". 198

In the 1940's, Oliver Quick charged Karl Barth and John Macmurray with living in a closed system. No discussion from the outside is possible, he alleged. For there are no common principles on which discussion may take place. 199 For Quick, a ground for discussion may rationally take place because Jesus as the Logos of God is "dimly or partially revealed in the reason and conscience of everyman". Therefore, the Gospel must make its appeal to that reason and conscience. 200 Though on a different point, Lewis later wrote an approving letter to Theology in response to Quick. 201

Quick espouses the Thomist distinction between revelation and natural theology, the latter enabling discussion or point of contact with those outside the faith. For Quick, this is an open system. But Torrance would argue that this system is not properly open to its object, allowing it to teach us the correct thought forms. Rather, it is a dubious dogmatic or scientific translation of a didactic effort to communicate the Gospel to unbelievers. Quick translates the Gospel into that part of the unbeliever's framework which overlaps with Christianity. His didactic concern is admirable, but he wrongly translates it into a dogmatic position.

The unadmitted difficulty in Quick's approach is that in all 'systems of unbelief', there resides an unrepentant logos and conscience in man which is detached from its inherent connection to Christ the Logos and which claims to judge the validity of Christ's rationality. This means that the reality of Christ ceases to be the judge and instead the active mind judges the object with its unrepentant a priori forms of knowledge and criteria. Quick does not appreciate that fallen man's logical-rational criteria are insufficiently open to the inherent rationality of its object because he illegitimately assumes a harmony between the logic of God's being and the laws of Aristotelian logic. Neither Torrance, Barth nor
Macmurray deny the rationality of the creation or man's rational gift to apprehend that coherence. They do question, however, all a priori forms which claim to capture reality prior to rigorous empirical interaction with the object investigated. Quick could just as easily be charged with a closed system of an a priori harmony between logic and being, of which he must break out before he is properly open to an empirical and inherent logic. Yet to deny Quick's a priori leads to his accusation of subjectivity and a closed system. Fortunately, modern science has abandoned that system and sought instead an a posteriori rationality.

The Thomist logical-causal structure is akin to the Newtonian-Euclidean framework imposed on the physical world. This is less of an open system than a prescriptive framework which controls our openness to physical reality. But, says Torrance, our paradigms must be repentantly rethought. We must learn to be self-critical before the inherent rationality of the object. It is illegitimate to assume, as apparently Quick did, that our logic and conscience are fundamentally appropriate to God in their unrepentant state. Logical-causal inference inadequately describes nature's rationality. It is the rationalist myth, insufficiently open to empirical reality. 'A priori Newtonian lucidity' must give way to the surprising and unpredictable rationality and coherence of the living universe. Human morality must give way to the foolishness of the Gospel, the righteousness of sola gratia which gives each labourer equal pay, regardless of the length of labour and calls into question all human judgements. "Let God be true and every man a liar." Torrance admits there is a "proper circularity" which is inherent in any coherent system whose axioms and logic cannot be derived or justified from any ground other than the intrinsic claim of the subject-matter. He also admits they could be false, even if internally consistent. Therefore they remain open to reasonable doubt. But ultimately all integrated frameworks of fact-theory stand or fall with their power to command our acceptance. "Systems" about reality stand or fall by their empirical fit to reality. Newton's system is so valuable
in one sense precisely because it was capable of empirical falsification.

Theology is an ultimate belief system fitted to its object, Jesus Christ. Its ultimate empirical verification is unique, for its eschatological verification is both within history in the incarnation and the Spirit's witness and also at the end of history. Temporarily, theology's position is analogous to physics's belief in the rationality of the universe. In order to function, physics presupposes order in the universe. Ultimately theology too has no independent demonstration of its truth, but only Jesus Christ himself, both temporally and eschatologically.

Torrance opposes the closed one-dimensional system of cause and effect because once we peel away a priori idealized order from Euclid to Aristotle, a living universe emerges with a dynamic and open system of contingent rationalities. Even so, mechanical causality is not destroyed but understood to have a limited validity within a multiple-layered coherence which is subordinate to the higher and non-mechanistic physical levels of Einstein's relativity. The world's rationality has an "indefinite range that reaches beyond the limits of our finite minds".

Heisenberg betrays an insensitivity to the unique nature of Einstein's breakthrough when he proposes that relativity is just one more closed system replacing another. Following Einstein, the work of Prigogine profoundly points to a further movement away from the chance-necessity, uncertainty-determinism antithesis in which Heisenberg and many others are entrenched. Prigogine's application of thermodynamic laws to open or non-equilibrium systems reveals a new understanding of the spontaneity and open structured order of the universe. A further pointer toward this new open approach to reality is biology's discovery of the unquantifiable in living organism's multi-variable or open field structures.

In the context of Prigogine, Einstein's words are even more compelling than when penned. "In so far as the propositions of mathematics refer to reality, they are not certain, and as far as they are certain, they do not refer to reality."
This reflects the contingent intelligibility of Einstein's finite, but unbounded universe, where theoretical components grounded in inherent structures are themselves finite and limited. Thus there can be no final, closed formalization principle as there would be in an ultimately necessary determinist universe. Our contingently intelligible universe is characterized by measures of freedom and spontaneity which are indeed untidy to the demands of a necessaritariian and closed system.

This is not a weak objectivity. That charge implies that a strong objectivity would be a determinist description of things. Rudolf Bultmann rightly refused the latter kind of objectivity (or better objectivism) as an inadequate way to understand the Gospel. But he mistakenly believed the only alternative was to turn to the subjectivity of his own self-understanding and thus confine God to his own subjectivity. 209

A theology which works integrally with the new science, finds it both unnecessary and mistaken to limit modern man's objective world to Bultmann's closed system of cause and effect. In the wake of Einstein, Gödel and Prigogine, it is more appropriate and accurate to integrate theology in terms of something like Polanyi's hierarchical model of coherent system-levels in which each system is incomplete and needs another in order to be complete and consistent. Today theology must seek to de-mechanize and de-determinize the twin doctrines of creation and redemption within a universe in whose expansion "new forms of coherence and order continuously appear", in all organic life including man himself. 210 Interestingly, Lewis perceived that man in Christ, is, in fact, a new form of organic life and order which has broken into history from above. 211 In Christ the divine and contingent order are integrated and healed in a startling way through the incarnation of God's own order which judges, renews and transposes our broken and limited modes of order by the God-breathed, personal renewing of all organic life.

It is becoming increasingly apparent that the universe has an inexhaustible reality and rationality which manifests itself in ways far surpassing our predictive powers. Therefore
we can emphatically agree with Heisenberg when he says that "the accidental" is more subtle than formerly conceived and can be co-ordinated with "the central order of things". He likens this to Einstein's references to God.212

Concepts and statements about reality should also have this quality of openness or built-in adaptability.213 That is why science favours 'disclosure' to 'picturing' models in order that they might be kept indefinitely open.214 Open intelligible systems require open-structured modes of thought to match their nature.215

Erich Kahler sees the search for open, multi-dimensional form in art as the crucial breakthrough from the constraints of classical rules. In Shakespeare and the art of Breughel, for example, there is no conscious intention to create a closed form, but rather the artists "let go" beyond restrictive bonds. As a result their work has a living depth, length and breadth of open-form with a symbolic quality; it moves simultaneously on different levels, which creates a richness of effect and symmetry otherwise unachievable.216

Erich Auerbach documents in Mimesis the renewal of representation in literature which he argues sprang from the central Christian belief: the reality of the incarnation. There Eternity engages temporality in a living and empirical intimacy unknown in prior thought and culture. In its wake, Western art developed its particular realism and comedy, and overthrew the idealized and highly structured tragedy of classical form.217

Because of the unbounded rationality of theology's object, theological concepts must be essentially open to the reality of God and not ultimately reducible to logical-mechanical manipulations.218 They must be essentially open to the reality of God and not ultimately reducible in their meaning to linguistic analysis.219 Openness is an essential part of their rationality. Only by openness and a refusal to impose constraining formal definitions do we keep contact with reality. The reality of God inevitably bursts through the forms we bring to grasp it.220 "God shatters every syllogism", boomed Karl Barth.221 Similarly, Lewis testifies that "Every idea of him we form he must in mercy shatter." 222
All of our theories and forms seek to refer directly to Christ in order to allow his reality and mystery to be revealed continually to us. 223

Finally, it should be said that one of the strengths of both Lewis' and Torrance's theology is that it allows theology's multi-dimensional rationality to be explored while permitting the object to teach us how to inquire into it. This openness allows criticism to emerge which may correct and/or complement their theology.

3. Dualism

Behind the widely influential démythologization argument of Bultmann is the claim that the basic credal forms of Christianity are bound up with an obsolete philosophy and cosmology, which enclose eternal truths in transitory thought forms. Therefore, we must find new conceptual forms more appropriate for modern man. Torrance believes this scheme assumes the Greek-idealist axiomatic assumption that form does not inhere in being and that a radical disjunction exists between the sensible and the intelligible. 224

As we noted earlier, this dichotomy has an ancient lineage, descending from Plato, who divided the former unity of body and soul. 225 From Plato, there grew a sharp distinction between unchanging, necessary being and the changing appearances of things. It is from within this dominant Greek culture that Christianity had to think through its non-dualistic Hebraic roots in the theology of the incarnation. 226 Therefore Athanasius rejected the fundamental Hellenic sensible-intelligible distinction because in his understanding of the Christ, the two worlds actually intersect and are unified. 227

Under the influence of Augustine, the dualism between the mundus intelligibilis and mundus sensibilis flourished once more. 228 Augustine understood spirituality and intelligibility in neo-Platonic other-worldly terms, wherein the visible and physical is a counterpart to an eternal heavenly pattern. 229 This gave the physical life a diminished, merely symbolic or sacramental role, Torrance argues. 230 Even the incarnation tended towards a shadow compared to the eternally real truth of God. 231
By using Aristotle's principle 'nothing in the mind which is not first in the senses', Thomas partially resolved Augustine's dualism by grounding rational ideas in sense experience and then abstracting them out in order to logically order them. However, he developed a further dualism between natural and supernatural knowledge and between faith and reason when he split the doctrine of the Trinity based on revelation and the doctrine of one God based on natural knowledge. In the science of Newton and Galileo, dualism took the form of a gap between geometrical frame and phenomenal surface. This created built-in discrepancies, by "crushing" the empirical into the framework of an idealized geometry. It also created a deistic disjunction between God and the universe within its mechanistic universe of cause-effect.

Inevitably the sensible/intelligible dichotomy leads to the dominance of one at the expense of the other. Rationalism identifies the intelligible with the logically necessary. Thus, Lessing proposed a radical dualism between the necessary truths of reason and the accidental truths of history. History introduces true ideas which then stand on their own merit. All spatial and temporal categories in theology, for example, the birth, death and resurrection of Christ, are qua historical events, unnecessary and of transitory importance.

Edwyn Bevan indicates that this leads to a crisis in the relationship between event and value or the particular and the universal. To consign the value of all historical events (cross, resurrection), to their symbol of eternal truths is to assign all value to the general and against the particular. Hence, 'Jesus died on the cross' is not important as an event in history but as a symbol that what is important is the general obligation for men to sacrifice themselves for other men, (or in the existentialist-pietist adaptation, the event which happens to me internally here and now).

The Gnostics, with their dualism of God and creature, could only see God as tangentially related to creation. Similarly, the Arians believed the divine involvement could only be a timeless, spaceless point. Therefore, Jesus is ultimately only a symbol, "not the downright reality in space and time of
the timeless, unchanging reality of God". 236 Bultmann's dualism inevitably implies that a different series of particular events took place in space and time.

In theology, to believe that there exists a coherent and unified field where form inheres, teaches us that the Biblical sources of our knowledge of Christ must be allowed to speak out of their own coherence. 237 To detach Christ from God, message and event from person, ignores the coming of Christ as God to man, and uproots Jesus from his ground in the being of God as the Father's Word to man. This makes Christ important only as a mediator of divine necessary ideas, not for his historical, ontological activity and being. 238 That is the triumph of idealism over Christianity.

How does Lewis fit into this analysis of dualism? Lewis was never entirely comfortable with a sensible/intelligible dualism. He interpreted the idealist claim that body locality and time are irrelevant to spiritual and intellectual life, as a symptom that "spirit and nature have quarrelled in us, that is our disease". 239 Ultimately, Lewis believed the new creation would heal this dualism and we have foretastes of it in the sacraments, the best of sexual love and in the experience of the earth's beauty. 240 Above all else, he sees in Christ's death and resurrection the 're-marriage' of spirit and nature. The Greek dichotomies (especially Plato's) all must die and be resurrected in the unity of sensible and intelligible which is in Christ. 241

For Torrance, modern physics, too, is a foretaste of dualism's intellectual excision. Instead of artificially integrating form with experience, Einstein discovered a unity of form and being, structure and matter, which buttresses Torrance's insistent assertion that theoretical and empirical factors already inhere in one another in objective reality. 242 Einstein replaced the concept of material object as the fundamental point of physics with that of the field and its own dynamic structures. That is, physical reality was seen as an integration of form and being, not as an abstraction of form on to or out of being. For relations of field are just as real as bodies themselves and are interlocked indissolubly together. 243
Prior to this field-object integration, the dualism endemic in science following Galileo and Newton either became a reduction upwards into a necessary, unchanging, absolute mathematical determinism or the phenomenological reduction downwards to atomic particles where the real is identified with atomic particles and raw data. The latter reductionist framework views theory as an essentially pragmatic convention. This form of dualism also asserts and isolates the independent reality of matter. This emphasis on the conflict between sense and intellect warps the organic wholeness of life and reflects a rather bourgeois view of personality which isolates the individual and denies his interdependence on the community.

In the wake of Einstein, science has profoundly rethought its cosmology. Newton's double distinction of absolute and relative time and absolute and relative space, made absolute time and space an inertial system independent of relative space and time and therefore immutable. It causally conditioned all bodies into a mechanical system. Einstein replaced this with a four-dimensional space-time continuum, with reciprocal connections between it and the matter and energy of the universe. In so doing he replaced both rationalist and empiricist dualisms with a "more profoundly objective but dynamic relatedness inherent in the structures of the universe, invariant for any and every observer". This lead Einstein to a critical realist position: a position which entails the reality of the external world and the inseparability of empirical and theoretical components in knowledge.

4. Monism or Creation?

The discovery of an organic connection between mass and energy, form and being, does not point towards a Spinozian doctrine of only one substance, God, of which all thoughts, things, and people are modifications. Pantheism certainly transcends dualism, but it falls short of an understanding of creation, let alone, transcendence. It reduces the rich variety of heaven and earth into a mere modification of the One. Creation teaches us that reality is "incorrigibly plural". More importantly, pantheism falsifies the utter transcendence of God,
making man and creation a natural, organic and necessary aspect of deity.

Torrance rejects monism for there can be no oneness of proportion between God and creation. God's incarnate intervention in redemption maintains his transcendence while it simultaneously and decisively rejects any deistic disjunction. The incarnation dashes the split between the phenomenal and real worlds. And yet, it is grounded in the transcendent God who comes to his utterly distinct and contingent creation that he might redeem it. Therefore on the basis of God's incarnate love, (not on the grounds of some secret hidden identity), we distinguish God from the world, but we do not drive a wedge between creation and redemption. They are not two separate kingdoms, but the one Reality of God who through Christ creates the world and redeems it.

How should theology communicate to those who stand within the various dualistic structures of understanding? It is counter-productive to vilify dualist theologies. Torrance at times is not free from a pejorative use of terms. At times this may be unavoidable in the heat of theological battle. Ecumenical theology has much to learn from the irenic model of Einstein who suggests that the gap between Newtonian physics and himself was not so much replacing Newton's old barn with a new skyscraper, but more like climbing a mountain. Where we start still exists. But with relativity we have a better view of the unfathomable depth of rationality still to penetrate. Like Newton's Principia, part of Einstein's achievement is that it may be improved. The same applies to theology as it penetrates into its subject matter with more and more appropriate questions of mind and heart. A theology grounded in such gracious forgiveness should seek not only to declare the sola gratia of redemption, but to embody it in and through a life of witness in prayer, worship and work. Barth is surely right to remind us that all theology speaks from forgiveness.

...regardless of my thousand reasons, I have to count all these people as members of the Christian Church and, remembering that I and my theological work are in the Christian Church only on the ground of forgiveness.
Christian Theology and Scientific Culture, p. 48.

The Integration of Form, p. 152.

The Place of Polanyi, p. 59.

Space, Time and Incarnation, p. 49.

The Integration of Form, p. 158. cf. Christian Theology and Scientific Culture, p. 65.

The World as I See It, p. 173. cf. in this light, Barth's understanding of Anselm's ontological argument and Lewis' gloss on the argument in Christian Reflections, p. 141: "I don't think we can initially argue from the concept of Perfect Being to its existence. But did they really, inside, argue from the experienced glory that it could not be generated subjectively?"

Butterfield, p. 64.


Miracles, p. 7.

Ibid., p. 111.

Heisenberg, p. 5.

Reason in Christian Theology, pp. 40-41. Also God and Rationality, p. 176.

Theology in Reconstruction, p. 236. Due to Kant's influence, Coleridge unites subject and object when he speaks of the act of knowledge. "There is no first and second; both are instantaneous and one." Biographia Literaria, p. 45. In contrast, Lewis sees a proper distinction, for "union exists only between distincts". The Problem of Pain, p. 150.

Theology in Reconciliation, p. 310.

The Road of Science and the Ways to God, p. 252.

Space, Time and Incarnation, p. 45.

Christian Theology and Scientific Culture, pp. 11-12, 17, 50.

Ibid., p. 12.

God and Rationality, p. 13.

Space, Time and Incarnation, p. 45.
Torrance explores the implications for our understanding of the presence of Christ in the eucharist in a relational way and contrasts it to a receptacle notion of Christ's presence in Space, Time and Incarnation.

22 The Place of Polanyi, p. 87.

23 Ibid., p. 80.

24 The Integration of Form, p. 155.

25 The Ground and Grammar of Theology, p. 175.

26 Ibid.

27 God and Rationality, p. 16.

28 Ibid., p. 17. Also Theological Science, p. 115.

29 Theological Science, p. 227. The Ground and Grammar of Theology, p. 34.

30 Divine and Contingent Order, p. 44.

31 Theological Science, p. 179.


33 Ibid.


35 The Place of Polanyi, p. 62.

36 Einstein and Infeld, p. 196.

37 Edwyn Bevan, Symbolism and Belief, The Gifford Lectures for 1933-1934, Boston: Beacon Press, 1957, p. 343. Regrettably, Max Planck notes that none of his theories were ever accepted on the basis of his own arguments, but only when his opponents had died, and a new generation grew up that were familiar with his concepts. Max Planck, Scientific Autobiography and Other Papers, London: Williams and Norgate Limited, 1950, p. 34.


God and Rationality, p. 184. (Italics mine.)


The Integration of Form, p. 163.

The Place of Polanyi, pp. 62-63.

Personal Knowledge, p. 150. Though Popper also describes it as "intellectual love" in The Logic of Scientific Discovery, p. 32.

The Place of Polanyi, p. 63.

Ibid., p. 62.

Ibid.

Ibid.

cf. Popper, pp. 31, 81ff, 106ff.

The Place of Polanyi, p. 65.


Radhakrishnan, pp. 114-120.

Ibid., pp. 100-101.

cf. I. Ellis, Schleiermacher in Britain, Scottish Journal of Theology, 33, 1980, p. 440, where Ellis describes Schleiermacher as the triumph of intuition over induction. Thus F. D. Maurice defended Schleiermacher against H. L. Mansel, for Maurice believed man has an immediate awareness of God, not just a logical inferential link. (p. 448). Here Ellis does not differentiate between an intuitive knowledge which is object-centred and has an essential ontological reference and a subject-centred intuition which focuses merely on the subjective pole of man's consciousness. The question is to what degree was Schleiermacher guilty of cutting himself off from the objective pole of knowledge because of his acceptance of Kant's dichotomy between noumena and phenomena, and because of his attempt to contemplate the enjoyed (Alexander).

Bevan, pp. 349, 352.

Biographia Literaria, p. 157.
Reardon, p. 9. Coleridge, not Kant, is the more immediate influence on Lewis.

The Place of Polanyi, p. 63.

Ibid.

Ibid.

The Integration of Form, p. 157.

The Place of Polanyi, p. 61.

Ibid., p. 65.

Ibid., p. 61.

Einstein and Infeld, p. 8.

The Place of Polanyi, p. 57.

The World as I See It, p. 64.

Ibid. Jaki seeks a mediating place between inference and intuition. He describes the universe's rationality as "always an inference, though not a necessary one...always a bold leap of the intellect". The Road of Science and the Ways to God, p. 81.

Theology in Reconstruction, p. 273.

Institutes of the Christian Religion, II. II. 20, p. 278.

Theology in Reconstruction, p. 84.

Theological Science, pp. 52ff.

Bevan, p. 256.

Ibid.

Biographia Literaria, p. 286.


The Abolition of Man, p. 27.

Elsewhere Lewis suggests the Angels with naked minds and no bodies, have a wholly intuitive knowledge of God which we lack. The Four Loves, p. 10. cf. Studies in Medieval and Renaissance Literature, p. 53.

Letters of C. S. Lewis, p. 231.

see footnote 6.

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The Four Loves, p. 115.

Bodleian Library, Lewis ms. facs. c. 54, The Great War, p. 48.

Einstein and Infeld, p. 9.

Born, ed., p. 149.

The Road of Science and the Ways to God, p. 40.

Ibid., pp. 252-253.

The World as I See It, p. 128.

Divine and Contingent Order, pp. 43, 61.

Letters of C. S. Lewis, p. 260. At times, Lewis uses imagination and intuition interchangeably, as do Einstein and Polanyi.


Here I turn to a brief but curious passage where Torrance praises Descartes for teaching us that our thoughts of objects must be arranged in orderly sequences "if we are to intuit them". Theological Science, p. 110. (Italics mine.) Torrance seems to be saying that the ordering of concepts is prior to intuition. This implies intuition springs from our thoughts or concepts. Whereas for Lewis, concepts spring from the intuitive indwelling act. Surely from the intuitive, indwelling encounter with the subject matter, indwell concepts spring forth. I can only conclude that this passage is either a printer's error or a mental solecism in Torrance's thought.

The Allegory of Love, p. 112.

Bodleian Library, Lewis ms. facs. c. 54, The Great War, p. 72. Torrance seeks the interior abstract framework which inheres in the object. But he would not deny this framework is abstract.
98. Christian Theology and Scientific Culture, p. 113.
99. Popper, p. 32.
100. The World as I See It, p. 125.
101. Ibid., p. 128.
102. Theological Science, p. 185.
104. The Integration of Form, p. 153.
105. The World as I See It, p. 64.
106. Ibid., p. 61.
107. Ibid., pp. 4-5.
110. Out of My Later Years, p. 64.
111. Space, Time and Resurrection, p. 11.
112. God and Rationality, p. 22.
113. Ibid., pp. 169-170.
114. Ibid., p. 179.
115. Christian Theology and Scientific Culture, p. 95.
117. Theology in Reconstruction, p. 73.
118. Conflict and Agreement, I, pp. 304ff. Only the Hebrew mind takes time seriously, as well as space, Torrance adds. One thinks of Einstein's 'Jewish physics', where for the first time space and time are 'thought together'.
120. God in the Dock, p. 176.
122 Ibid.
124 The Integration of Form, p. 155.
125 T. F. Torrance, personal interview.
126 Theological Science, pp. 230-231.
127 Ibid., pp. 234-235.
128 Ibid., p. 207.
131 Theology in Reconciliation, p. 38.
133 Auerbach, p. 119.
135 Theology in Reconstruction, p. 128.
136 Space, Time and Resurrection, p. 71.
137 Theology in Reconciliation, pp. 208-210.
138 Theology in Reconstruction, p. 148.
139 Theological Science, p. 7.
140 Ibid., pp. 212-218, 138.
141 Theology in Reconstruction, p. 188.
142 Conflict and Agreement, I, p. 147.
143 Theology in Reconciliation, p. 244.
144 Divine and Contingent Order, p. 16.
145 Theological Science, pp. 118-119.
146 The Problem of Natural Theology in the Thought of Karl Barth, pp. 133-135.
147 Space, Time and Resurrection, pp. ix-x. Torrance records that when he discussed this analogy with Barth shortly before his death, Barth replied, "I must have been a blind hen not to have seen that analogy before". By this analogy of relativity physics and geometry, Torrance expounds Barth's own theological epistemology. See Chapter VII. C. Natural Theology in Reconstruction.

148 Theological Science, pp. 258-259, and 163. For Torrance, the move from the lower (Father-Son-Spirit) level to the higher, abstract (trinitarian conceptualizations) retains its meaningfulness only if we hold to an identity of the ontological with the economic Trinity. The Ground and Grammar of Theology, p. 168.

149 God and Rationality, p. 203.

150 Ibid., p. 11. cf. Out of My Later Years, p. 98.

151 See, Chapter VIII. D. Theology as Art and Science.


154 Theological Science, p. 63.

155 Theology in Reconstruction, p. 273.

156 Ibid.

157 Divine and Contingent Order, p. 2. God's personal being holds his will and rationality together in a natural unity.

158 Calvin's Doctrine of Man, pp. 61, 63.


160 Israel: People of God--God, Destiny and Suffering, p. 7.

161 Divine and Contingent Order, p. 58.

162 The School of Faith, p. lxxiv.


164 Ibid., p. 41. cf. The Ground and Grammar of Theology, p. 103.

165 Divine and Contingent Order, p. 28.

166 Ibid., p. 43.
167. Ibid., p. 57.
168. Ibid.
169. The Ground and Grammar of Theology, p. 100.
171. Ibid., p. 108.
173. Ibid.
175. Space, Time and Incarnation, p. 74.
176. The Ground and Grammar of Theology, p. 77.
177. Divine and Contingent Order, p. 34.
178. Ibid., p. 39.
179. The Discarded Image, p. 94.
180. God and Rationality, p. 140.
183. A Preface to Paradise Lost, p. 89. I know of no place where Lewis specifically mentions creation ex nihilo.
184. Miracles, pp. 59-62. cf. God in the Dock, p. 73, where Lewis deals only with laws of nature as necessary provided there is no interference.
188. The Problem of Pain, p. 25.
Brewer, The Tutor: A Portrait, p. 59, records Dyson's comment that Anscombe had dealt a conclusive blow to one of Lewis' most fundamental arguments. "Now he has lost everything and has come to the foot of the cross." Griffiths too records Lewis' admission of defeat, but that his faith was unaffected because he had no illusions about philosophy's relation to Christianity. "We have no abiding city even in philosophy: all passes except the Word." quoted in Griffiths, The Adventure of Faith, pp. 21f.

Miracles, p. 110.

God in the Dock, p. 81.

Ibid.

Heisenberg, p. 93.

Ibid., p. 98.

The Ground and Grammar of Theology, p. 91.

Auerbach, p. 340.


Auerbach, p. 345.


Quick, The Conflict in Anglican Theology, pp. 234-236.

In his letter, Lewis pursues a different thesis, namely, the 'hating approach' of all closed systems to those outside. 'The Conflict in Anglican Theology', Theology LXI, Nov. 1940, p. 304.

See N. D. O'Donoghue, Creation and Participation, Creation Christ and Culture, p. 140. O'Donoghue argues that logical thinking by its very nature implies totality and a closed system. He refers to Levinas who suggests that to meet the other in his otherness, I must break out of my totality and open outwards to the unknown.

Romans 3:4.

Space, Time and Resurrection, pp. 15, 17.

Divine and Contingent Order, p. 3.

The Ground and Grammar of Theology, p. 12.

The Integration of Form, p. 146.
208 Divine and Contingent Order, p. 53.
209 Theological Science, p. 296.
210 The Ground and Grammar of Theology, p. 192.
211 Mere Christianity, p. 182.

213 The Place of Polanyi, p. 73.
214 Theology in Reconstruction, p. 96.
216 Kahler, pp. 10-13.
217 Auerbach, pp. 321, 324.
218 Theological Science, pp. 15-16.
220 Ibid., p. 187.
221 Anselm: Fides Quaerens Intellectum, p. 30.
222 Letters to Malcolm, p. 82.
223 The Ground and Grammar of Theology, p. 126.
224 Theology in Reconstruction, p. 260.
225 Kitto, p. 173.
227 Space, Time and Incarnation, p. 15.
228 Theology in Reconciliation, p. 31.
229 Theology in Reconstruction, p. 262.
230 Belief in Science and in Christian Life, p. 5. Also Theology in Reconciliation, p. 268.
231 Theology in Reconstruction, p. 175.
232 Belief in Science and in Christian Life, p. 5.
233 The Ground and Grammar of Theology, pp. 22-23.
Space, Time and Incarnation, pp. 41, 43.
Bevan, pp. 264-265.
Christian Theology and Scientific Culture, p. 28.
Ibid., p. 25.
Miracles, p. 103.
Ibid.

Ibid., p. 164.

Ibid., p. 24.

Ibid., p. 27.
The Integration of Form, p. 145.

Reason and Emotion, p. 25.

Ibid., p. 215.
The Integration of Form, p. 147.


Miracles, p. 169. cf. Adey, p. 22. We should note Lewis' difference with Barfield here.
Space, Time and Incarnation, p. 71.
Theology in Reconstruction, p. 211.

God and Rationality, p. 77.

Einstein and Infeld, p. 152.

CHAPTER III

THEOLOGY AND RATIONALITY

A. The Object Prescribes The Mode of Knowing

Fundamental for Torrance's theological science and its analogy with natural science is the realist belief that we discover truth; we do not create it. He therefore fundamentally opposes all Romanticism and subjectivism. All science seeks to understand the distinct nature of its object in order to develop and use categories appropriate to it. Theology is a rational science only to the degree it is controlled and regulated by objective states of affairs independent of our conceptual constructions.

Here we must discuss the source of authority in theological epistemology. In the Medieval world, the locus of authority was often seen to reside in the learned tradition of the Church and the great Greek writers such as Plato and especially Aristotle. Today a high view of authority persists only for our own modern thought forms and culture. The past is either patronized or debunked, a mental habit Lewis calls chronological snobbery. Nonetheless, the great advances in the sciences were made by men steeped in the great tradition of the finest teachers. The heuristic value of tradition stands unchallenged. Yet flexibility and openness must be a part of tradition lest it grow rigid and obscurantist.

Eventually the question arises of where the ultimate locus of authority resides. Then we must make a commitment to either some sort of rationalist or existentialist individualism, or to an institution—or a reality "wholly given and trans-subjective", in A. E. Taylor's words.

If our knowledge is to be more than opinion, there must be a direction and control of our intellectual constructs by something received, not made. To say that the object prescribes
the mode of knowing does not imply that a mechanistic dictation takes place in any science. But it does affirm that we must be open to receive. Luther remarks that unless we see ourselves as spiritual beggars with empty hands outstretched to God we cannot be filled with his righteousness, but instead we desperately cling to our own feeble virtues. This lesson applies to theological epistemology just as much as to salvation and righteousness.

Unless the object inspires and gives us courage through the sheer impact of its truth and beauty upon us, we will have neither courage nor confidence to probe and to inquire. Auerbach notes that the sheer reality in which the seventeenth century French author, St. Simon lived, inspired and forced him to go beyond the rationalism of his day. Similarly for Kierkegaard, it is God who motivates the passions of our subjectivity, that is, our passion and impetus to respond and participate in the Gospel.

To allow the object to teach us means we must allow it to determine the proper connections in our thinking. No true knowledge begins with theory or method, but rather the ontic reality prescribes the noetic mode. Content dictates form. Knowledge is a posteriori. Causal or logical connections may distort. Within the field of interaction between God and his world, a dynamic pattern of connection exists which eludes its attenuation into a logical-causal framework. This is a radical change from the old positivist notion of science wherein every part of the universe must be observable or objectifiable in the same way, open to the same kind of coercive experimentation and where all must be amenable to logical forms that arise from thinking of determinate objects. This selects a priori what kind of knowledge is possible. Physics itself could not have advanced with this limitation. Progress in physics arose only through radical changes in the structures of scientific rationality itself, with the work of Einstein, Bohr and others.

In this context, we can best understand Torrance's recurring insistence that theology is more like an exact science than it is like philosophy, for it insists on thinking
in strict accordance with the nature of its concrete object. Here is the crucial epistemological implication of sola fide: for as justification makes clear the path of righteousness, namely, faith determined by the objective Word of God and not by lesser authorities, so also the theologian detaches himself from all other norms of knowledge in order to commit himself to this Word of God. A theologian is not a free man wandering unattached to any community of ideas, as Wittgenstein describes the philosopher. As Lewis puts it, "I was not born to be free, but to adore and obey." Barth has frequently been labelled a Kantian. Doubtlessly influenced early, Barth left this behind "to take up a very different position on the ground of the actual knowledge of God based on his Word". Torrance points out that Barth's commitment to the absolute priority of the Word of God is the opposite of Kant. God's activity is primary. He is Lord and never resigns himself to our intellectual control.

Torrance's commitment to the primacy of revelation is reflected in his regard for Scripture, whose thought forms have a unique "sancrosanctity" because they represent the way both God's revelation and reconciliation have taken within the mind of man as covenanted patterns of response and obedience. The Bible calls man away from abstract and impersonal philosophies to the Personal Lord who encounters us face-to-face in His Word.

The parallel with Lewis is so striking that in 1946 an interviewer for the Christian Century asked Lewis if he had read Karl Barth. Lewis replied he had not read enough Barth to have been affected by him. But as the interviewer puts it, "To Lewis, God is the centre, God rules, God can interfere with men whenever he desires. The intellect is not a king." Lewis once complained that Bultmann sought to accommodate the Gospel to our modern thought forms. "But supposing these things [e.g., the resurrection] were the expression of God's thought...?"

Lewis' commitment to the primacy of God's reality and revelation is the ground of his thinking and feeling. He quotes with approval Tyndale's sage view of philosophy: "Let
man first be grounded in Scripture". After that, we may wander in the fields and meadows of philosophy, but will able to discern the honey from the poison. Lewis warmly echoes Hooker's argument that no king or Pope has absolute authority for ultimate sovereignty lies "nowhere except in Heaven". He impatiently dismisses the rational piety of eighteenth century writers like Addison, Swift and Pope. It was insufficiently doctrinal for one who preferred to be a supernaturalist, "one who submits Reason to Dogma".

The proper method for all doctrine is to consider the way God has taken. All knowledge requires this a posteriori respect for reality. Lewis likens the rationality of our participation in Christ to the rationality of our physical birth.

We have to take reality as it comes to us...If one did not happen to know, I should never have seen any connection between a particular physical pleasure and the appearance of a new human being in the world.

Lewis shares Torrance's realist orientation—the objective reality always precedes our understanding and always exceeds our efforts to grasp it conceptually. When Lewis opposed the ordination of women priests, he defended his view by saying that though it might be opaque to reason, it was not contrary to it. He reckoned that to retain only those doctrines justifiable before the bar of "enlightened common sense" would be to exchange revelation "for that old wraith natural religion". As Lionel Adey, a critic of Lewis, observes, the final mode of verification for Lewis was always to follow the lead of the subject matter as the only guard against subjectivity.

Lewis perceives the object's priority in theological knowledge in a very personal way. In Narnia, Edmund is questioned about Aslan. "But who is Aslan? Do you know him?" "Well—he knows me," replied Edmund. To be known by God is man's purest joy. That is why the words are so tragic which we are warned that we may hear: "I never knew you. Depart from me".

What is the nature of the ontic reality which we are given? Is it certain dogmatic propositions? No. God gives
to us himself in Jesus as ontic reality. Our noetic conceptualizations of this personal, ontic reality derive from and rest in Christ and always stand under the correction of his ontic reality. At the centre of our theological epistemology stands Jesus Christ. He is the norm and criterion of our knowledge. 31 We must never abstract our formal Christology from direct dialogical encounter with God in Christ for it is only through sharing in the knowledge of the Father by the Son that we can know God as He has given Himself to us in Jesus Christ. 32 That is, we must never reduce our knowledge of God to a coherent system of ideas. That would be to stop with concepts, not Christ. Christ's rationality and reality cannot be reduced to even the best theological concepts. 33 He is more real than either my imagination of him or my cognitive reflections. Religion is destructive when it seeks to reach beyond the embodiment of God in Word and flesh and to transcend this utter actuality by means either of an ineffable experience or an identification of truth with a concept. "All attempts to abstract Jesus' meaning from his objective human reality are not merely exegetical mistakes, they are worship of another God than the God of the Gospel." 34 Theology is content to point to Christ by concept and image.

This theological particularity and concrete focus is not without its critics. For example, John McIntyre thinks theology has many objects—Bible, revelation, Christ, church history, etc. 35 R. W. Roberts sees Barth's (and by implication Torrance's) Christ-centredness as a systematic alienation from "the concept of natural reality". 36 Both thinkers prefer to expand theology's centre to include a variety of abstract concepts from historical theology to the "shared reality of human existence".

But for Torrance and Lewis, this substitutes the concreteness, object-centredness, and immediacy of the incarnate Christ, known through the Spirit, for the abstractions of theoretical analysis. This bypasses the face-to-face encounter with the Word made flesh, for the reflection and stimulation of theological concepts.

The unabashed claim of the Gospel is that creaturely beings may actually know the inner heart of God the Father laid
bare for us in the flesh and blood of Jesus and through him share in the filial love grounded in the eternal being of God. 37

Theology falsifies the mode of knowing when it substitutes a detached approach for a whole-personed openness and dialogue with the Living God. As D. M. MacKinnon puts it, the incarnation is God's presence with us. And we shrink from it, preferring 'necessary' absolutes such as abstract values, concepts, institutions or even spiritual experiences.

If the object prescribes the mode of knowing, the question of particular criterion, *scientia specialis*, arises. MacKinnon argues that theological statements are true or false in accord with principles and criteria internal to their nature. 38 There is no simple account of truth applicable to all. Mathematical proof requires reasoning; a scientist experiments; historians rely on documents; judges insist on sworn testimony. 39 Each field requires a "certain faculty of recognition". 40 In geology we must find and investigate rocks. We initiate. With animals, again we initiate the search, but we must be quiet. With human relationships the initiative is divided. The only valid knowing is that of free and willing individuals revealing themselves to one another. 41 Controlled experiment is absurd. 42 But if I will not allow myself to be known, the other is left out.

In knowing God, however, the initiative is all his. "If he does not show himself, nothing you can do will enable you to find him." 43 We cannot verify Christ's divinity by taking specimens of his blood or dissecting him. 44 Nor can we use a telescope or mathematical reasoning such as we use in knowing dumb, impersonal objects. 45 Most significantly, in accord with God's nature, I am questioned before I begin to ask questions. God confronts man as Subject, as personal Lord. Hence the basic mode of inquiry is not logic or reflection, but repentance and prayer. 46

To know God, the instrument we use is not external to the self, like a telescope, but is the whole person brought before God in dialogue. Herein lies the importance not only of prayer, but ethical obedience, integrity and honesty. All of these function within the Church, the laboratory of God
(Lewis), where real men and women united as a community of verifiers (Polanyi), inquire into God through worship, prayer, holy living, sacrament, repentance and adoration. 47

To know God is a gift bestowed in grace. We receive by that same grace. Concretely this leads us to humility before the truth and therefore patience with others. Humility reveals whether theology finds its truth in itself or in God alone; patience reveals whether theology understands its object as something we cannot master or control. 48

1. The Epistemological Relevance of Election

Christian theology claims that we know God not so much through acting on him or discovering him, but through his acting on us, his journey to the far country. This is the doctrine of election. 49 Therefore we do not seek to know by prior philosophical ontological categories but rather "in the way which he has willed to be known". 50 God is known because of God's decision to love us. 51 He is Lord of the knowing event and process. Man's role is to receive, to say amen. But in Calvin's rough and tumble language, vanity and pride are seen

when men seeking God, measure him by the yardstick of their own carnal stupidity...for they do not apprehend God as he offers himself. 52

As a result, they "end up worshipping not God, but a figment of their imagination". 53

Divine election means that theological thinking does not choose its own direction. One has been chosen for it. As Lewis puts it, if there is a God at all,

then it is so probable as to be almost axiomatic that the initiative lies wholly on His side. If He can be known it will be by self-revelation on His part, not by speculation on ours. 54

Our task is to look for him where he has revealed himself. The supreme curiosity about describing religion as "man's search for God" is the absurd way of putting it. One might as well speak of the mouse's search for the cat. 55 Lewis reckoned one could compile a better guide on how to avoid God than on how to find him. "That is because I never had the experience of looking for God." 56
At the time of his initial conversion experience, Lewis had been making a sincere effort to obey his conscience. Athanasius, too, speaks about the need for a holy mind in order to see God. Without faith it is impossible to please him. But these are subsidiary considerations of response to the electing, loving God. The only proper context within which to discuss obedience and faith is the reality of God's seeking, initiating love. To speak of our faith or response of obedience, etc., is to say that our knowledge and verification awaits upon our entering into the conditions which the object itself prescribes. 57

2. God is Revealed and Known by God Alone

Teach me to seek Thee... for I cannot seek Thee, except Thou teach me, nor find Thee, except Thou reveal Thyself.

--Anselm 58

Because God is holy and pure, sinful man cannot approach God. The light of purity blinds him. Therefore no knowledge is possible unless God himself establishes reciprocity and adapts himself to our finitude. That means revelation can only occur through reconciliation where guilt is expiated, namely, through the incarnation and passion of Jesus. 59

God is revealed and known by God alone. Philo rhetorically asked, "Do we behold the stars by any light beside that of the stars themselves"? 60 Were God not the source of all our knowledge of him, our knowledge would betray itself to be "one of those principles underlying human systems and finally identical with man himself". 61

The reality which confronts us in theological epistemology tells us that our knowledge of God can never be fully comprehensible or explainable in terms of our action, our conceptualization or as our possibility. 62 To demand full conceptual understanding without recourse to knowledge as an act of God does not take seriously the Christian claim that it is God who initiates and God who reveals. "God remains master of our knowledge of Him." 63

In knowing God, we must admit man's estrangement from God. Therefore theology gladly acknowledges that it is not man but God who activates and sustains the relation between...
our knowing and his reality. 64 Otherwise we substitute the work of our human spirit for the work of the Holy Spirit. The epistemological relevance of the Spirit is his creative agency in mediating the Father's Son to us and in creating as the immediate presence and power of God our receptivity and understanding of God's revelation in us. 65

In his early writings, Torrance suggests we understand man's rational comprehension of God along the model of the hypostatic union. Our knowledge of God does not involve the deification of our human spirit, for the Spirit keeps our spirits human. And yet it is the Spirit who "creates out of the matrix of the human mind the forms by which Christ is apprehended". 66 Man's thoughts are properly and inevitably human thought forms. Our human knowledge must not be identified with the divine understanding so as to deify our concepts and thus turn them into idols. But on the other hand, we must not make our concepts subjective by regulating and associating them not with God but only with the self and reposed upon our self-understanding. 67

God as ultimate reality is more truly knowable, not less, than any other reality, says Torrance. He cannot be demonstrated from any ground inferior to himself for his demonstration is a demonstration of his own Spirit and power. 68 That is, ultimately, the ground for our knowledge is God, not human reason. Coleridge wrote:

I more than fear the prevailing taste for Books of natural theology, demonstrations of God from nature, etc....Evidences of Christianity! I am weary of the word...you may safely trust it to its own evidence—remembering only the express declaration of Christ himself: No man comes to me, unless the Father leadeth him!69

For Torrance, God's revelation is not only the uncovering of God but also the uncovering of the eye and ear of man for God. Revelation is the bi-polar act of the God/man. Our response and God's initiative are gathered up and united in Christ. 70 That means our response is truly ours only as we participate in Christ's response as man to the Father. Our regeneration is not a new effect of our making but takes place in the life of Christ and manifests itself in us as the Holy Spirit
subjectively realizes in us what has happened in him.  

3. The Possibility of Theological Knowledge

There is no possibility of knowing God unless man enters into the God-required adaptation of our humanity to God, Jesus Christ. For Christ is he who comes to restore our humanity and free man from all self-enclosed possibilities. Most questions concerning the possibility of theological knowledge, like most questions concerning the existence of God, are abstract and therefore meaningless because they are independent of the actual knowledge of God through Christ.

Beyond any innate ability to achieve it, God creates our capacity to know him. For Torrance, this means we operate with an incongruence, a gap, a discontinuity, between our knowing and Christ, the object of our knowing. In the incarnation, God breaks into our world and our cognitive structures and transposes them into a new key. A complete and fully formalized epistemological exposition from the side of man would substitute a theory of knowledge for the free activity of the Spirit.

Discussions about the possibility of theological knowledge are 'after-thoughts', thinking in the wake of Jesus Christ. As Barth puts it, "What I mean is that man cannot unveil God." If God could not by his own nature reveal himself and make that knowledge real and rational, there would be no Christianity. There can be no give and take, no correlation "allowing for adjustment on both sides".

Once man's rationality is no longer seen as necessarily autonomous and able to resolve all epistemological questions within the circle of its own possibilities, there is a proper way to speak of fulfillment or continuity, as well as the discontinuity of God's breaking in, senkrecht von oben. For even as justification by grace does not destroy morality or law, but establishes it truly on its proper ground, namely the grace of God, so also knowledge by grace establishes our rationality on its own proper transcendent ground, God himself in his own incarnate Rationality, Passion and Decision of Word made flesh.

Christian theology does not so much seek to answer man's
questions as it seeks to put a question to man at every point of his life. This is the epistemological inversion theology requires. If it merely answered man's predisposed questions, it would only answer what man was already pleased to know and the manner in which he had secretly determined how he would know it. True theological knowledge only occurs through a "critical reconstruction of subjectivity in accord with the nature of the object". This is the road of repentance, intellectual and emotional. This implies that at times, theological thinking may impose a severe strain on our normal habits of thought. But so it is with the God who is indis-solubly Lord. Hence, the finest result of prayer is to arise as Aquinas and say, "But I never knew before, never dreamed". And of his own mighty work he humbly said, "It reminds me of straw".

B. Inherent Form in Theology

In hunger I have come to Thee; let me not go unfed. I have come in poverty to the Rich; in misery to the compassionate; let me not return empty and despised.

--Anselm

Theological statements must struggle not to project into God what we already know from elsewhere, but to seek to allow what is radically new to come to us. This distinction between projection and discovery reminds us that theological thinking does not primarily interrogate its object but listens and receives.

However, theological terms are not immaculately conceived. Theology struggles to invent terms and to creatively work out doctrinal patterns, but only from what it is compelled to think and say on the grounds of God's self-revelation. Jesus did not constantly remind his disciples who he was, but wanted them to discover it. "He kept the pressure of his presence upon them which forced on them the question as to his being and person." This illustrates the great but fruitful tension between our integrity of human response and the utter Lordship of the Divine object. Theology reflects here the freedom for which Einstein argues in the physical concepts of natural science, in which only one pattern really fits the word puzzle.
And the very best concepts are those that reality forces upon us. Even so, the connection between thought and being, though intimate, must be distinguished and not reduced one into the other.

It is this intimate but non-reducible relationship between thought and being that Torrance has explored at length. He quotes approvingly James Brown's assertion that "thought and being are together from the beginning". In revelation, the Word (dabar) of God is not primarily the inner being of God, nor the activity of God, but both. The LXX translates 'dabar' as either 'logos' or 'pneuma', for in God, word and event, being and presence, coinhere. God's activity corresponds with his words and his words are integral to his being.

In his early writings, Barth gave such emphasis to Word as God's act, that he existentially anchored this act in man's decision. But he saw that this amounted to a Pelagian co-redemption and the personal despair of ultimate dependence on one's own piety and not God's grace. Penetrating more deeply into the Word, Barth came to see its meaning as 'Being in Act'. Hence as we participate in the event of God's revelation in Jesus Christ, we encounter the actual being of God.

We cannot firmly identify God's being with his act in Christ unless that same Word dwells eternally in the trinitarian heart of God. Without grounding God's Word/Act within his eternal being, there is no ultimate grounding of the Gospel in God himself. God the Father remains unrelated to and indifferent to our human condition, having no place or time for us in his innermost being. Christ's love for us, then, is not anchored in ultimate reality.

In Christ, God has established an ontological and cognitive bridge between the world and himself. Our human capacity or natural reason does not prescribe to God, but learns from his self-giving and is healed. The purpose of our reason, passion and sensuous experience cannot be to substitute a man-made bridge to God. God's being is inherently eloquent and rational and that is what he gives us in Christ. God gives us his Rationality, his Logic, in atonement and forgiveness.
Since Arius, some theologians have accepted the dichotomy between the phenomenal world of sense and the real world of intelligibility and spirit. As a result, they cannot accept that God could or would bridge this gap. Therefore all our concepts and images are axiomatically correlated to man's consciousness and powers of conceptualization but not to the nature and reality of God. It was this axiomatic assumption that Athanasius so radically rejected in thinking out the implications of the incarnation.95

For Arius the Word of God was not grounded in God's eloquent eternal being. The Word was separate and therefore mutable. Athanasius rejected this Hellenic dualism of sensible world and intelligible world with its detachable theological conceptuality related to God only by convention, not by nature. Athanasius argued that this disrupts our reading of the Bible and converts its proper sense into an oblique meaning. It thereby interprets Christ in accord with what the interpreter conceives and finds acceptable.96 This makes man, the subject, the point of absolute reference.

The perennial problem of modern Protestantism is its Arian lack of confidence that its object is rational in its own right. Therefore God must be made objective and rational by borrowing concepts from elsewhere.97 This is the shared path of Harnack and Schleiermacher which makes the essence of Protestantism 'raw data' of the inward and spiritual experience. But for Torrance, the object of theology is not religious experience, per se, but the inherently rational Word of God. Our experience is a window, not a mirror. It refers outer and beyond to the other, namely, God who comes to us and whose rationality is inseparable from his Person.

In his important early work on Anselm, Barth speaks of a nóetic necessity in theology.98 By this he means that the eternal Word of God is present to man in rational concrete form.99 Similarly for Athanasius, the essential Biblical forms of thought and speech derive from the economy of revelation in Christ, and in and through him are grounded in the eternal being of God.100 Theology has to do immediately with truth in the form of concrete being. That is, theology
has to do with God's rational act in Jesus Christ. In our 'religious experience', we experience Jesus the Logos. It is fundamentally wrong to see theology as an interpretation put upon a more fundamental experience. Religious experience is blind and dumb. It tells us only what its object gives us. If we must interpret it from out of our own rational formulas, we have heard nothing new. No word has been spoken to us. We have only devised a word for ourselves.

Closely resembling the Arian chasm between sensible and intelligible, is the Kantian dualism between noumenal and phenomenal, which makes God unknowable in himself. God remains unknown, for he cannot fall under the power of man's objectifying conceptual operations which are shaped by the active reason. To say we know God would mean God, too, is under our control like other this-worldly phenomena. If God cannot be known like other phenomenal objects, he must be known by faith. But this faith-knowledge operates outside all rational structures. It is because Schleiermacher accepted Kant's position on concepts as objectifying projections that he denied the possibility of cognitive knowledge of God and formulated theological rationality only by reference to the religious consciousness of the Church's creative spirituality and not by reference to God. Inevitably Jesus is not known either. We only know what appeared to his contemporaries, "what they made of his appearances for themselves". By driving a wedge between faith and scientific or rational knowledge, this tradition deprives faith of its objective ontological reference. Faith-knowledge is emptied of its cognitive content. Within such a double disjunction of noumenal/phenomenal and faith/reason, only a merely moral, poetic or symbolic meaning about ourselves and our intimations of transcendence can remain. Here are the epistemological prolegomena to Bultmann's demythologization programme, namely, a dualism between rational knowledge and faith, conjoined to the Kantian-Arian dualism of sensible/intelligible.

When with Athanasius we see the incarnation as the coming of God as man whose word/act is a unity, we no longer extract religious or spiritual experience from this natural unity.
For God comes as Word and conveys to us the rational forms appropriate to understand him. Because the object reveals to us the correct noetic form, Lewis had the confidence to say that the 'God-man' is the objectively true description of the incarnation, whereas his critic, Pittinger, only wished to say that it was a Christian's subjective opinion of Jesus Christ. But for Lewis and Torrance, God in Christ carries us across the gap between man and God. This is why the Gospel is good news. God has revealed himself as the loving and forgiving judge who takes our sin and judgement upon himself.

For Bevan (one of Lewis' important modern guides), the emphasis on religious experience (e.g., Otto's awe, Schleiermacher's dependence) is best understood not as the raw, foundational experience of religion which theology builds upon. Rather, as the emotional relic of an abandoned belief system, it reflects the modern desire for an undogmatic religion, that is, one which has no concepts and no confessions, but only a nice numinous awe attached to particular things in the world—starry skies, etc. Theological concepts would be understood as symbols of a Reality beyond, but what this is, no concept of mind can express. For Bevan and Lewis this focus on meaning and feeling may have a legitimate place in theology and need not be rejected out of court. At one level at least, the experience of awe is a genuine one which is felt by many people. To stress man's awe or feeling of dependence is "not as much false as partial". In Macmurray's language, this would be an aspect of the rationality of the emotional life.

Lewis explores this partial truth with empathy and even sympathy. By contrast, Torrance's stinging intellectual rebuke of Otto and Schleiermacher for their experience-centred perspective does not permit us to explore the 'aesthetic rationality' their experience suggests. As an adult convert to Christianity, Lewis read Otto's account of the numinous with the keenness of one who had experienced awe without adequate theoretical framework within which to integrate it, much like a man walking along a beach who wonders why his heart aches with an intense longing. After all, there is no
causal connection between awe and plentiful quantities of water and sand. Lewis found Otto's account of the numinous experience "the best analysis of this we have".\textsuperscript{110} Granted, Otto describes religious experience only with reference to the emotions it arouses. But his whole point is that we are mistaken if we understand the numinous merely as an affair of 'feelings'. "But then nothing can be described except in terms of its effects in consciousness."\textsuperscript{111} What we feel about awe is not itself awe. We feel awe about something other. Both awe and dependence point to that other--and break off.\textsuperscript{112}

Of course, there is more to God than a Wordless; awe-ful presence. There is more to a bear than broken twigs and scratched bark. Broken twigs and awe are both the marks left in the wake of something which has passed. One may with care and thoroughness examine the markings. Phenomenal description is not without value.\textsuperscript{113} A posteriori, both witness to the presence of something other.\textsuperscript{114} The heavens indiscriminately declare the glory of God to all men. But nevertheless, experience alone is blind. Schleiermacher's God is ultimately Wordless and hence unknowable. Without a cognitive Word from God, we are rudderless, without a map and only faintly aware of a reality so dimly felt but not seen and heard. Left to its own, this religion becomes a self-indulgent, self-interpreted and self-cognized ritual. For convenience and sentimental reasons, such a 'spilled religion' eventually becomes organized into an institutional framework. This is the religion which Barth and Bonhoeffer vigorously opposed.

Following the way of incarnation, the basic movement of theological concepts is from God to man. A theology of grace thinks from God to man, and then from man to God.\textsuperscript{115} That God reveals himself is the root meaning of the doctrine of the Trinity.\textsuperscript{116} Athanasius argued that because Jesus the Logos is internal to the trinitarian being of God, to know God through the Logos is to know God in the inner reality of his own being. That is why the incarnation is epistemologically central to knowing God.\textsuperscript{117} The thrust of the homoousios is that Jesus Christ establishes the objective link between our knowing and God's reality.\textsuperscript{118} As Torrance puts it, Christ is not a mere
symbol or a representation of God detached from God, but

God in his own being and act come among us, expressing in our human form the Word which he is eternally in himself....As the epitomized expression of that fact, the homoousion is the ontological and epistemological linchpin of Christian theology.119

Epistemologically, homoousion means that what God is towards us in his economic acts in space and time, he is antecedently and eternally in himself.120

Nonetheless, literary critic Auerbach accurately points out that the New Testament itself "clings to the concrete and fails to progress to a systematization of experience in new concepts".121 Neither 'Trinity' nor 'homoousion' are Biblical expressions. The reality of the God we know in Jesus Christ is infinitely greater than we can ever conceive. Therefore, it is a sin to identify trinitarian structures of our thought with the constitutive relations in the being of God. All true theological statements fall short, such that their inadequacy is essential to their truth and precision.122

Any conceptual formula, any movement from Jesus Christ to Trinity or homoousion, that is, from economic events to ontological concepts, admittedly substitutes highly attenuated relations for the concrete and historical relations of God's self-giving. Here we have in mind Einstein's remarks about the precision of relativity theory bought at the price of wholeness. Those terms admittedly have real meaning only when we hold them intimately to the Father-Son-Spirit primary levels we read on the New Testament pages. Without their ontological bearing and connection to Jesus, Spirit and Father, the terms are empty.123 For in Torrance, as in Anselm, the point of concepts and propositions is to express reality, not just mental ideas.124

1. Intuitive Concepts

For Torrance, true concepts result from penetrating into the field of reality and allowing the object-field's inherent coherence to impose itself on our minds. The hypostatic union and Trinity are intuitive penetrations into the inherent grammar or syntax of theology. The meaning of the Gospel cannot

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be construed properly without them.

In theology, intuitive penetration involves us in far more than logical analysis, but in accord with the nature of the object, it involves a process of indwelling through study, prayer, sacrament and worship. Concepts which have mere abstract connections to the empirical reality reflect only the questioner, not the object. Torrance pleads that we think being through concepts. A radical dualism of sense/intellect or phenomena/noumena knows only appearances. But if God's being is inherently rational and capable of communication, then through intuitive penetration, knowledge of God occurs. 125

As we have seen, for many, concepts are by definition abstract generalizations or creations of the active intellect. 126 Thus, for example, Bergson substitutes intuition for intellect as the proper organ of absolute knowledge. 127 In an interesting kinship with Plato, (with which Lewis would agree), Athanasius argued for a kind of thinking which really and naturally reaches reality and is more than a convention. 128 This is the real knowledge of God we have in Christ.

Lewis believed that our distinction between abstract and concrete language was a recent phenomenon. Originally, mental-spiritual and concrete-physical were a unity. 129 Thus, at the time of Athanasius, ousia was not an abstract essence of being, but God's being and his presence, word and act inseparably conjoined. In this sense, concepts for Lewis spring from the concretely real.

If one rejects the organic, penetrative thinking of Plato or Athanosius and operates instead with only abstractive, form-imposing thinking, one sees propositions or concepts as the mind's abstract creations superimposed on to reality. Therefore, it is impossible to have real, cognitive theological knowledge.

Thus Stephen Sykes challenges this realist notion of a noetic necessity, that is, that theology's crucial concepts inhere in the ontic reality and that by faith's process of intuitive indwelling, we may grasp the object's inherent rationality. 130 He suggests that Barth's (and implicitly Torrance's) openness to the Word of God at the centre of

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theology in fact disguises "the actual centrality of a particular Christological doctrine". Sykes denies the possibility of intuitively derived concepts and seems to return to Schleiermacher's notion of religious experience as the raw material upon which theology builds and to Kant's notion that concepts are the creation of the active intellect interpreting raw experience. Therefore Sykes prefers a plurality of theological systems, which frees theology to be "as systematic and strictly conceptual as it may be".

Torrance notes that early in his career, Barth was accused of placing a massive ideology (a great Hegelian synthesis of Roman Catholic and neo-Protestantism in a higher unity) at the core of his thought. Torrance replies that Barth's thought differs from a new ideology because Barth freely admits the inherent inadequacy of theology's conceptual formalizations and openly believes they only have their meaning as they are extrinsically object-centred and point to the One whom they cannot fully describe or define. Torrance describes this form of thinking as the strongest safeguard against all ideology, "for it is a form of thinking that from first to last is under criticism of the object". Ideology claims truth for itself, intrinsic to its statements. Theological thinking renounces this and seeks only to point away from itself, like John the Baptist in the Isenheim altar piece. Theology seeks to serve, to submit to the claims of its object upon it and point away to the truth beyond itself, making all theological thought a reference to the mystery of Christ, not a law, but a pointing to God's grace. Christ himself is the reality which breaks through all ideology.

To prefer a 'plurality of theological systems', denies the inherent eloquence and rationality of theology's object to communicate itself. Bonhoeffer reminds us such "systematic thinking remains far from reality". In the wake of the incarnation, a plurality of conceptual altars to the unknown God is obsolete. Phenomenological systems grounded in man's self-understanding or cultural expressions fail to take seriously the fact that empirical realities are already
interfused with relations and patterns so that the theoretical and empirical components of our knowledge arise together, indissolubly conjoined in our knowing from the very start. 138

Without this epistemological perspective, theology cannot grasp the radical intervention and primordial unity of God's being in his act which the incarnation reveals.

True theological propositions arise out of immediate intuitive encounter with Christ as mediated through the Scriptures. Otherwise, with Schleiermacher, we are thrown back upon ourselves to create thought forms about God. Without a cognitive Word from God, we cannot distinguish our words from his.

2. Ontic Reality Breaks In

It is a common and lamentable weakness of modern theology that it habitually deals with theological language and concepts by abstractly detaching them from the reality of God.

Concepts are seen not to arise from God but from our own consciousness; substituting the self-expression, self-understanding of the community for a conceptuality forced upon us from the side of God. 139

When man encounters reality in a new and more profound way, a reaction inevitably occurs. The instinctive normal guesses of man seem much more plausible. For we told it to ourselves. Thus Lewis notes that Schrödinger's account of atoms does not seem as plausible as Democritus, for he knows too much. "The first shock of the object's real nature, breaking in on our spontaneous dreams of what that object ought to be, always has these characteristics." 140

The ontic reality has a way of disrupting and breaking into our cognitive patterns (that were running rather smoothly without them). And yet the new categories of thinking which emerged from Christianity, when applied to the epochs and inner life of man, were at once more empirically fitting to reality than the Classical ones and ushered in with tremendous energy a whole new understanding of life, culture and man, based on the dynamic new empirical-concepts of law, sin, grace, faith, justice, love, power and spirit. 141 Hence Auerbach sees in the rise of the New Testament a fundamental shift in the
thought forms of Western civilization. In the New Testament, the "deep, subsurface layers [of Western thought] which were static for the observers of classical antiquity, began to move". A new, organic form had arisen. Though the New Testament itself 'clings to the concrete', new concepts inexorably flowed in a spontaneous generation of thought forms which sprang organically from the generative power of reality. For instance, in the experience of Peter, Paul and the early Church, the ethicism of the ancients lost its definitive standing. A new moral experience emerged which was grounded in a justification by faith, not works. Ethics as usual was inadequate to judge and understand Jesus Christ and Christianity. A new experience and a new reality had arisen which would not fit into the former genres and categories. The theology of the Church Fathers is only coherent in this light— a new light, which had broken forth.

The new wine of Christianity not only burst through Hellenism's philosophical-conceptual wineskins. It burst through the old established literary wineskins. In Dante, we see a revolutionary mingling of the high style of Classical poetic dignity with the low and popular, the tragic with the comedy of Christianity. "Nowhere does mingling of styles come so close to violation of all styles."

These revolutionary changes were evident, not only in science as we have seen earlier, and in art as we have just noted, but primarily in theology itself. To realize that God is known not by our search, but by his coming and his condescension, revolutionizes theology from the Greek worship of the unknown God to the dogmatic, positive declaration that He is among us. He is risen.

This way of knowing, this being gripped by reality, has its parallel in science. In retrospect, Einstein confesses that in the discovery of new breakthroughs in a scientific field, "the products of his imagination appear so necessary and natural that he regards them and would have them regarded by others, not as creations of thought but as given realities". Similarly in aesthetic rationality, Lewis argues that the connection between romantic love and a 'red, red rose' is not
optional, but is forced upon our imagination, even though it is only men of a certain training or taste who may grasp its truth. One can deny the necessity of fundamental concepts only if, as Bevan suggests, one retreats into an emotional relic of a former unity of the cognitive-emotional indwelling in the ontic reality.

The noetic necessity of theology resides not in itself, but in the object. Theology's concepts have no necessity but the necessity of God acting upon us. Theological thinking means that absolute and final certainty rests in God, not in man. Consequently the rethinking of our noetic forms is always proper for our thinking lives under the Lordship of theology's object.

As we have seen, the contemporary 'conceptual letting go of God' (Buber), has its roots in Kant's proscribing of knowledge of objects in their internal relations. Implicitly, this denies the trinitarian love of God which reaches out to man in Christ and seeks to bring him into the communion of love interior to Father, Son and Spirit.

Within such a cultural context, Torrance calls our active intellects to repent so we may allow the reality of Christ to seize our minds and set up within them the law of his own rationality through a direct and intuitive apprehension of God's reality. Theological thoughts arise a posteriori out of encounter with God's reality, not out of necessary inferences or analogical reasoning.

Of all the ancient theologians, Athanasius was supremely aware of the epistemological stakes involved here. Fundamental to objective knowledge is the belief that the mind assumes conceptual forms under the pressure upon our thought of the objective reality of God. Man's active role is his response of repentance as he allows his old forms of thought to fall away and to be called in question. Only this way roots our thought in the Word, the eternal being of God. Doctrines such as the homoousion and the Trinity are "forced upon the Church as it penetrates into the Biblical witness". The truth of these statements prove themselves "by bringing our minds under an imperative obligation that we cannot rationally resist".
It was under the sheer impress of God's reality that Anselm penned his ontological argument. And so it is that theology calls itself dogmatic theology, for it consists of positive assertions forced upon us by the reality we study.\textsuperscript{155} Theological knowledge is knowledge in the sense of acknowledgement; it is the kind of knowing where the driving power lies not in the knower but in God. Thus theological knowing is always a humbling, repentant knowing. We are not discoverers or conquerors; we are lost sheep found.

3. Noetic Limits

Thoughts are but coins. Let me not trust instead of Thee, their thin-worn image of Thy head.\textsuperscript{156} --Lewis

It is wrong to argue that because the maturing and deepening of love between two people transcends duality that therefore perfect love abolishes individuality. Similarly, it is mistaken to argue that though the true apprehension of God transcends all intellectual formulation, the quest for the finest concepts is misdirected.\textsuperscript{157}

In science, Einstein points out that our knowledge of the external world through sense perception is indirect. We grasp reality through speculative and intuitive means. "It follows from this that our notion of physical reality can never be final."\textsuperscript{158} Thus the mathematical invariance of relativity is not identical to the objective invariance in the universe, but is relativized by it and is revisable in the light of it.\textsuperscript{159}

Theological statements are contingent statements essentially and inherently. As such they point beyond themselves to what is infinitely greater than what we can ever conceive or express. Our belief that all our theological statements fall short of what God is results from revelation and faith.\textsuperscript{160} Our concepts do not compel God into connections with our thoughts, but seek to serve and point to the path of God's incarnate coming which inevitably cuts across our expectations.

Though it is wrong to identify theological statements with ontic structures in God, it is unfaithful to revelation to discard all objective statements as a form of objectifying thought.\textsuperscript{161} In poetry, the grandeur of the reality we inhale
is not denied by our failure to describe it exhaustively in our expression.

Torrance speaks not of theoretical transcripts of reality but of disclosure models. Through them we allow reality to disclose itself from beyond our theoretic constructions. Patristic thought forms did not seek to abolish the subject-object relationship, for they understood their concepts to grasp God in the sense of apprehending him without exhausting his transcendence. In knowing God we know what transcends us. That is, our consciousness and cognitive understanding of God does not trap God within our minds, for we cannot fully account for God's mystery. Similarly, mathematical formulas do not project laws we observe into nature as if they are the actual laws objectively inhering in nature. They are noetic constructs that reflect and point to ontic structures. Only through them can we know nature. Hence they cannot be eliminated from our context of knowledge.

It is a part of their truth that theological statements acknowledge a discrepancy between themselves and God's reality for they essentially rely on a relation which "God from his side established between Himself and our knowing. That relationship is Jesus Christ where truth meets us." In this way we can understand the nature of the human words of the Bible as also the Word of God to man. Their identity lies not in the essence of the words, but rests on God's decision and presence to which the words authentically and authoritatively point. They point beyond themselves to what God has done and who he is. It is God who decides to allow the frail human word to be by his Spirit "the holy expression of that Word in human form". "The Word has so imprinted its own image upon the human word as to make it a faithful reflection of its own revelation."

The limitations of theological science are a healthy reminder to all sciences of their relativity. In the wake of a reality always greater than our grasp, Lewis was keenly aware of the provisional nature of our "models". With relish, Lewis recalls the experience of Pope Gregory in the Paradiso when he found that the theory of hierarchies with which he had
taken great pains, was quite wrong. "We are told how the redeemed saint behaved;...It was the funniest thing he had ever heard."170

C. God's Mind and Ours

How shall we think then, of the relation between God's uncreated light and man's creaturely rationality? St. Augustine clearly distinguished between nature and human mind as created lights and God's mind as uncreated and intelligible light. But, says Torrance, Augustine worked within a dualism of intelligible and sensible which "trapped" him in the Platonic view that our minds are capable of knowledge only to the degree they participate through an infusion of God's grace in the eternal uncreated light of God.\footnote{171} This has been called Augustine's ontologism.\footnote{172} As well as man's participation in the uncreated light, Augustine envisioned a sacramental universe wherein the visible, physical universe mirrors the eternal and heavenly patterns within God's mind.\footnote{173}

Lewis was clearly influenced by this Platonic-Augustinian tradition. "God pierces nature wherever there is a human mind."\footnote{174} "A man's rational thinking is just so much of his share in eternal Reason as the state of his brain allows to become operative."\footnote{175} In this sense, Lewis tolerates a great continuity between God's reason and man's. For Lewis, "supernatural reason enters my natural being...like a beam of light which illumines or a principle of organization which unifies and develops."\footnote{176} Lewis may also be hearkening back to Sir Philip Sidney who similarly believed that the unchangeable forms of human nature exist in the mind of the Creator.\footnote{177}

Clearly, for Lewis, reason has a special place within nature as God's link with man. His strongest statements on reason came early in his life and were later modified. In his autobiography he states, "I must admit that mind was no late-come phenomena: that the universe was in the last resort mental; that our logic was participation in a cosmic Logos."\footnote{178} But in confrontation with Pantheism and Barfield's religious idealism (Anthroposophy) Lewis championed Christian creation. Creation for Lewis meant "to come to be, without pre-existing material, that is, to cause both form and matter of something
preconceived in the causer's thought, which after creation is other than the causer". 179 Lewis unashamedly used the same word for man's reason and God's "because I think that in creating rational creatures God created things which qua rational are like himself". 180 Therefore the difference between God and man is not one of quality or degree as in immanantism, but a distinction of substance. Lewis rejected idealism's whole and part relation in favour of Creator-creature. 181 That is, God gives man a subjectivity other than his own.

Without this qualitative link between man's rationality and God's Lewis feared that science and theology would be irrational. 182 Lewis was ill-disposed towards the theological tradition which emphasized God's incomprehensibility. Within this tradition, Lewis had in mind Pseudo-Dionysius, the Cloud of Unknowing and certain German Protestants and existentialists of the modern period. Lewis firmly rejected their assertion of the primacy of God's will over his mind. 183 However, Lewis also recognizes that we share in God's reason only in an imperfect and interrupted way. He strongly challenged Dorothy Sayers' comment that "between the mind of the maker and the Mind of his Maker" there is a difference, not of category, but only of quality and degree. 184

Torrance's doctrine of contingent intelligibility has some similarities with Lewis' distinction between a difference of substance or being of God and man, as the key to understanding the nature of their rationality. Torrance seeks to understand their distinctness and also their unity in such a way that he avoids the Augustinian ontologism or a necessary ontological connection between man's mind and God's. And yet he also rejects a unity based on God's sheer will power alone.

As contingent, creation is not arbitrarily related to God. The two are related because in grace God created contingent rationality and in Christ he assumed created truth and rationality. He made them his own, although he remains distinct from them. 185 The ultimate ground of creation's rationality is God's act of love in creating us. This love is his final rationality and sheer mystery "which knows no
reason beyond its own ultimateness as the love that God is".  

God's love, therefore, is the ultimate ground for creation's rationality which evokes in scientists such as Einstein a deep wonder and awe.  

Does this mean that God is ultimately inscrutable as Lewis feared when creation springs from God's will, but not his rationality? Torrance answers that Occam failed to see that our knowledge of God and of creation itself is connected both to God's will and God's being. Our knowledge of God is rational, as Anselm saw, because it arises under the compulsion of the Divine being. Similarly, creation is rational because it springs from the Creator Logos of God.  

Torrance suggests we think of the mind-God connection in terms of an infinite differential between our rationality and God's in order to preserve God's freedom from necessity without making him arbitrary. That is, theological statements are not a priori and necessarily related to God, for the rationality of God is correlated and understood in terms of God's active grace and love. This means an eschatological ingredient must be factored into the infinite differentiability in God's relation to creation. To reduce it to an a priori necessity falsifies it. But understood a posteriori, as the way God's love has taken, we find coherence and rationality which we could not have predicted.  

Thomas rejected Augustine's ontologism and illuminationism and bridged the sensible-intelligible gap by developing a unitary and realist basis for knowing God through the establishing of a perennial philosophy in which an inherent likeness exists between God's mind and the logical forms of reason. This grants to Aristotelian logic a universal validity and creates a praemubula fidei which is used to interpret revealed theology within its parameters. Grounding all knowledge in the abstraction of logical form from sense experience led Thomas to reject Augustine's intuitive knowledge.  

Together, Western Latin thinking (definition-controlled thoughts) and Hellenic thinking (discernment of eternal forms) won out over Hebraic thinking as Latin theology became subordinate to philosophical ontology. In striking contrast,
Hebraic thinking understands cognitive relations with God, not primarily as logical, but as dialogical. For God is personal, and when he objectifies himself he does so as Person and involves us in communion with a personal Being, not just concepts or stories. Hence a personal response of faith and obedience is part of truly rational theological thinking. But in Latin thinking, the dynamic personal element of faith was reasoned out of theological knowledge and bracketed only within the sphere of faith and authority.

For Torrance, the integration of rational and personal occurs in Christ, where personal reconciliation is inseparable from rational and cognitive apprehension. In the incarnation, God's mind enters our darkness in order to redeem even our human understanding. Thus our knowledge of God is bound up indissolubly with the space-time, historical Jesus, in such a way that theological knowledge is at once intuitive and sense-experiential. For the Holy Spirit brings us into immediate contact with the concrete, historical Jesus and grounds our knowledge in the sensory, space-time world. It is Christ who forces us to be intimately related to God, in order that personal dialogue and encounter may take place. An infusion or immediate illumination would be insufficient. Though it might affect our consciousness immediately, it would lack any personal, cognitive response on our part. Therefore, I would argue that the Thomist emphasis which grounds knowing in sense-experience and Torrance's call for an intuitive knowledge of God are at once met in Jesus Christ. Personal, intuitive encounter and empirical reality of space-time meet and become indissolubly united. The true, particular bridge between thought and being took place when Word became flesh. Henceforth, there can be no intuitive and unmediated knowledge without an organic correlation to sense experience, space and time. Nor is there any logically necessary process in this knowledge, but rather our indwelling and participation through the Holy Spirit in Jesus Christ.

1. The Nature of Rationality

To appreciate Lewis' views on reason, we must journey
with him back to the ancient historical foundations of key terms and their meanings. Historically, there emerges a fundamental distinction between the higher intellectus, the understanding (kennen, connaître) and the lower reason, ratio, (wissen, savoir). Due to Coleridge's commanding influence, these meanings have been reversed in modern English, with intellect being the lower faculty (ratio), reason the higher (intellectus).

By intellectus (the higher faculty) comes the simple, indivisible, intuitive grasp of truth; ratiocinari (the lower) is the progression to a truth by going from one point to another, reasoning. Truths of the intellectus (Torrance's intuitive rationality) are self-evidencing. Truths of the ratio proceed step by step, inductively or deductively. Ultimately, the cognitive life depends on the self-evident truths. The two together make up man's rational soul. Through the one, man apprehends the higher truths of God and morality; through the other, man apprehends the truths of natural science.

Man knows God intuitively in a 'knowledge by acquaintance', that is, by the direct and higher faculty of connaître, not by the logical steps, probability and inference of savoir. Lewis translates connaître as 'knowledge by acquaintance'. It is a tasting, immediate kind of knowledge, self-evidencing in its reality. We have no 'knowledge about' God, savoir; there are no logical steps to God. In the realm of ratio, we only have analogies. "We do not see the Light, though by light we see other things."

Prior to the eighteenth century, this larger sense pervaded thinking. Reason was also the organ of morality. That is, moral truths were intellectually grasped. They were not mere affairs of the emotions, but the work of intellectus, not ratio. Lewis only hints at the reasons for these changes and is content to record them. No doubt the remarkable advance in scientific knowledge and its logical-causal thinking was a catalyst. By the eighteenth century rapid changes occurred. 'Reason' began to be regarded no longer as intellectus and ratio, but ratio only. Butler declared that
'conscience', not reason, is the source of morals. Others attributed morality to taste or sentiment. Wordsworth distinguished head from heart. By the nineteenth century, domestic affections constituted morality. Linguistically, the result was to narrow the meaning of Reason and to de-value the integrity of moral and theological truths. The current use of reason has often shrunk to mean little more than "the power of deducing one proposition by another". From this historical vantage, we can see that Torrance, Macmurray and Polanyi have sought to renew the scope of Reason, and to expand the domain of intellectus to the foundations of science as well as the indispensable attribute of everyday science.

This larger sense of Reason dominated the ancients. For Plato, Aristotle, the Stoics and St. Paul, moral and theological knowledge is reasonable or rational in the sense that knowledge of God and value involve a cognitive knowing.

Concerning the relation between intellectus and the laws of logic or the lower reason, in later years Lewis asserts there is no logical connection. For Lewis, the higher undergirds and explains the lower. The lower cannot explain, contain or account for the higher.

The lower reason or logical-inferential thinking has an indispensable role to play for Lewis. In Pilgrim's Regress, he calls her a "sun-bright virgin clad in complete steel, with a sword naked in her hand". Her sword destroys false thinking, question-begging, Freudian psychologizing, Bulverism, propaganda and other formal and informal fallacies by which most people's minds are fuddled through the devilry of Screw-tape and his friends.

For Lewis, the laws of logic and inference are a valid if external and formal grasp of reality. If they are not, we are cut off and cast adrift. If they are just an irrational habit as Hume argued, all knowledge fails. However, this insight is not inferred; it is intuited. Logical thought has to be assumed. Logic itself cannot be logically proved. You either grasp its necessity or you do not. Hume's
comment may be seen to devastate the rationality of science or it may be seen as a legitimate acknowledgement that logic is grounded upon a regulative intuitive belief, as Torrance puts it.\(^{209}\) This does not disparage reasoning but 'restores the cognitive balance of the mind' to its fundamental credo and rejects as illegitimate the wedge between faith and reason.

As we have seen, Lewis extended his regard for inferential thinking to the point of asserting that "events in the remotest parts of space appear to obey the laws of rational thought".\(^{210}\) Here he fails to grasp the contingent intelligibility of the universe and the non-necessitarian nature of empirical-rational knowledge. This rehearses a point made earlier, namely, that at the scientific level of rationality, Lewis posits an \textit{a priori} harmony between the laws of nature and laws of logic. Torrance accepts a modified God-given harmony, not one reducible to \textit{a priori} logical links, but one discovered \textit{a posteriori} through intuitive-empirical penetration.

Here let us recall that in his 'self-contradiction of the naturalist' argument, Lewis tried to falsify naturalism by logical arguments. But as G. E. M. Anscombe argued one night at the Socratic Club, this argument oversteps its bounds.\(^{211}\) Lewis had confusedly identified causality and logic, the very connection to be proved. This brings us to the whole problem with the Newtonian framework which made causation a logically necessary link with physical reality. Quantum and relativity physics have decisively challenged this \textit{a priori} correlation.

A recent article by Walter Hooper, Lewis' literary executor, reveals that Lewis was aware of certain implications of Einstein's work and in particular, that relativity "had disproved normal logic from a higher and unassailable plane". According to notes taken during a Socratic Club lecture, Lewis admitted that formal logic was only a more or less valuable tautology.\(^{212}\) But earlier in \textit{Miracles} (and elsewhere), Lewis asserts the organic harmony between physical reality and the laws of logic. Anscombe's criticism was inevitable.\(^{213}\) Lewis' error lay in transferring an intuitive, \textit{intellectus},
grasp of the need for a sufficient reason for the rationality of man and nature into a formal logical–causal (ratio) argument. That is, he wrongly tried to use logic to connect the lower rationality of mind and nature with the higher, intuitive truths. But following Einstein and Torrance, we have seen that even in natural science the bridge between thought and being is not (as Lewis thought) a causal–logical bridge, but an intuitive–fiduciary, non–logical connection that evoked in Einstein the greatest awe and wonder.

The two hemispheres, ratio and intellectus, mutually interact with one another, like synthesis and analysis. Lewis sees man's mind as an intellectual faculty employed in both practical and theoretical judgement, capable of good or evil, and in need of regeneration.\(^{214}\) For Lewis, logic is never the final arbiter or organ of truth or falsehood. Even when highly valued, it is only the lower rational faculty. The discursive reason, as he calls it elsewhere, grasps only an abstract and external framework.\(^{215}\)

The relation between ratio and intellectus is often a subtle one. In many areas of life, "there is nothing irrational in exercising other powers than our reason".\(^{216}\) No one breaks a horse, writes poetry or begets children by syllogising.

It's rational not to reason or not to limit oneself to reason, in the wrong place and the more rational a man is the better he knows this.\(^{217}\)

2. Lewis and Kant

Given the Coleridgean bifurcation in Lewis' background between reason and understanding, we must inquire into the extent to which Lewis was influenced by Kant. Certainly his early, pre–Christian letters reveal a Kantian influence. He tells Arthur Greeves that a tree or any object is not beautiful in itself but the beauty arises mysteriously out of the relation between the perceiver and the tree. Colour comes only in our brains. Only by mental habit, says the young Lewis, do we call these mental impressions the thing in itself.\(^{218}\) "We have no knowledge of the external world", but only a tolerable phenomenal substitute for knowledge as a result of abstract
reason plus sense experience plus habits.\(^{219}\)

In letters to Barfield, Lewis quotes Aristotle approvingly that the suffering side of the mind is transitory; the creative mind (nous poietikos) is everlasting. But when Barfield flatly asks if Kant was right, Lewis replies, "I don't know".\(^{220}\)

These letters predate his conversion. By his own admission, Lewis progressed to faith by way of Absolute Idealism.

In his post conversion writings he rarely refers to Kant. In *Surprised by Joy* he affirms Kant's phenomenal/noumenal distinction in regard to the self. But he uses this distinction to argue that the phenomenal self one investigates through introspection is untrustworthy in the extreme. This forever cured him of the quest for a self-taught self-understanding.\(^{221}\)

In an early but important essay on semantics, he severely questions the value of Kant's heavily abstract epistemological analysis.\(^{222}\)

Lastly, in a 1940 letter to Barfield, he remarks that Julian of Norwich in the fifteenth century seems to have proleptically rivalled Thomas' reconciliation of Christianity with Aristotle by nearly doing so with Kant.\(^{223}\)

From *Miracles*, we know Lewis was firmly committed to objective scientific knowledge by means of inference. This is the classical Thomist rationale for the legitimacy of scientific thought, the harmony between laws of logic and of being. This is a strongly realist orientation, quite different from his friend Barfield's idealist, esoteric Christianity, and from Kant's own denial of ontological knowledge. However, one might still wonder if Lewis accepts Kant's phenomenal knowledge as what in fact our scientific knowledge discovers when it grasps its abstract, external framework. But here again, this framework is conceived of in strongly realist-Thomist terms which assumes an objective harmony of logic and being and which sees the knowledge of heaven and earth as realms of "objective facts--hard determinate facts" which we learn and discover rather than create.\(^{224}\)

If our knowledge of the world, says Lewis, is "not a genuine insight into realities beyond them--if it merely represents the way our minds happen to work then we can have no knowledge".\(^{225}\)

Lewis contrasts the world we build up out of our bundles of
sensations which is very far from the "real world of Einstein's mathematical relationship...to which we must agree". The determining extent of Kant's influence would be found in Lewis' view of the higher level of rationality in ethics and theology, namely, the Practical Reason. We first turn to Coleridge's adaption of these Kantian terms.

For Coleridge, *Reason* is the self-evidencing, higher level of rationality; *understanding* is the discursive faculty of reflection. "Reason (says our great Hooker) is a direct aspect of truth, an inward beholding..." The two spheres of rationality differ in kind, neither falling under the definition of the other. With the understanding, we can reflect and generalize and are dependent on the senses. But Reason is independent and antecedent to understanding. Practical Reason alone, says Coleridge, is Reason "in the full, substantive sense; source of ideas". The theoretical or pure reason is the light of reason in the understanding. The Practical Reason as Coleridge calls it, is the source of wisdom, "of living and actual truths".

Absent here is the meticulous analysis of the categories of the understanding, as in Kant. Reardon correctly concludes that Kant's influence on Coleridge was more formal than material. He used Kant's negative statements that the understanding, though valid for science, by its very nature cannot establish truths of theology and ethics. For Coleridge, Kant delivered the most important truths from mere logic. Yet, whereas Kant denies the possibility of metaphysical knowledge, for Coleridge, practical Reason is reason in its truest, most substantial sense. In fact, Reardon recalls that Coleridge's critics accused him of using Kant to reassert a Platonic epistemology.

Fundamentally, Lewis' use of 'Practical Reason' is Coleridgean, not Kantian. Lewis champions the rationality of ethical values, and argues that we must extend "Reason" to include the "Practical Reason" lest value lose its rational core. Lewis' use of Practical Reason reflects a Platonic-Augustinian-Calvinist epistemology in its commitment to an intuitive, immediate knowledge of values and of God. For
Lewis, knowledge of the higher truths is grasped immediately and intuitively by the gift of man's rationality.

D. The Limits of Reason

All epistemological analysis is tempted to understand the search for truth only within intellectual terms because it involves the mind and it thereby turns truth into propositions one can syllogistically arrange and re-arrange. Ultimately this makes truth the logical-syntactical relations of statements, rather than the reference of statements to reality. This reduces truth to ideas and assumes we can express in ideas how ideas are related to being. Truth is reduced to statements.

It is this rationalizing of truth which Torrance criticizes in St. Thomas. For when Thomas defined being ultimately with an emphasis on cognitive truth, he bridged the thought-being gap by means of thought. Calvin revolted from Latin thinking at this point by emphasizing truth as God in his being, not as cognitive statements about God. Biblical statements are the paradigm of all theological statements and they have their truth not in themselves, but in Christ, their semantic reference.

Another form of rationalism occurs when certain mental forms or structures take on through constant use a permanent configuration and become seen as part of man's essential being and hence, substantival. Both Aristotelian logic and Kant's categories of the understanding have been used in this manner to judge the rationality of any and all objects. Therefore, substantival reason accepts as rational only what fits these forms of a now autonomous intellectual activity. Rationalism occurs when rational forms claim to be the judge of all reality.

Torrance consistently opposes such a substantival understanding of reason. Our reason is never ultimate, but it seeks to be used in service to nature and in service to God. An autonomous and judging reason is the result of the alienated mind disrupted from God. Athanasius called the mind of a sinner alogos, or as Calvin puts it, mente alienatus. The autonomous mind judges all but knows no judge. For Torrance,
such a rational structure secretly identifies transcendence with itself and ends in self-deification.  

When the Athenian city-state failed, it was not so much a judgement on the Greek political system as a criticism of the capacities of human nature. Reason appears a dull and superficial thing only when it claims to judge all by certain a priori criteria. There are varying levels of trust and mistrust of reason. To deny reason ultimate is not to advocate irrationality. In Till We Have Faces, Orual respects the Greek slave (reason), but the slave has no answers. As Lewis notes, reason herself tells us to experience or to act or to trust—depending on the situation, and that is the more reasonable thing to do. That is, we should understand reason as a servant, not as a master of the truth.

One limit of reason to which Lewis refers is the problem of free will and election. Lewis admits the logical-causal ratio is not adequate to resolve this conflict. But he thinks the higher reason gives us a glimpse of resolving this issue without lapsing into determinism.

Lewis was not a rationalist in the sense that the mind was the autonomous judge of reality. He was open to reality in a much broader and richer way. After all, he writes, consider our mental equipment,

five senses; an inexorably abstract intellect, a haphazardly selective memory; a set of preconceptions and assumptions so numerous I can never become even conscious of them all. How much of total reality can such an apparatus let through?

However, Lewis believed, on the ground of the Practical Reason, that the truths of theology and ethics were self-evidently true. This is not dissimilar to Torrance's emphasis that the fundamental beliefs of science and theology, though not demonstrable logically, are the very foundation of rational thinking in either field, and are grasped intuitively and seen to be rational by their own light.

Around the time of his letter in response to Oliver Quick's article in Theology, Lewis mused to his brother that he had blundered into the world of modern theology,
imagining that I was the upholder of the old, stern doctrines against modern quasi-Christian slush; only to find that my sternness was their slush. They all talk like Covenanters or Old Testament prophets. They don't think human reason or human conscience of any value at all....

To Lewis, it appeared that modern (probably 'Barthian') theology had utterly denied the rationality of theology and ethics. Theological truth was a non-cognitive, non-conceptual affair. But this is certainly not Torrance's view (nor Barth's). Torrance argues that theological truth, like scientific truths of nature, are grasped intuitively as self-evidencing on their own intrinsic rational grounds.

For Lewis, there is a real connection between our reason and reality. He refused to abandon all cognitive claims for theological knowledge, as he thought modern theology was demanding. This would imperil any connection between the God of revelation and the intuitively-derived knowledge of ethics and the inferentially-grasped knowledge of science. And judging by certain brands of Calvinism, he thought it nearer to devil worship or sheer will-power worship than worship of the true, good and holy God.

To the question of what would happen if there were an absolute darkness between God's will and our conscience, that is, "if God was bad, or alternatively we are moral idiots", Lewis had no answer, even as he had no answer to what would happen if he found absolutely demonstrative evidence for two contradictory propositions. Yet Lewis knew that God's rationality may seem unreasonable to our standards. "Doubtless, by definition, God was Reason itself, but would he be 'reasonable' in his demands?"

In literary criticism, Lewis once argued that a proper interpretation of a text must include logic, emotion, and imagination. If he found an interpretation which fitted logically, it must also fit imaginatively and emotionally. "Indeed if we had to choose, I should prefer a logical to an imaginative and emotional incongruity."

Lewis' many-and varied writings reveal a search for a proper unity of all the gifts of the rational soul: logic,
imagination, emotions. He recognizes that intellect (ratio) is invariably abstract and grasps only external frameworks, and yet our experience is rich and concrete, where we taste rather than abstractly know. Within him, the abstract and concrete epistemological experience can be in conflict. "As thinkers we are cut off from what we think about; as tasting, touching, willing, loving, hating, we do not clearly understand." We cannot study pleasure abstractly in the moment of embrace. Lewis sought to unite the abstract intellect with the feeling intellect which apprehends immediately and intuitively, yet without the logical precision of abstraction which the discursive reason yields.

It is a similar search in which Michael Polanyi engaged when he sought to restore the cognitive balance of the mind to the intuitive, believing side of rationality. The great difference lies in Polanyi's grasp of the intuitive, personal and fiduciary element at the heart of natural scientific knowledge which gives the logical-causal or abstract intellect a distinctly subsidiary though valid role even in physical science.

E. Rationality in Torrance

One of the most remarkable features of the Scottish theological tradition is the way in which it has maintained its conviction that the human mind has the capacity for a rational knowledge of God and his ways.

—Reardon

Unquestionably, Torrance stands in this tradition as much as in the Calvinist Reformed tradition. His collected writings are a monument to his faith in the rationality of God and his universe. He is most ill at ease with a disjunction between science and religion, nature and grace, reason and revelation. He has sought to learn from many thinkers, including Einstein, Maxwell and Polanyi, as well as from Athanasius, Calvin and Barth.

This comprehensive understanding of rationality is notably expressed by the British philosopher, John Macmurray, who also prefers a functional to a substantival understanding of rationality. He describes rationality as "the primary characteristic
of the personal life", namely, man's capacity for objectivity, which he describes as the "capacity to behave in terms of the nature of the object". Macmurray examines science, art, and religion as the three interlocking areas of the personal life, for each reflects a decisive and determining aspect of human nature. By its very nature, "Reason is not self-regarding. It is concerned with its object". Irrationality is the failure to behave in terms of the real situation. The recent theological revolt from theory toward praxis finds a philosophical foreshadowing in Macmurray's restatement of a wholistic-Hebraic view of knowledge and living. Macmurray's Gifford lectures are a sustained attempt to re-interpret the rational life away from the Kantian and Cartesian focus on the thinking self to a Hebraic understanding of rationality in terms of man as agent, whose thinking, worshipping and feeling all contribute to the fundamental core of rationality, namely, our capacity to act in love for others without regard for ourselves.

For Torrance, rationality occurs when we act in accord with the nature of the object and allow it to prescribe the specific mode of rationality we need to adopt as well as the kind of demonstration appropriate.

Rationality is not a substantival and innate structure of categories of understanding we impose. Man's capacity for objectivity is not a static possession, but the dynamic interaction of subject with object. Torrance equates 'substance' rationality or res cogitans and the thinking self of Kant with man's desire for autonomy, the very essence of sin, whether of will or mind. For Torrance, reason must be seen not as a law unto itself, abstracted from its reality in God and turned inward, but should be turned outward to its maker in an appropriate response to reality. Therefore reason stands under the fiduciary assumption that man in fact is able to know reality aright. This is the fiduciary commitment to rationality, in science, theology and art.

This functional or relational understanding of rationality in a natural harmony with faith commitments, has enabled Torrance to make creative alliance with science. By rejecting
an attenuated notion of reason as logic, Torrance has been able to appreciate the different kinds of (non-logical-causal) order which inhere in nature. This is nature's contingent intelligibility, which resists conversion into a logical relation as in Medieval science or necessitarian relations as in Newtonian physics.255 

One of Lewis' long standing complaints with modern man is that he has emptied qualities from their existence in the real world and put them inside man's head. Torrance's emphasis on a contingently rational intelligibility which exists in the real world, is a profound confirmation of Lewis' realist commitment to an objective rational reality.

For Torrance, the Reformation gave priority to this Hebraic way of knowing, where the personal and dialogical in knowledge take precedence over the Medieval emphasis on the logical and dialectical. But the fundamental difference in the Hebraic way is the change in the locus of authority from the subject (whether collectively or individually) to the object, and not as is argued by some, from the authority of the corporate church to the individual believer.256

Calvin also understood man's rationality functionally, not substantivally. Of course, it is part of Christian faith to believe that man is specially qualified by creation to receive revelation.257 Though a "shapeless ruin" after the Fall, God maintains man's reason and by grace renews the mind to a right reason. Thus the knowledge of God is beyond our natural capacities, for God descends to us and at the same time raises our mind.258

For Torrance and Lewis, the knowledge of God is rational. Both are unhappy with Kant's abolition of cognitive knowledge to make room for faith. However, even if we accept Macmurray's positive assessment that Kant, like Coleridge, opposed a narrow reason in order to find a new and deeper understanding of rationality,259 later philosophy used his dichotomy and mental structures to expel theology's rationality. In this context, Torrance has sought to re-integrate faith and reason, and thereby expose Kant's dualism of pure and practical reason as an artificially abstract, a priori and unscientific structure.
As we have seen, man's rationality is his capacity to relate himself appropriately to the object of inquiry. Yet within this pervasive rational capacity, we find in the universe multi-variable modes of rationality which all require distinctive modes of thinking, acting and feeling. Torrance lists at least four such modes of rationality—numerical, verbal, organic or organismic, and aesthetic. To pursue only one mode rigorously to the exclusion of the others is an artificial abstraction "which nature punishes by limiting our discoveries through it".

True thoughts and true statements are those which refer properly to reality. Thoughts cannot be true which refer to personal being as if it were merely a thing or a proposition. To proceed a step further, once rationality is no longer confined to the intellect, but is a capacity belonging to every facet of our personal life, (art, religion and science) a far-reaching integration of rationality and being is possible which does not continually convert or reduce these modes into logical evaluations or propositional analyses. This resonates with Lewis' statement that it is more reasonable to act, or to feel at times than to think, according to the situation.

Theological rationality is unique in that nowhere else do we find truth in the form of personal being and nowhere else do truths cohere in a person. Hence a properly systematic theology requires that truth in the form of personal being dictate the appropriate mode or system. Therefore Torrance replaces the Medieval system, which gave a coherent account of being through a system of rational ideas based on a realist doctrine of universals with "consistent obedience to Jesus Christ". In the personal field, love is the capacity to behave rationally in regards to the other person. In theology, if God is love, to be rational means to act in terms of his being/activity in love and not in terms of our self-understanding.

Lewis agrees that love is the essential element in knowing God for its passion and power alone enable us to leap the "massive wall of our selfhood". Love is the great capacity
for objectivity—to be truly and appropriately related to reality.

F. Whole Knowledge

For Plato, to say something was beautiful was not a mere aesthetic judgment but moral, intellectual and aesthetic appraisal all at once. Similarly, sin is neither a rational error, nor a moral shortcoming. It is both. Mental errors are morally blameworthy. Knowledge, too, for Plato was much deeper than ratio, but was moral and intellectual; it was the culmination of the search for rationality, the true, good and beautiful.

So it is with theological knowledge; an intellectual grasp alone is unworthy of the object. Christ's teaching "cannot be grasped by the intellect alone, cannot be 'got up' as if it were a 'subject'". Rationalism errs when it thinks that thinking about something is identical with making genuine contact. This destroys empirical discovery and insulates man within a self-made conceptual prison. The mind cannot cross the gap between itself and reality by its own ideas and concepts. Man's entire being, including his mind, is separated from God. Therefore saving knowledge must involve our whole beings, not just our minds. The gap can be bridged, however. This leads us in awe before a rationality we cannot control or dominate, but which inheres in the world and which in wonder we may discover.

The modes of rationality which Torrance discusses are interlinked. Even the pure science of mathematics has been praised for sanctifying the minds of those who earnestly inquire. But a special place belongs to theology, for "of all disciplines, theology is the fairest, the one that moves the head and heart most fully, the one that comes closest to human reality".

Before we discuss this whole or participatory knowledge more fully, we will first have to examine the respective epistemological linchpins of Lewis and Torrance, the intuition and the imagination. But in closing this discussion on rationality, we should remind ourselves that we could easily over-emphasize Lewis' distinction between the lower and the higher reasoning.
faculties, that is, his commitment to logic and to the intuitive faculty. Austin Farrer said in defending Lewis from his critics who interpreted him as a split personality, "I will not call split personality one brave enough both to think and feel, nor will I call it integration which is achieved by halving human nature". 273

1 Theological Science, p. 266.
2 Ibid., p. xii.
3 The Ground and Grammar of Theology, p. 114.
4 Surprised by Joy, p. 166.
5 Butterfield, p. 74.
7 Auerbach, p. 437.
8 See Brown, p. 62.
9 God and Rationality, p. 165.
10 Theology in Reconciliation, p. 259.
11 Theological Science, p. 91.
13 Theology in Reconstruction, p. 164.
15 quoted by A. C. Harwood, About Anthroposophy, C. S. Lewis at the Breakfast Table, p. 29.
16 The Problem of Natural Theology in the Thought of Karl Barth, p. 124. Barth may not have seen that Kant was also increasingly irrelevant to natural science. cf. Brown, p. 149.
18 Conflict and Agreement, I, p. 302.
a supporter of Barfield, describes Lewis' view as the consistent belief that men cannot "by the use of their natural powers" arrive at final truth. Raymond Tripp, Chiliastic Agnosticism and the Style of C. S. Lewis, Man's 'Natural Powers', Essays for and about C. S. Lewis, Raymond P. Tripp, Jr., ed., England: Omny Press Co. Limited, n.d., p. 27.

20 Christian Reflections, p. 165.

21 English Literature in the 16th Century, p. 186. Lewis also admires Edmund Spenser, who wrote primarily as a Christian and only secondarily as a Platonist. Studies in Medieval and Renaissance Literature, p. 144.

22 English Literature in the 16th Century, p. 458.


24 Conflict and Agreement, I, p. 12.

25 Mere Christianity, p. 60.

26 Studies in Words, p. 204.

27 God in the Dock, p. 238. The reason Lewis cannot accept 'priestesses' is because he holds that the priest is a representative of Christ during the eucharist. (p. 236). But Torrance would deny this sacramentalist notion. He reckons that what represents Christ in the sacrament of communion is the bread and wine. cf. Conflict and Agreement, II, p. 189.

28 Adey, p. 44.


30 Screwtape Proposes a Toast, p. 106. "For in some sense, as dark to the intellect as it is unendurable to the feelings, we can be both banished from the presence of Him who is present everywhere and erased from the knowledge of Him who knows all."

31 Theological Science, p. 138.

32 Ibid., p. 139.

33 Space, Time and Resurrection, p. 174.


35 McIntyre, Theology and Method, p. 230.

37 Theology in Reconciliation, p. 223.


39 Screwtape Proposes a Toast, p. 65.

40 Christian Reflections, p. 172.

41 Theology and Church, p. 43.

42 "I happen to believe you can't study men. You can only get to know them, which is quite a different thing." That Hideous Strength, p. 37.

43 Mere Christianity, p. 140. The didactic style of Lewis takes him 140 pages to state what the dogmatic style of Torrance begins with.

44 Christian Reflections, p. 172.

45 God and Rationality, p. 116.

46 Theology and Church, p. 43. cf. Aids to Reflection, pp. 73, 185. Also Christian Theology and Scientific Culture, p. 113. Here is one of the critical weaknesses of Barth's American evangelical critics, Carl Henry and Gordon Clark. For both, theology is primarily concerned with propositions about God, not God Himself. This intellectualism leads to a stark disparity between their method (abstract, a priori principles of logic) and their object, the concrete, personal, living God. cf. Gordon Clark, Karl Barth's Theological Method, Philadelphia: The Presbyterian and Reformed Publishing Co., 1963, pp. 56ff., and Carl F. H. Henry, God, Revelation and Authority, vol. I, Texas: Word Books, 1976, p. 206.

47 God in the Dock, p. 46. cf. Theology in Reconciliation, p. 248.


49 Theological Science, p. 96.

50 The School of Faith, p. lxxi.

204
Theology in Reconstruction, p. 121.


Ibid.

God in the Dock, p. 144.

Surprised by Joy, p. 182.

Christian Reflections, p. 169.

Brown, p. 192. See also Chapter V. D. 7. The Act of Knowing.


Christian Theology and Scientific Culture, pp. 90-91.

quoted in Bevan, p. 133.


Theology in Reconstruction, p. 61.

Theological Science, p. 53.

The Knowledge of God and the Service of God, p. 119.

The Ground and Grammar of Theology, p. 166.

Reason in Christian Theology, p. 40.

Ibid., p. 39. Torrance ends with "The difference is that he does not now think out God, but thinks Him in—nevertheless he thinks." Though an opaque expression, Torrance has in mind the change from thinking to God, to thinking from God. That is, thinking in grace and using logic, not thinking logically to fit in and comprehend grace. True rational thinking is from a centre in a participated experience of the gift of faith and justification in Christ. As Torrance puts it elsewhere, "We may think out from a centre in God's Word [because he has come among us in Christ] but we cannot think our way into him through our reasoning". The Hermeneutics of St. Athanasius, p. 452. Here too we see Torrance's emphasis that thinking and being cannot be divorced.

Belief in Science and in Christian Life, p. 3.

Aids to Reflection, p. 309.

Theology in Reconstruction, p. 130.
71 Conflict and Agreement, II, p. 131.
72 Theological Science, pp. 46ff. cf. Theology in Reconstruction, p. 9.
73 Theological Science, p. 9.
74 Theology in Reconstruction, p. 31.
75 Space, Time and Incarnation, p. 54.
76 God and Rationality, p. 166.
77 Karl Barth's Table Talk, pp. 48, 65.
78 A phrase used by McIntyre, Theology and Method, p. 211.
79 Theological Science, p. 198.
80 The School of Faith, p. xxvi.
81 Theological Science, p. 98.
82 Ibid., p. 279.
83 Letters to Malcolm, p. 82.
84 Anselm, Proslogium, Chapter I, p. 6.
86 Christian Theology and Scientific Culture, p. 112.
87 Theology in Reconstruction, p. 118.
88 The World as I See It, p. 64.
91 Karl Barth: An Introduction, p. 145.
92 Christian Theology and Scientific Culture, pp. 102-103. In this light, we must understand baptism and the eucharist as sacraments of the Word made flesh. This means "they do not have existence or reality independent of the Word". Conflict and Agreement, II, p. 164. Without this intimate link with the Word of God, they become empty signs, sentimental ceremony.
93 The Ground and Grammar of Theology, p. 87.
Torrance argues that Aquinas rejected Anselm's view that God's being is intrinsically eloquent, that is, God's speech is intrinsically a part of his being. Christian Theology and Scientific Culture, p. 101. That is, for Aquinas, the humanity of Christ is the outward form of the Word and "is not related to the essential and eternal nature of the Word". Hermeneutics According to Aquinas, p. 276.

Theology in Reconstruction, p. 47.

Ibid., p. 49.

Christian Theology and Scientific Culture, p. 135.


Anselm: Fides Quaerens Intellectum, pp. 22ff.

Reason in Christian Theology, p. 35.


Christian Theology and Scientific Culture, p. 21.

Space, Time and Incarnation, p. 44. For this reason, Barth prefers the term Gegenstand (object) rather than Objekt. The former implies a standing over against, the latter suggests the object lies passively under the scrutiny of a Subjekt. Brown, p. 151.

Christian Theology and Scientific Culture, p. 21.

The Ground and Grammar of Theology, p. 114.

Ibid., p. 36.

God in the Dock, p. 178.

Karl Barth: An Introduction, p. 98.

Bevan, pp. 288-290.

Ibid.

God in the Dock, p. 174. cf. Bodleian Library, ms. facs. c. 48, p. 110, where in a letter to C. S. Carnell (1958), Lewis says he had been deeply influenced by Otto.


113. Mere Christianity, pp. 130f. cf. Lewis' phenomenological analysis of the reading experience to determine if one is subject or object-centred. An Experiment in Criticism, pp. 14ff. We have already noted Barth's phenomenological analysis in Church Dogmatics, III/2, The Doctrine of Creation, pp. 71ff.

114. The numinous appear to be just another aspect of aesthetic experience, says Lewis, "until religion comes and retrospectively transforms it". God in the Dock, p. 175. (Italics mine.)


117. Theology in Reconciliation, p. 222.

118. Theology in Reconstruction, p. 39.


120. Unfortunately, because Aquinas denies that Christ's humanity is a part of the eternal nature of the Word of God, he does not affirm that what the Word is in the humanity of Christ, he is antecedently in God himself. This implies that the incarnation of the Word is ultimately only an episode in the life of God. Hermeneutics According to Aquinas, pp. 276-277.

121. Auerbach, p. 44. cf. where Thomas Smail challenges the notion that ontological statements are irrelevant to the exegesis of John 10 (My Father and I are one.) He notes that ontological statements need not mean abstractly speculative, but may be quite practical and concrete for they refer to Jesus' relation to the Father, and thus are essential to fully describe the Gospel. Thomas Smail, The Forgotten Father, London: Hodder and Stoughton, 1980, p. 90.


123. The Ground and Grammar of Theology, pp. 166-167.


125. The Ground and Grammar of Theology, pp. 121-122.

126. God and Rationality, p. 20.


128. Theology in Reconstruction, p. 48.

Stephen W. Sykes, Barth on the Centre of Theology, Karl Barth: Studies of His Theological Method, p. 53. Barth discusses theology's noetic necessity in Anselm: Fides Quaerens Intellectum, pp. 45ff. Our noetic ratio is absolutely conditioned by conforming to the object.

Hence classical Chalcedonian Christology would seem to be viewed as a kind of mythological projection of human concepts into the divine. Thus the only valid Christology would seem to be that which has a story form from which one cannot abstract any clear conceptual infra-structure.

Sykes, Barth on the Centre of Theology, p. 53. Sykes appears unconcerned that a similar realist notion of knowledge is argued for by Einstein in modern science.

Karl Barth: An Introduction, p. 177.

Ibid., p. 179.


No Rusty Swords, p. 370.

The Integration of Form, p. 161.

God and Rationality, p. 47.

Miracles, p. 88. (Italics mine.)

Auerbach, pp. 44-45.

Ibid.

Ibid., pp. 185, 188.

Theological Science, p. 96.

The World as I See It, p. 131. (Italics mine.)

Christian Reflections, p. 135.

Theology and Church, p. 47.

The Ground and Grammar of Theology, p. 150.

Ibid. Paul Tillich advocates a non-cognitive relation to God, through symbols whereby the cognitive content derives from culture. cf. God and Rationality, pp. 45f.

God and Rationality, p. 21.

209
Theological Science, pp. 173-174. As I have noted, Lewis operates with a limited acceptance of inferential thinking at lower levels of scientific rationality, which he integrates with the higher apprehension of the intuitive, feeling intellect.

Theology in Reconstruction, p. 49.

Ibid., p. 40.

The Ground and Grammar of Theology, p. 97.

Newton, Einstein and Scientific Theology, p. 238.


Bevan, p. 295.

Newton, Einstein and Scientific Theology, p. 244.

The Ground and Grammar of Theology, p. 171.

Karl Barth: An Introduction, p. 185.

Theology in Reconstruction, pp. 51, 55.


God and Rationality, p. 22.

Theology in Reconciliation, p. 52. Torrance refers to Baron Von Hügel in this regard, that the more concretely real the object, the less clear our ideas. Theological Science, p. 166. This is a common theme in Lewis, e.g., The Great Divorce.

Theological Science, pp. 94-95.

Ibid., p. 185. True statements always confess their inadequacy. T. F. Torrance, Hermeneutics, or the Interpretation of Biblical and Theological Statements According to Hilary of Poitiers, Abba Sálama, 6, 1975, p. 54. (Hereinafter referred to as Hermeneutics According to Hilary of Poitiers.)

Theology in Reconstruction, p. 139.

Ibid.

The Discarded Image, pp. 15-16.

Christian Reflections, p. 11.

Christian Theology and Scientific Culture, p. 86. cf. Theology in Reconciliation, p. 78.

Theology in Reconstruction, p. 262. cf. Ronald Nash,

173 Theology in Reconstruction, pp. 262, 278.
174 Miracles, p. 47.
175 Ibid., p. 43.
176 Ibid., p. 36.

179 Bodleian Library, ms. facs. c. 53, Letters of C. S. Lewis, p. 191. (Italics mine.)
180 Ibid., p. 194.
181 Ibid.
182 Miracles, pp. 31, 47.
183 The Discarded Image, p. 70.
185 Space, Time and Incarnation, p. 65.
187 Ibid. Lewis' Sehnsucht has a similar role to play for him as wonder played for Einstein, as the deep emotion at the heart of his search for God even as awe was the ground of Einstein's search for scientific rationality.
188 Space, Time and Incarnation, p. 65.
189 Divine and Contingent Order, p. 23.
190 The Ground and Grammar of Theology, p. 144.
191 Theology in Reconstruction, p. 178. cf. The Problem of Natural Theology in the Thought of Karl Barth, p. 132.
192 The Problem of Natural Theology in the Thought of Karl Barth, p. 132.
193 Theological Science, p. 38. cf. Théologie in Reconstruction, p. 178, and also Anselm: Fides Quaerens Intellectum, pp. 35ff., where Barth writes there is no right knowledge without right faith.
194 Theology in Reconstruction, pp. 132-133.

Bodleian Library, ms. facs. c. 47, Letters of C. S. Lewis, p. 18.


Bodleian Library, ms. facs. c. 47, letter to Griffiths, p. 20.

In That Hideous Strength, p. 37., and Mere Christianity, p. 143, Lewis denies the validity of logical-causal or savoir knowledge for knowing human persons as well.

The Four Loves, p. 115.

The Discarded Image, p. 151.

Ibid., p. 157.


Walter Hooper quotes from the Socratic Club notes for Oct. 15, 1945 in Oxford's Bonny Fighter, C. S. Lewis at the Breakfast Table, pp. 152-153. cf. The Abolition of Man, pp. 32, 46. Also cf. Bodleian Library, ms. facs. c. 47, letter to Griffiths, p. 20. In That Hideous Strength, p. 318, Lewis editorializes that God's command is primary and unprobable from below. In its light the other laws are understandable, "but from them you could know nothing of it". It appears that Lewis' self-contradiction argument was an abortive attempt to use the lower reason to compel or undergird the higher. In later years he abandoned it.

The Pilgrim's Regress, p. 82.

The Screwtape Letters, p. 11. cf. The Pilgrim's Regress, pp. 87, 89.

Miracles, pp. 18-25, 38.

So also Bevan, pp. 337-338.


Miracles, p. 37.

G. E. M. Anscombe, A Reply to Mr. C. S. Lewis that "Naturalism" is Self-Refuting, pp. 7-15. cf. Lewis' written reply reprinted in God in the Dock, pp. 144-145.


215 Adey, p. 41.

216 God in the Dock, p. 234. cf. Bevan, pp. 344-345. Also Clyde Kilby, The Creative Logician Speaking, C. S. Lewis, Speaker and Teacher, pp. 28-30, where Kilby assembles a detailed list of Lewis' use of 'reason'.

217 God in the Dock, p. 234.


219 Ibid., p. 223. cf. the final note in Bodleian Library, ms. facs. c. 54, The Great War, p. 72.


221 Surprised by Joy, p. 159. The specific situation Lewis mentions is the event of being wounded in World War I.

222 Selected Literary Essays, p. 265. In The Personal Heresy, p. 59, Lewis explicitly claims Kant is irrelevant for aesthetic and semantic questions, regardless of the possible epistemological question whether we create phenomena.

223 Bodleian Library, ms. facs., Letter to Barfield, June 2, 1940, p. 106.

224 Letters to Malcolm, p. 104. In Perelandra, p. 202, Ransom asks Maleldil if he is only an appearance. And Maleldil replies that everyone but Maleldil sees only appearances, but that does not mean they are false. I would suggest that though Lewis uses Kantian language here, the influence is, as with Coleridge, more formal than material. What Lewis wishes to assert is the genuineness of our knowledge, yet the inherent limitations of all our noetic constructs. This is similar to Torrance, though for the sake of precision, Torrance eschews all Kantian-idealist language. Lewis, I believe, instead of rejecting the language, uses it, even baptizes it within a new Christian context.

225 Miracles, p. 18.

226 Letters to Malcolm, p. 81.

227 Aids to Reflection, pp. 160f.

228 Ibid., pp. 161f.
229 Ibid., p. 315.
230 Ibid., p. 120.
231 Reardon, pp. 69-71.
232 Ibid., p. 72.
233 The Abolition of Man, p. 20.
234 Theological Science, pp. 141-142.
235 God and Rationality, p. 32.
237 Ibid., pp. 23-27.
238 Kittô, p. 143.
239 C. S. Lewis, Till We Have Faces, A Myth Retold, Grand Rapids: Wm. B. Eerdmans Publishing Co., 1970, (1956). That is, the Fox has only naturalistic explanations. A similar treatment is accorded MacPhee, the sceptical friend of Ransom in That Hideous Strength, who is modelled after Lewis' tutor W. T. Kirkpatrick. By reason here I refer to logic and inference.
240 The Discarded Image, p. 88.
241 Reflections on the Psalms, p. 52.
243 Letters of C. S. Lewis, p. 177. (Feb. 18, 1940).
244 Christian Reflections, p. 27.
245 Surprised by Joy, p. 182.
246 Studies in Medieval and Renaissance Literature, p. 156.
247 God in the Dock, p. 65.
248 Reardon, p. 429.
249 Reason and Emotion, p. 19.
250 Ibid., p. 201.
251 God and Rationality, pp. 199-200.
252 Karl Barth: An Introduction, p. 186.
253 Reason in Christian Theology, pp. 29-30.

254 Ibid., p. 22.

255 Theological Science, p. 63.

256 Theology in Reconstruction, pp. 169-170.

257 Reason in Christian Theology, p. 22.

258 Calvin's Doctrine of Man, pp. 116-128.

259 Reason and Emotion, p. 208.

260 Christian Theology and Scientific Culture, pp. 30f.

261 Divine and Contingent Order, p. 17.

262 Theology in Reconstruction, p. 232.

263 The School of Faith, p. xxxii.

264 Ibid., p. lxi.

265 Theology in Reconstruction, pp. 232-233.

266 The Four Loves, p. 105.

267 Kitto, p. 170.

268 Ibid., p. 193.

269 Reflections on the Psalms, p. 95.

270 Theology in Reconstruction, p. 56.

271 Reason in Christian Theology, p. 34.


273 The Brink of Mystery, p. 45.
CHAPTER IV

INTUITION AND IMAGINATION

A. Introduction

It is important for this study to consider the relationship between the imagination and intuition, for these two terms designate mental-affectional capacities which are the respective epistemological linchpins for Lewis and Torrance. Their similarities and differences clarify the differences and similarities between Lewis the literary critic-theologian and Torrance the scientist-theologian.

The wrong uses of imagination are many and probably account for Torrance's negative view. But on the positive side, Lewis sees that firstly, the imagination helps us to understand others, and secondly, it helps us respond to and produce art.1 Its bad use is to provide for us in shadowy form, a substitute for virtues, successes, distinctions etc., which ought to be sought outside in the real world. For example, picturing all I would do if I were rich instead of earning and saving.2

The fundamental difference between the imagination and the intuition is that the latter connotes a knowledge claim which the former lacks. Coleridge remarks that intuition denotes 'an immediateness of any account of an object of knowledge.'3 In English, Richard Hooker made early use of 'intuition' to describe the cognitive act especially appropriate for theological knowledge, namely, an immediate grasp or looking upon the truth.4 Whereas intuition entails a judgement or an evaluation of the object's truth claim, imagination suggests that the conception may not correspond to reality.5 Epistemologically it serves us by offering heuristic suggestions. The two share, however, the qualities of immediacy and vivid mental apprehension which has led to their usage.
as synonyms.

What imagination is to aesthetics intuition is to the sciences. As a truth judging faculty, the intuition tastes, that is, immediately apprehends, truth as the imagination tastes meaning. Part of their difference is that the imagination suggests the immediate entertainment of its subject matter through symbols and intuition refers to the immediate entertainment of reality through abstract or imageless concepts.

In Lewis' thought, the imagination serves as a kind of outer mental boundary whereby the mind may indwell the semantic intention of an object or thought without any judgement of its truth. It is the mind's "wise passiveness" before the object. Unless the intellect receives meanings and not just ciphers, its judgement and analysis will apprehend only superficialities and not the reality of its subject matter. "Symbols exist precisely for the purpose of conveying to the imagination what the intellect is not ready for."

Art, the domain of the imagination, allows the mind to rest upon a story or object as if it were real. Coleridge describes this "willing suspension of disbelief", as the essential precondition of all aesthetic experience; whether enjoyment of a play or a poem. Art leaves the question of truth to philosophers and scientists. Poets enjoy; they laugh, play, weep and rub their noses into the quiddities of life. Dante shows what God is like. He does not entertain the abstract question, "Does God exist?".

In science, the appropriate mode of knowing prescribes that we consider the object's truth and authenticity. In art, the object prescribes a different but appropriate mental-emotional response. In art, meaning lies not in an empirical referent but in the imagination's sensuous representation of its object, without any ontological commitment to its reality. It seeks to enjoy its object, not to verify it. But science's concern for truth compels it to evaluate the object's reference to empirical reality.

The differences between science and art, intuition and imagination, become at once problematic and fruitfully provocative in theology. They confront us with the relation of
truth to beauty. For in theology, the subject matter compels the poet's imaginative belief and enjoyment to consider the object's intuitive truth claim. And it compels the scientist's interpretive and abstractive process to be short-circuited by the object's concrete particularity and call for worshipful enjoyment.

B. Concepts and Images

Because Torrance, the scientist-theologian, gives priority to imageless, intuitive connections between thought and reality, he rejects the Roman Catholic (and Orthodox) emphasis on symbols and images. He argues that the Roman view assumes all knowledge rests upon an Aristotelian dependence on inference from sense-perception and speaks of direct cognitive acts only in terms of the beatific vision.10

Torrance's aversion to images has its historical antecedents in Calvin's criticism of the Lutheran and Roman Catholic use of icons in worship and in the intuitionism of his fellow Scotsman, Thomas Reid, the advocate of common sense realism. Reid opposed all representationalism and phenomenalism and argued that external objects are known immediately without the intervention of vicarious phenomenon.11

Austin Farrer, Lewis' close friend, agrees with Torrance that we have a direct understanding of God, but only by means of symbols derived from sense experience.12 Torrance agrees that theology may use symbols as transparent media for cognition. But he accuses Farrer of thinking only with his eyes, by insisting on the importance of symbols and images. Images point to or signify God, but never picture him visually, says Torrance.13 Torrance iconoclastically rejects Farrer's 'descriptive theology' and proposes instead a 'paradigmatic theology'. And Torrance rejects Farrer's belief that we "cannot by-pass the images to seize an imageless truth".14 Torrance argues that images point away from themselves to the imageless Word. Even the Bible's images are adapted to the human subject rather than the divine object, helpful to man rather than fitted to God, in Hilary's words.15 Torrance's real concern here is that we might assert a "general justification of human forms of thought and speech".16 Torrance
rejects any inherent correspondence between God and man other than a correspondence by grace. He would agree, however, that in and through Christ, God has laid hold of and adapted basic human images for knowing him. 17 Or, as Lewis recalls Hooker's words, "If nature hath need of grace, yet also grace hath use of nature". 18

Lewis readily agrees that images may act as mere links to theological knowledge. A wafer has no resemblance to Christ, yet links us to Christ in the eucharist. In fact, this non-resemblance is quite advantageous, for "I need Christ, not something that resembles Him". 19 Images in the mind or on paper are not important in themselves. Among the great lessons of Lewis' quest for joy, was his discovery that images and sensations in his mind were only the mental track left by the passage of joy. But if idolatrously focused on as valuable in and of themselves and taken for the true object, all images confess themselves inadequate. "I am only a reminder." 20

There is a problem, however, with denying that Biblical images are descriptive or appropriate to God and merely adapted to and accommodated to man. Torrance's desire to deny any analogia entis, in its negative tone, also risks denying the integral unity between the economies of creation and redemption and the ontological reality of God, which he elsewhere powerfully maintains. 'Fitted to man, not God', suggests an ugly gap between God's self-disclosure and his eternal reality.

Torrance says images have a signitive, not a mimetic relationship to God. Again, Torrance fears that 'mimetic' implies an analogy of proportion which understands God in terms of some inherent likeness with man, rather than out of sheer grace. 21 He argues that Biblical images are irreversible, unlike those in formal logic. 22 As we listen, truth breaks in apart from the image. "Their function is ostensive and persuasive, not descriptive." 23 But to say truth breaks in apart from the image is like saying that as we listen to Christ, the Father breaks in apart from Christ. It is better to say that image and word are a unity in Christ. Both the
Bible's images and words point to Christ as Christ points to the Father. However, Torrance is right to stress that the validity of the images springs not from the words or expressions themselves, but in the activity of God to which they point. 24

Torrance says that Biblical images are fitted to man, not God. This is doubtlessly true in regards to many images. Bread or the communion wafer is no doubt suited to man, and not, save by its function, suited to God. It awakens and prompts us to Christ's presence. But a wafer as a corporeal symbol is by no means our sole access to God. But what access to God have we apart from the incarnation? If the incarnation is not a real resemblance to God, in a way quite unlike the conventional link between a wafer and Christ, then God the Father remains unknown. If a real symbolic appropriateness does not exist between the economy of Biblical images, words and events and the ontological reality of God, the integrity of revelation as God's genuine self-disclosure is thrown into question. We may not identify images as descriptive of God's being for fear of anthropomorphism. But we deny their appropriateness for God at the risk of agnosticism or some intuitive gnosis apart from the incarnate, sense-experience and historical activity of Jesus Christ, the express image of God, as Paul says. Bevan concludes his Gifford Lectures by saying that certain symbols tell us that though God is unimaginable, Scripture's symbols really are appropriate to God, "the best possible way the truth could be expressed in human ideas". 25 Elsewhere, Torrance strikes a much surer balance as he approvingly expounds Athanasius on Biblical images.

The images used are not arbitrary, for they are drawn from the world which God has created through his word and which he has provided to direct man's gaze upward to the Creator, but even so they are meaningful only when interpreted in the light of God's Word...26

Nonetheless, it is significant for the comparison of imagination and intuition that Torrance chooses to contrast his theological approach with that of Farrer's. Because
Torrance diminishes the imaginative-symbolic and stresses imageless, intuitive concepts, his theology is a rigorously precise map, but weak on parable and story. His is a theological science, not a theological artistry. Lewis teaches through story and analogy; Torrance probes and seeks to understand his object through precise, indwelt concepts.

Torrance's emphasis on a scientific referential theory of meaning leaves him little room to appreciate the kind of imaginative meaning which art provides. Reid's argument for immediate apprehension of reality resolves many epistemological problems and is correctly associated with a modern critical realism, but as S. Graves points out, thoughts about what does not exist involved Reid in his "only sustained obscurity", in which he tried to avoid having ideas for non-existent objects. The artistic experience seeks primarily the quality of life and brackets off questions of objective factuality. Though not the same as scientific knowledge, the mental-emotional activity involved here is of the utmost importance for man's aesthetic rationality and is a crucial ingredient of his rational life and hence of his theological rationality.

However, Torrance too desires a unity whereby image and concept are 'thought together' with concrete reality. Even more explicitly than Lewis, he sees the incarnation as the healing of concept, image and being, or as Lewis puts it, the marriage of heaven and earth, myth become fact and word become flesh.

The great appeal of Lewis' writings, like the Medieval poets he praises, is in no small part due to the steadfast focus of his eyes and ears upon his subject matter. This emphasis is certainly appropriate for theological epistemology, for the sensuous imagery of Scripture invites us to 'taste and see' God as well as hear true concepts. Images deepen our knowing into a whole which involves the child and poet as well as the philosopher and scientist. This is the goal of a repentant descriptive theology. Its mimetic representations seek to point transparently to Christ. Biblical images, parables and narrative are mirrors by which we apprehend Christ, with head and heart, emotion and intellect.
Pictorial symbols and imageless concepts both have the paradigimatic function to point away from themselves always to Christ, the Word made flesh. Conceptual maps such as homousios or the Trinity, or cognitive symbols such as Aslan all in their respective ways, serve the truth. They are not ends in themselves. Audits and images are servants only. Neither symbol nor audit was the chosen vehicle by which God revealed himself, in Jesus of Nazareth.

Epistemologically, this leads us to the notion that concept and image must be allied, with neither given priority, for in Christ the Word has become indissolubly united with flesh. The incarnation is the coming of the invisible God into visibility. Therefore the ontic descent, (Jesus as God's image), becomes normative for our noetic constructions. We cannot know God behind the back of Jesus, God's unveiling of his face. Nonetheless, ontologically the imageless and invisible eternity of God is the controlling source of God's revelation in Jesus.

With scientific maps and precision statements, theology speaks to the academic world and science, but it must represent with parables, analogy and story in order to address the multitude. Torrance's theological science is read by thousands; Lewis' theological artistry is read by millions. While Lewis speaks to the multitudes with story and image, Torrance's scientific theology evangelizes the limited, but influential world of academic philosophers and theologians. If imagination and intellect, word and image, are merged indissolubly in Christ, then theology must refuse to give priority to either in its witness to Christ.

It is good to remind ourselves that mathematical numerals and metaphors, imageless relations and images, are all symbols in that each refer thought in a different way to its object. A symbol is that which represents or stands for something other than itself. Einstein's universe is symbolic in that it uses imageless mathematical symbols to link thought and being. Einstein himself reminds us that formalized mathematical symbolization deliberately leaves out vast tracts of reality in order to obtain its peculiar (mathematical) precision.
The formalized precision of the theological concept, *homoousion*, is similarly restrictive in order to be precise. Imageless symbols do not exhaust our cognitive knowledge of reality. Therefore we must explore with Lewis the role of art and the imagination, for the realm of aesthetic rationality and its theological appropriateness as an objective penetration into reality has been quietly ignored by academic theology.

C. Meaning and Imagination

In the English literary tradition, the imagination has been seen as the greater power of the mind, which unifies and synthesizes the cognitive and emotional. Its work is epitomized in the poet who brings the total mind of man into activity, blending and fusing each faculty of man "each into each by that synthetic and magical power...the imagination".33

For Shelley, the imagination perceives and weighs the value of qualities which reason enumerates. Whereas reason respects differences, imagination focuses on the similarity of things.34 The imagination reproduces and arranges materials of knowledge "according to a certain rhythm and order which may be called the beautiful and the good".35 With this background of literary influence, we can appreciate the high respect Lewis has for this mental attribute; he grants it the pivotal role in experiencing reality and in preparing the ratio and intellectus to evaluate the object's truth.36

As we have noted, Torrance the scientist ties meaning or semantic intention to empirical, ontological reference.37 Lewis the literary critic and story writer ties meaning to the empirical-sensuous imaginative apprehension without commitment to ontological status. These need not be seen as hopelessly contradictory if we allow the object in art to prescribe the appropriate mode of apprehension, even as in theology, the object prescribes that meaning entails a commitment to empirical truth. As a literary critic, Lewis could not operate with such empirical-factual criteria of meaning since this would entail a rejection of all art as meaningless unless it were committed to spatio-temporal factuality. This would eliminate as meaningless the majority of literature, painting, and music of mankind. Therefore meaning refers to
its quality of story and its impact upon our imagination, "the series or system of emotion, reflection and attitudes produced by reading it". 

Lewis disapproves of Crocean aesthetic theory which conceives of the imagination as non-cognitive and as bearing only on feeling and self-expression. Instead, he wishes to "reaffirm the Romantic doctrine of the imagination as a truth bearing faculty, though not quite as the Romantics understood it". That is, symbols may have a cognitive content without necessarily being reducible to imageless concepts. For Lewis, if Biblical images lack any signitive and cognitive content (but not conceptual as in Torrance), there is no real correlation with God.

The difference between Lewis and the English Romantics lies in his distinction between imagination and reason. For Lewis, imagination is the organ of meaning, the antecedent condition of truth or falsity. He tells Barfield, "We are really at one about imagination as the source of meanings... We both agree that it is the praeus of truth." Through the imagination the object is not learned by definition, but "you rather get to know it as you get to know a smell or a taste, the atmosphere of a family or a village, or the personality of an individual". Too often philosophy and theology endlessly go on "explaining a thing, without knowing what it is" because they have not concretely apprehended meaning through the imaginative grasp prior to abstract and analytic evaluations. Abstract concepts rigorously define, but imaginative symbols fill in the outline with qualitative and experiential attributes of the object which transcend formalization and are essential for communication.

Lewis rejected Barfield's Romantic notion that to imagine is to know. Therefore he distinguishes between imagining what God is like if he exists (which gives the meaning, the quality, the whatness), from the factual question, "Does God exist?". For Lewis, truth, in contrast to meaning, "is known not by its content but by its connection with other concepts... linking it with things outside itself". Lewis' Narnian Chronicles illustrate how the imagination is prior to coherence and truth.
Lewis wrote Narnia when pictures began to enter his imagination. Only later did he discover the coherence of the total work. Thus imaginatively, *The Lion, the Witch and the Wardrobe* (redemption) is written first, while chronologically and logically, *The Magician's Nephew* (creation) is the initial Narnian event. Hence, years later he still maintains we cannot decide between the truth-claim of materialism and theism by reading Lucretius and Dante, but we read them in order to learn what it feels like to be a materialist or a theist.

Lewis' affirmation of the imagination as a truth bearing faculty "implies a kind of truth or rightness in the imagination itself", which Lewis admits amounts to something like a psycho-physical parallelism built into the universe. He sees the equations between goodness and light, evil and darkness, breath and soul, all to be genuine insights into the universe. This aesthetic and moral harmony parallels the rational 'pre-established harmony' of the universe which Leibnitz and Einstein were fond of speaking.

For Lewis, there are important "moods", non-logical but nonetheless real and embedded within the universe. Such a mood includes the experience of awe at great size. The truth of these mood equations is discerned by the imagination. There is no logical link between size and importance, but our imagination tells us there is. This is a psycho-physical parallelism. Poetic images which link a red rose to romantic love are given to us by the real world. A rose could not be replaced by an onion in love poetry. It would not do. Yet this rose-love equation is not automatic or forced upon us. A certain training or sensitivity is required to appreciate it.

As conceptual, imageless thought enables a mathematical precision otherwise unobtainable, so the imagination allows the mind to focus on non-quantifiable qualities of experience. A poem about death enables us to experience more of life's uniqueness than a real danger would permit us. For in a real danger we would be so practically preoccupied with staying alive (subject-centredness) we could not drink in the depths of the experience (object-centredness). We could not experience...
the real as it really is, for our focus would be subjectively slanted towards what might happen to us. But in the imagined experience of a poem or novel, we can focus unself-consciously on a terror or a joy more deeply and fully than the practicalities of life would ever afford. This imaginative representation of life and experience grants us a unique qualitative precision which though limited is as valuable an insight into reality, as mathematical precision.

In Torrance's epistemology, this discussion would belong to his references to the unexplored region of aesthetic rationality. Torrance regularly refers to aesthetics as a rational mode, but never integrates it with his penetration into the numeric and word rationality of science and theology. This absence from his writings may be due to his innate mistrust of the imaginative faculty as either unnecessary in theology or, following Reid, as misleading in the philosophy of perception.

As a scientist, Torrance discusses belief and participation in the context of the truth claim of Christianity viewed scientifically. There are several limitations in this approach. Christianity's revelation involves history and hence narrative or story. Its concrete events cry out to be understood and treated in terms of their aesthetic rationality. Auerbach has shown that Christian faith's influence on the Western experience of reality is of unrivalled importance for its literature. Secondly, if in one sense, Christians and unbelievers lack a common ground, they must nevertheless search for better ways to understand and communicate. If I can only believe and commit myself to one truth, how do I as a Christian dialogue with and communicate to other religions and other experiences? I cannot pretend not to be a Christian while reading the Koran. But if I imaginatively suspend my disbelief as far as possible in an aesthetic and imaginative openness which Lewis describes, I am in a positive position to comprehend and appreciate, thus seeing real differences and real similarities, yet without the believing commitment which the scientific and intuitive knowledge claim entails.

Finally, Lewis' paradigm also has value for a scientist,
unhappy with the old framework, but yet not sure if this new one will work. There is a proper tentative and exploratory work of creative imagining in science as well as in art. The imaginative thinker is free from the domination of "observed fact" and is free to explore new connections and relationships. 55

The imaginative writer uses myth and story to communicate meaning, in order that once the meaning is apprehended, the truth of the matter can be properly considered. He presents as much of the quality of his subject matter as possible without its factuality. Of course, the factuality of the subject matter does indeed affect its quality. Though art and imagination do not assert, Lewis denies Croce's claim that nothing cognitive enters into aesthetic experience. For Croce, the distinction between real and imagined disappears in aesthetic experience. For Lewis, this distinction not only survives, but makes aesthetic difference. 56

In the Christian revelation, story and truth claim encounter one another. Hence in Torrance's language, aesthetic rationality (art) and word or numeric rationality (science), cannot be ultimately divorced in theology. Lewis presents the quality of Christianity by means of story and analogy, believing that if we experience the imaginative meaning (or aesthetic rationality) of the Gospel, we are 'close to the Kingdom'. By this artistic route, we sneak past the 'watchful dragons' of unbelief, scepticism and subject-centredness which ordinarily preclude man's enjoyment and participation in the Gospel. Thus in Out of the Silent Planet, Ransom plans to get people to listen to his story by publishing it as fiction first. For if presented as fact, people would not suspend their disbelief. 57

Art casts an epistemological spell which disarms our many-faceted a priori barriers to belief. 58 So it was that George MacDonald's fairy tales 'baptized' Lewis' own imagination. Though there was no belief commitment, a certain quality of Christianity was tasted. As a result, he could now see and taste the beauty and coherence of the previously cold and hostile facts.

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1. Varieties of Imagination

Lewis describes and distinguishes various imaginative styles. The Classical imagination (e.g., the Parthenon) embraces its object completely within a simple, symmetrical, harmonious self-explanatory whole. The Romantic imagination loves to lose itself in a labyrinth and surrender to the inextricable. Lewis also discusses the transforming imagination of Wordsworth and the penetrating imagination of Shakespeare. He particularly lauds Shakespeare for his unique combining of the creative, "richly wrought phrase" with the natural, true to life or 'mimetic'.

Most dear to his heart is the realising or mimetic imagination of Medieval thought. Lewis values this mimetic imagination for its extremely factual and descriptive word painting which insures that we see what the author saw. This is done by giving us multiple sensory impressions which enable us to imaginatively exercise our five senses. Herein lies the Medieval vividness, "feeling the seized moment wherein the artist seeks to let us actually hear a voice rather than hear the character's mind". This imagined exercise of all the senses, is what so intimately links the imagination to the vividness and concreteness of sense-experience. It is this mimesis of sense experience which gives art its meaning. In Medieval literature and its unique mystery plays, Lewis believes, the mimetic or realising imagination flourished for two reasons. Firstly, it rejected the classical a priori of decorum. But even more important was "their devout attention to their matter and their confidence in it". In other words, object-centredness and confidence or commitment to the subject-matter are the outstanding qualities of the realising imagination. This bears striking resemblance to Torrance's criteria for theological science.

2. The Feeling Intellect

When the imagination works at the height of its power, Lewis calls it the "feeling intellect". "Imagination...is but another name for absolute power and clearest insight, amplitude of mind, and Reason in her most exalted mood." Without this imaginative-intellectual effort, the meaning of
many objects cannot be grasped. This includes theology's object. Thus Lewis says that trying to grasp the meaning of Christ's words by the intellect alone is "like trying to bottle a sunbeam". 66

Plato opposed all mimetic or representational art in his Republic because of the danger of mistaking art for science. Art for Plato is a copy of a copy, the natural world already being a copy or shadow of the transcendent world of forms. 67 But Christian theology rejects Plato's account of the Demi-Urge's creation in favour of a Biblical doctrine of creation as contingent reality ex nihilo. Thus we see that Jesus is the image of God, not in the sense of a copy of God, but in the sense that he embodies forth God in space and time. To say that Jesus is the image of God means that he incarnates what previously had been invisible and imageless. In the incarnation, God descends to the less real, or better, the contingently real; he descends from uncreated reality to the created and contingent reality of space and time. In so doing, his incarnation heightens, revivifies and truly establishes contingent reality's claim to be real, though limited by transcendence. Jesus as God's image holds forth God to man to see, hear, taste and touch in a startling new way. This is the scandal of the Gospel to the Greeks and to the idealists of all generations who prefer principles of transcendence, invisible and non-sensuous and abhor not only the virgin's womb, but anything empirical, from Christ's making of wine to his bodily resurrection.

In this light, mimetic art is not, as Plato accused it, a copy of a copy. Rather, its function is not unlike mathematics. That is, it is a precision instrument used to apprehend aesthetic moods and moral qualities which inhere in the universe.

Further, this implies that the artist, like the scientist, is free to re-arrange and bracket off certain factual questions in order to draw attention to other salient features. He does this not for technological prowess, but playfully for sheer enjoyment of the marvels of creation's beauty and goodness, and in so doing casts a semantic richness upon its truth.
This is the justification of Lewis' theological artistry.

The imagination may therefore quite properly and playfully indwell and re-arrange nature as did the poetry of sixteenth century England. To not only imitate nature but to play with her is as legitimate a focus on non-mathematical qualities of nature as are the freely creative mathematical inventions of mind which draw out aspects of the numeric rationality of the universe otherwise unobtainable by inference or deduction.

3. The Visual Element

Man's imaginative power involves more than having mental pictures. Images or mental pictures are merely the elements left in the wake of imaginative activity. All such images are provisional and limited, each to be dropped as it serves its turn. In fact, an image too clear and static inhibits the further play of imagination. These images are the slag from the furnace, which easily become the bane of reading and writing. Here, too, is the danger of icons in worship: their rigidity and permanence may be a barrier to deeper penetration into reality.

Similarly, reasoning involves more than the succession of linked concepts we use when offering an argument. The formal argument merely translates a prior activity. Here Lewis suggests that the discursive intellect is the after-effect of the mind's intuitive grasp of an object's truth. The intuitive grasp is the primary rational power. Hence for Lewis, the imagination is not really about the pictures or representations it produces, but about something outer and other to which the pictures point. However, the imagination does form pictures or images, even as the intuition does form concepts. Lewis records writing his stories when "pictures came into my head".

Mental and external images in thought and prayer have a limited value. They may help concentration when the visual stimulates mental activity, but inevitably the artistic merits or demerits distract from the icon's true object--God.

Internal visual images have similar defects and further problems, particularly for those who have great powers of visualizing. The images get in the way. The visualizer can
elaborate his images indefinitely and forget the spiritual. Lewis concludes that images are most helpful in prayer and in thought when they are most fleeting. "Kiss it as it flies." Fleeting images render a qualitative impact on us, but do not remain and make our spiritual and imaginative life stale and static. With regard to theological beliefs, accompanying mental images are inessential. For example, the image of a parachutist is irrelevant to our belief that Christ "came down from heaven". The use of visual images is not utterly discarded even by Calvin. He refers to Christ as a mirror of our election. Of course, a mirror is not the same thing as what it reflects, but there is a close link. The imagination's pictures are not the same thing as the object they represent. They are pointers. The embodying power of the imagination may involve actions as well as pictures. For example, Gower combines image and event, and thus gives us a cinematographic imagination. Lewis explicitly denies that the imagination is merely visual. The imagination allows us entry into nature's "moods" or "spirits", as well as views of her surface phenomena. Terror, gloom, cruelty, lust and innocence are all images given by nature which art draws out and qualitatively explores. Images, like music, richly express mood and atmosphere. Lewis found Spenser's *Fairie Queen* particularly evocative. Its images "are in every possible relation of contrast, mutual support, development, variation, half-echo..." Atmosphere, as well as events and pictures, are qualities which the imagination comprehends. And often, the imaginative portrait of differences in weather or environment are even more poignantly and clearly felt than in real life because our feelings are not changed and diluted into action.

4. Images, Emotion and Will

The great power of the imaginative life is its special ability to arouse our emotional life. It helps feelings respond appropriately (and hence rationally) to reality. But poetry moves emotions only indirectly by way of an imagined appeal to our senses. Emotions are not moved by intellectual orders. "Be grateful!" "Feel shame!" Such lead only to
artificial scolding efforts to induce existential feelings by will power. When we try to change feelings by intellectual effort alone, we only inoculate ourselves and others from the proper mood. Unless our hearers are imaginatively receptive, conceptual confrontation may only insure they will never feel the weight or taste the meaning of our concepts.

It is because the imagination awakens the emotions and thereby the intellect to attend to reality, that Jesus so frequently spoke in parables. Without first commending truth to our feelings by way of the imagination, the intellect feels no sufficient desire to change its habitual mental patterns to genuinely consider new conceptual material. In this light we can see how vital it is for theology to be sensitive to aesthetic rationality in aligning feelings properly to reality.

We have seen that the heart of the imagination is its appeal to our five senses. The concrete appeal to our senses—to feel, taste and touch stirs us to openness. Imaginative symbols arouse feelings in us of beauty by their sensuous use of nature. The imagination does not seek to interpret its subject matter or analyze it, but is a "continual statement" of it, a representation of it, a glorying in it, a participatory celebration. Thus in theology, once we have tasted and seen the 'fair beauty of the Lord', we are in a proper position to interpret and reflect. That is why dogmatic, conceptual statements spring from doxological statements.

For Lewis, the imagination also serves a unique didactic function by incarnating the rational truth of concepts. We might liken the relation of a concept to a symbol as the relation of a line to a solid or a map to a walk on a beach. Our beliefs and truth commitments are filled out or incarnated through the images gathered from nature's sensuous resources. Nature does not inferentially imply God, as in Thomism, but it does sensuously embody our beliefs and create meaning where there had previously only been abstractions. "Nature never taught me there exists a God of glory and of infinite majesty... But nature gave the word 'glory' a meaning for me."

The story of the prodigal son carries us on a journey into the land of the Trinity. The statement homoousion serves
us conceptually as a precision symbol to help interpret and thus fully enjoy the story. The parable stirs and heals our feelings. Both in their own way bear witness to reality as transparent mediums, pointing mind and heart to Christ. 86

The limitation of concepts is that they have only a formal precision. The qualitative reality which images revivify may have been long forgotten or ignored; they may be conceptually true but our affections are frozen. 87 Thus Lewis reckoned it was one of the tasks of literary criticism to help readers to reconstruct for themselves the feelings of (for example), Medieval man, and how his concepts about the universe felt. Unless criticism aids the reader's feelings, he will not genuinely grasp the meaning of the stories with which he is cerebrally familiar. To know Medieval stories aright,

You must go out on a starry night and walk about for a half hour trying to see the sky in terms of the old cosmology...You must conceive yourself looking up at a world lighted, warmed and resonant with music. 88

Lewis believed the imagination occupies a fundamental role in moving the will, for it evokes in our feelings a willingness or desire to learn of truth, regardless of the cost. 89 Imagination moves, stirs, inflames the mind with desire for the good and the beautiful. In his most notable sermon, "The Weight of Glory", Lewis deliberately appeals to the imagination "to energize morality by letting us imagine the joys of heaven that await the redeemed". 90

The imagination educates by delighting (which aids memory). 91 It moves us to act by accompanying its lessons with pleasure. 92 By arousing our imagination, Lewis admits he 'weaves a spell', but only to reverse the evil enchantment of worldliness and to encourage an emotional-volitional openness to reality which has been missing. 93 Lewis seeks to engender personal participation in the reality of truth.

The use of imaginative presentation is ubiquitous in Lewis. As Austin Farrer remarked in his analysis of The Problem of Pain, though we ostensibly listen to an argument, "we in fact come to see". We are presented with an intellective vision and it is the vision which carries conviction. 94 This
is Lewis's intellectual imagination, by which he, like Langland in *Piers Plowman*, renders doctrinal truth imaginable where before it was only intelligible. We feel the truth where before we only knew about it. To taste the Trinity in the prodigal son parable makes the formal doctrine a celebration. Again, that is why the original context of dogma was its use as doxology in worship.

The imagination with its power of image-making and myth-making is a "natural human activity" like reasoning, no better, no worse, as J. R. R. Tolkien puts it. It is neither the road to heaven nor hell. The creation of fantasy literature is not necessarily a degenerate and fallen activity, even as thinking is not necessarily a disease of the mind. It may be redeemed. We make and enjoy in our own derivative, contingent measure. Image-making, like reasoning, may serve the truth. That is its true vocation.

It is a symbolic narrowness for Karl Barth to assert that "pictorial and symbolic representation are out of place in the Protestant Church". He argues that the reality of Christ is represented solely by the activity of the community in worship and in life. Undeniably, the Church is a representation, a living symbol. But it is one peculiarly narrow image, and may lack in qualitative richness. Surely the author who uses concepts as symbols to point to Christ in the rationality of dogmatics cannot deny the poet and artist the same privilege of serving the truth in their mode of rationality and using their gift of image-making to serve Christ. The heighth, depth, breadth and length of God's beauty and goodness far outrun our imagination's efforts to bear witness to it, even as our word 'rationality' cannot exhaust his rational richness.

D. Imagination, Truth and Communication

For Lewis, images are true or false only if we decide to refer them to reality by saying, "I believe this is like reality". Images are meaningful, not true or false. For Barfield, the imaginative faculty (which links us to God's creative being) creates truth. Truth is not a fact or a known object, but is the process of knowing, "reality taking
Evolution
the form of consciousness". 101

Having allowed us to entertain the object with all its power and vividness, the imagination's duty ends. All that we entertain or consider imaginatively, we need not and do not believe. 102 Lewis recalls that he never believed in the imaginative world. "I never mistook imagination for reality." 103

Many religions initially are more appealing to our imagination than is Christianity. Omnipotence appeals less imaginatively than Odin fighting against the odds. 104 This tells us that imagination is never the criterion of belief. Lewis found Christianity less aesthetically pleasing qua aesthetics than unitarianism's monolithic grandeur or polytheism's richness. Christianity neither caters to, nor satisfies the Classical or the Romantic imaginative aesthetic a priori. 105

For Lewis the appeal to our a priori imaginative and emotional desires accounts for the immense popularity of the myth of evolution or development. It is a hanger-on, the offspring of one of the most imaginatively marketable scientific theories of our modern era. The primordial development and ascent of man over his environment was the theme of Keats' poetry and Wagner's music forty years prior to Darwin. Eventually, such a powerful Romantic image found scientific embodiment. It moves and satisfies the imagination by its whispers between the lines that ultimately man, by the sweat of his brow, will become God. 106

Once Christianity is seen in its own light, imaginatively enjoyed and then believed as true, its imaginative appeal deepens further. Believed as true, Christianity gives aesthetic pleasure in abundance. Lewis' novels and stories reflect the beauty of a lived experience and participation in Christian faith. The real has an aesthetic attraction which depends on its very reality. That God actually entered history as a peasant-born infant in a minor satellite of the Roman empire creates the deepest wonder and joy in all who seriously consider it. 107

To imagine and to judge are different mental activities.

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Statements may be true but meaningless if their object is not participated in and enjoyed. Or statements may be false but meaningful. Unless we have enjoyed and indwelt first, our judgements are liable to be faulty and merely the analysis of statements, not the perception of reality through statements. The judging man is conscious of different requirements such as internal coherence, external correspondence with reality, etc., in a way in which the imagining man is not bothered.

As we have noted, Lewis seeks by imaginative writing to engender a personal openness to truth. This resembles Torrance's demand that belief is necessary for proper understanding. The difference is that whereas Torrance tells us what the truth is, Lewis describes it. Torrance declares while Lewis portrays. As an imaginative writer, Lewis invites us to enjoy first and repent of our epistemological errors later. By means of fantasy and fiction, Lewis thereby evades certain kinds of subject-centredness. In contrast, Torrance lays down an intellectual challenge to man. "If you believe and repent, then you will understand the Gospel." This may be true, but when it is implicitly cast in a legal (if-then) form, like all law, it may increase trespasses rather than abolish them. Lewis offers an invitation to the imagination. He says, "This is what the Gospel means. Taste and enjoy. There is goodness, beauty and yes, truth yet to be imagined. Now, having done that, will you repent and believe?" If Torrance's challenge to the intellect is read by one emotionally and imaginatively open, his cognitive arguments are compelling. But if one is unrepentant, his precise scientific statements fall on deaf ears.

I believe Lewis became increasingly self-conscious of his deliberate appeal to the imagination prior to the intellect later in his career. He tells a correspondent that if he is good for anything now, it is "catching" the reader unawares through fiction and symbol. "I have done what I could in the way of frontal attacks." By this, he refers of course, to his popular doctrinal and apologetic works, with their didactic and argumentative style, albeit rich in metaphor and image, as Farrer has noted.
We might ask what is the relation between one who loves Aslan but does not know or believe in Christ. (And there are those who love Christ but dislike Aslan.) The difference is that to love Christ involves a total commitment of the whole person, unconditional surrender, not just a willing suspension of disbelief and imaginative embrace. It is the difference between a romantic attraction for a lady and asking her to be your wife. Christ puts to us the question—will you marry me or just entertain my beauty and holiness in your imagination and feelings for a while? This is a crucial difference, yet it points to an important continuity like that between belief and understanding. There can be no commitment of the whole person (symbolized by the will) if the imagination has not been converted, baptized. One cannot commit the will before one enjoys and understands. We have noted Lewis' great debt to the imaginative writings of the Scotsman, George MacDonald, who "baptized my imagination...Naturally the rest of me took a bit longer". Through MacDonald, Lewis fell in love with the truth of Jesus Christ. The courtship began. His vows of obedience and fidelity came later.

As for the Christian who feels guilty of idolatry for loving Aslan more than he has ever loved Christ, Lewis speaks to this concrete problem in his correspondence with a nine year old American boy. Lewis wrote his mother that when the boy thinks he is loving Aslan, he is really loving Jesus. For Aslan merely represents and describes Christ imaginatively. "The things he loves Aslan for doing or saying are simply the things Jesus really did and said." Dietrich Bonhoeffer's one nagging criticism of Karl Barth (which Barth never understood) was that Barth laid down a 'positivism of revelation'—take it or leave it. Part of Bonhoeffer's concern may have been this practical incongruity in Barth's theology of God's unconditional love. For at times the very forcefulness of Barth's dogmatic-conceptual exposition of the Gospel appears to be a prerequisite which we must affirm before we enjoy or understand the Gospel. One wonders whether the very form of dogmatic theology, (that is, abstracted from its intimate doxological role) does not create severe
imaginative-affectional barriers. When theology translates Gospel events into the formal concepts of academic and scientific theology, it must correspondingly seek to represent the concrete events of Jesus' life, death and resurrection. Perhaps this is but another way of saying that even in fighting false doctrine, dogmatic statements must never stray far from their doxological origins, where Christ's words and acts are represented in a living unity of Word and eucharist.

It is a great strength of Lewis' imaginative presentation of the Gospel that he embodies within them what Calvin would call evangelical repentance. The imaginative re-telling of the Gospel does not demand cognitive assent before the meaning of the Gospel is vividly presented and (hopefully) grasped.

Erich Auerbach has clearly seen that the problem of reading the Bible correctly is so difficult because it demands not merely the imaginative effort of a willing suspension of disbelief, but total obedience and unconditional submission to the Lord of heaven and earth. These are the terms we are offered. Nonetheless, an initial aesthetic description and presentation of meaning allows the exhortation to intellectual repentance to become not an intellectual order, but the appropriate response to the truth which has intuitively declared itself. For in theology the imaginatively enjoyed passes organically on to intuitive-cognitive assent to truth. Ultimately for theology, imaginative meaning and intellectual truth "are each into each and cannot stand divided".

For Lewis, imagination is to meaning what wonder or belief is to knowledge in Torrance. And yet in many cases to wonder is prior to and not the same as to believe. Unless we have imaginatively embraced and enjoyed the subject-matter in art, science or theology, we cannot understand why we must bother to repent or have our self-satisfied mental categories renewed, renovated and transformed inside out by the forgiving Father of Jesus Christ.

As incarnation logically precedes and engenders repentance and faith, so I would suggest the imagination's concrete representation precedes and engenders the intuitive conceptual understanding and judgement. Imagination gives us the necessary
preliminary aspect of a participatory embrace of the truth. The seed of science lies within belief; all knowledge springs from wonder. They are intimately bound together. Yet a proper order is crucial. As grace is prior to law, so imagination precedes belief. If a proposition is not meaningful for the imagination, it cannot be believed to be true or false.

E. The Interrelation of Reason and Imagination

For many years Lewis was hopelessly divided between his imagination and intellect. A war raged between "the two hemispheres of my mind." All that he loved, the "many-slanted sea of poetry and myth", he believed was untrue. And all that he believed real, "atoms and the void", he thought grim and dull.

As we have noted, certain differences between imagination and intellect remained throughout his life. Imagination gives us meaning and reason (intellectus and ratio) grasps truth. But more importantly, Lewis' conversion to Christianity brought the two together.

As Shelley noted, the synthesizing, similarity seeking, integrative orientation of the imagination contrasts greatly with the abstract intellect's penchant for analysis and breaking things down into their components. The synthesizing mind is the superior cognitive tool for Lewis as for Shelley. Though Torrance only discusses it in the context of intuitive rationality, he too sees the synthetic mind as the primary rational quality too long dominated by the analytic intellect.

In many instances, imagining and thinking may occur simultaneously without one being significant for the other. In his story of 'horrid red things' Lewis tells how a little girl's image of little red beasties kept her from eating too many aspirins. Though in fact aspirin does not contain (so far as we know) horrid red things, the girl was quite correct to think that eating too many aspirins is poisonous. Her image was ludicrous; her thinking correct. When Lewis thought of London, he always had a mental picture of Euston station. His thinking, however, was not about the image, but about London, for which there is no adequate mental image. "To think is
one thing; to imagine is another." 122

When the little girl learns that no evil things inhabit aspirin, she will have found that nothing essential was misunderstood. Similarly, Christians who receive philosophical training do not feel misled by the "details of celestial furniture" when the Son is described as sitting at the right hand of the Father's throne. The point was "the assurance that the once crucified Master was now the Supreme Agent of the Unimaginable Power on whom the whole universe depends". 123

Should we therefore seek to rid our minds of mental images? No. Lewis, like Tolkien, argues that the imagination is a natural and incurable mental activity. If we get rid of anthropomorphic, Biblical images, we will invariably substitute others. If we think 'Father' too anthropomorphic, and prefer a 'spiritual force', we let in images of winds, tides, electricity and gravitation. Pantheism's doctrine that we are all parts of one great Being evokes images of a widely extended gas or fluid. Lewis knew a student brought up by 'higher thinking' parents who imagined God to be a vast tapioca pudding. 124 Often, so-called advanced (abstract) philosophical concepts are accompanied by vague images, much more absurd than Christian anthropomorphic ones. After all, man is the highest form of life we meet in sensuous experience. 125

Language is inevitably metaphorical. If we reject 'He came down from Heaven' in favour of 'God enters the natural order', we still have a spatial image, but a horizontal one instead of a vertical one. For Lewis, the Bible's images are as important as its concepts. Images of good and evil pervade the inherent aesthetical-rational order which is embedded in the universe.

Torrance, following Frege, argues that words may awaken pictures, but that no necessary connection exists between word and image. Torrance concludes that words without pictures, or imageless thoughts, are not lacking in content or meaning. 126 Thus, in theology, the relation between concepts and the reality to which they refer is often beyond the imaginable
range. However, Lewis would remind us at this point, that God has not left our imaginations empty or free to create indiscriminately, but has guided us with revelatory images as well as authoritative words. Father, Son and Spirit are not negotiable metaphors to be replaced by Mother, Daughter, etc., to enliven our preaching. 127

However, metaphors and images can influence our thinking in good ways and bad. The impact of metaphor upon our thinking is greatest when it is unperceived. For instance, there is a great difference between thinking about atoms and thinking atomically. Unnoticed, mechanical and mineral metaphors have dominated whole minds in the modern world. 128 As we have noted, the unacknowledged metaphor of mechanical causality often reduces all the riches of an intricately ordered universe to the image (or model) of mindless and impersonal forces, the stronger of which prevails unless acted upon by a greater. 129

When the Newtonian model of natural law replaced the Medieval image of cosmic longings and yearnings, a new and different tone of mind resulted. An impersonal mechanistic model easily evolved, especially following the industrial revolution. 130 We have already discussed the damage this has created in man's moral and spiritual, as well as intellectual life. Torrance has pointed out that this mechanistic model is obsolete in modern science. Our notions of physical laws must not be pushed into necessitarian forms, for this abandons contingency. Fortunately, the concept of open systems has begun to free scientific thinking from its entrenched mechanico-causal imagination. 131

F. Image and Concept--Priority?

The question arises whether concepts or images are superior. Lewis and Torrance would agree that what we believe is the imageless reality toward which the picture and concept point. Thus, the answer is--neither concepts nor images are superior. Both point us to reality in their own way. In science, the picture of atomic structure helps to explain the reality. But the diagram is not what the scientists believe. "What they believe is a mathematical formula. The pictures are there only to help you to understand the formula...they
are only meant to help." When science discusses the atom, "the thing itself cannot be pictured, it can only be expressed mathematically". Lewis draws a parallel here to the Christian doctrine of the atonement. Were any theory fully to express the event it would show that it was not what it professes to be—the inconceivable, the uncreated, the thing from beyond nature, striking down into nature like lightning... Here the formula we believe is that 'Christ was killed for us, that his death has washed out our sins and that by dying he disabled death itself'.

That is the formula. Lewis makes the dichotomy that theories as to how Christ did this are another matter, because as a poet he wants to drive us back relentlessly to the empirical concreteness of the peasant man, Jesus, impaled on Roman wood. The very word 'atonement', when lifted from that concrete happening, is an abstraction. However, here Lewis falls back to viewing the theoretical as external relations which is a form imposed upon facts. Torrance seeks a progressive penetration into the organic theoretical structures which inhere within the reality of Christ's atoning life and death.

The Bible's own images of Father, Son and Spirit have an organic correlation in Christ with our finest noetic conceptualizations, such as 'Trinity' or homoousion. However, the images disclose a cognitive-aesthetic rationality of reality which cannot be matched by the intuited precision of basic credal formulas. Even granting for all further theological reflection the primacy of fundamental intuited concepts, the Biblical images of Father, Son and Spirit have an epistemological and logical priority. The concept 'Trinity' is abstract and meaningless if we forget it is a symbol which points to the empirical event of the Father sending his Son. Father, Son and Spirit stand to 'Trinity' as solid to a line, as concrete reality to mathematical formula. Lewis' theological art invites us to indwell these images and to taste and feel their reality. Such indwelling comes naturally to the imagination even as it does for the intuition in Polanyi and Torrance. Let us recall that for Torrance only a participatory indwelling could have led to the scientific precision of the
theological formulas of 'Trinity' and homoousion.

Many believing Christians have indwelt the story of the Father sending his only Son, but have remained only tacitly aware of the conceptual precision and beauty of the trinitarian formula. Inevitably, when rational reflection about the saving events took place, the homoousion became the integral grammar of the Gospel. Nonetheless, semantic meaning precedes the syntax. One imaginatively enjoys the Gospel story before one works out its rational and grammatical coherence. Indwelt participatory enjoyment of the story precedes indwelt conceptualization. Historically and psychologically, as well as theologically, this is true. The theological work of the Greek Fathers has a noetic inevitability which has lost none of its relevance; it always serves and refers to the Biblical reality. The Biblical images are an ontic part of God's revelation and are given in a way unlike the theological concepts of our own making.

Rightly understood, images and concepts are complementary. The images are the building blocks; the theological concepts are the invisible grammatical mortar which holds the meaning together. The homoousion is the 'physical concept' which inherently indwells Father, Son and Spirit images.

The symbols of the New Testament are many: bread of life, vine and branches, bridegroom, light of the world, living water. The list is long and rich in sensuous appeal. Why are Biblical images so richly sensuous and varied when theology is normally content to discuss formulas which are rather limited and repetitive? Why are there so many sensuous images yet so few theoretical formulas to be believed? Because no one symbol is adequate to release our emotional life to enjoy worthily its object. Each helps cover what another lacks. We are given "a dozen changing images correcting and relieving each other, lest the joy of his presence be too exclusively understood, in a narrow, poor experience of personal love". But fundamental theological concepts are necessarily few for their function is to precisely and with conceptual simplicity to lay bare the inner logic of the Gospel events.

In theology, says Lewis, image and event are both
Le & is net rule
but Father of Jesus
necessary to maintain a balance. Neither is more true than the other. Both are concessions to our weakness. Together the two are mutually corrective.\textsuperscript{136} The image of 'personal encounter' associated with Martin Buber can be a useful anthropomorphic balance to philosophical abstractions.\textsuperscript{137} And yet, as well as the One who encounters, God is omnipresent; He is above, within and below. Lewis advocates that we alternate between conceptual and scriptural symbols. We can get no closer to conceptual knowledge (\textit{savoir}) about God. However, the intuitive knowledge-by-acquaintance (\textit{connaitre}) is given in our devotional and sacramental life. The latter (thou) knowledge is closer to reality than our mental image (He), which is closer than philosophical abstraction (it). The image points beyond to the imageless. "We must worship the Thou, not the He in our minds which is just as much an image (therefore possible idol) as a figure of wood or stone."\textsuperscript{138}

In all exegesis, Lewis advocates a great respect for Biblical images. If we take the expressions, 'God grieves, pities,' etc., literally and translate them into theological abstractions, we will reap the absurd consequence of extrapolating every possible logical deduction. Instead, Lewis suggests that whenever the image says to our will and affections that which conflicts with the logical extrapolation, "trust the purport of the images every time", rather than logical inference. That is, God the Father is primary to 'omnipotence' or 'omnipresence'. The sensuous and Hebraic images of Scripture refer us more closely to reality than to abstract thinking, the "tissue of analogies", which models "spiritual reality in legal or chemical or mechanical terms".\textsuperscript{139} Similarly, for Athanasius, Biblical images are not inventions, but are "provided by revelation...". They are pointers, but in no sense arguments or types from which we can assert any inference which happens to follow. This leads to heresy.\textsuperscript{140}

Biblical images must be restricted to what we may legitimately extract from them. Thus the potter-clay image of Romans reveals one quality, and one quality only, of God's loving character, namely the love "an artist feels for an
We are God's handiwork and God is at work perfecting us. The peculiar quality in love presented in this image is the thoroughness by which God perfects. But we utterly misread the image if we extrapolate from it an answer to the question of God's mercy and justice. Bevan points out that a symbolic phrase such as "hand of God", as opposed to the more abstract "this event came about in order to realize a particular value" has a truth for the feeling and the passion as important and vital as the conceptually more precise abstraction for the intellect. The hand·symbol makes us feel the event as the simple, direct act of God, by sensuously arousing our imagination. This emotional realization is as important as, and perhaps more fundamental than, the precise but abstract intellectual notion of 'providence'.

What are some of the consequences of neglecting the importance of images? Reformed piety and worship suffers when it excludes or ignores an imaginative focus on the Gospel and regards the task of theology and preaching only as the correct diagramming and interpretation of the Gospel. The Church must both enjoy and interpret. The finest interpretation is the bloom from true enjoyment and indwelling. Exposition of true doctrine without imaginative embrace and participation in the life of Christ becomes a rigid list of theological concepts. It creates the psychological grounds for an existentialist revolt whereby man tries to fill his heart and mind with a self-understanding or a self-consciousness, which he substitutes for the truth which has been bottled and packaged into precise theological formula, but which he has inadvertently been forbidden to taste, represent and celebrate. The absence or infrequency of the ritual, liturgy and drama of such artistic re-enactment (though not in the sense of repetition) within vast areas of the Protestant Church, has contributed to an emphasis on either preaching as interpretation of true doctrine or on appropriation as primary. Worship as the celebration and participation in the life, death and resurrection of Christ is largely ignored. By the process of abstraction, worship becomes an event of pure Word,
not Word made flesh. Such worship often takes the form of divine imperatives and exhortation with concomitant social and personal moral appropriations. This reflects the loss of free participation by grace in the saving life, death and resurrection of Jesus. The Church is left with (more or less) worthy moral standards and precise doctrinal formula, but with only a vague awareness of the living presence of the Son of the Father who comes in the power of the Holy Spirit.

Torrance's emphasis on imageless relations and cognitively precise theological concepts must be yoked with an equal emphasis on participation in the Biblical images and the reality to which they point, that is, imaginative participation by retelling, remembering and enjoying the Gospel events. This deficiency is seen in Torrance's hierarchical structure of theological knowledge (indebted to Einstein), which prescribes the third or higher scientific level as the true subject matter of theology, over the doxological and theological. Otherwise, the Gospel can easily be subverted into an invisible piety, with little imaginative enjoyment which leads in the end to an emotional atheism. In Christ the experiential and the doctrinal are a unit. Word and sacrament, science and art, myth become fact, are united in Christ. The weakness of concepts which are abstract, when stripped of their metaphors, is that though very clear and logically precise, they are "so far away from real things, that they say nothing". To say, "Our Father in heaven", represents a concrete experience in the minds of its users, whereas "the supreme being who transcends space and time" is a dextrous use of counters.

The belief in sensuous-empirical representation as the font of meaning in art, led Lewis to follow Dante in artistically treating as concrete God's transcendence and the temporal and contingent as less real. This is Lewis' "almost sensuous intensity about things, not sensuous". Lewis sees the positive or concrete notion of the spiritual realm as a constant theme in Christian and Hebraic thinking. Apart from the notion of the concreteness of the spiritual, theological concepts lack rich earthly images and do not command the imaginative power and force to evoke feeling and will. Here
theology only imitates its Lord, for this is the way God has taken, coming not as pure Word, but Word indissolubly united to the flesh of Jesus Christ.

For Lewis, the task of an apologist is to move the imagination and to convert the reason. Most misunderstandings of Christianity are due to presuppositions which forbid the perception of its beauty and coherence. Torrance sees the task of Christian persuasion primarily as the reconstruction of our frameworks of thought. But with Lewis and Macmurray I would suggest that, at least for many of us, the key which unlocks our intellectual habits is our emotions. They are what move us to act and to change our minds. Theological epistemology must take both seriously. That is why theology must be seen as an art as well as a science. The imagination induces movement in our feelings; concepts calm us and direct us, and they purify our minds.

We have noted that often images are not essential to our thoughts. This is because we have access to the object apart from the image. I can go to London and see the city myself. But with certain "magistral metaphors" my only access to the reality is through the image. Such images are essential, even though we know they are metaphor and not literal truth. Father, Son and Spirit are revealed images which tell us things about God without which we have no access. Further, they are so integrated with the life of Jesus within Israel's history that to extract a meaning which abandons these metaphors is either to create a meaningless abstraction or to create a new meaning. Theology must avoid any glimmer of the Hegelian conceit whereby the picture-thinking of religion suitable for pupils in their primary stages is replaced by a pure and imageless conceptual philosophy as the final truth to which we may progress.

Let us recall the analysis of the Anglican theologian, Dean Mansell, which Bevan discusses in Symbolism and Belief. Mansell held to a real connection between Scripture's images and God, but one cannot extract part of the symbol as a real resemblance and part as not. "You have to take the representation in its entirety as offered."
Torrance would agree that a proper anthropomorphism in our concepts is derived from the "profound reciprocity that God establishes with us through his Word". However, Torrance is more confident than Mansell that the doctrine of the incarnation and the Holy Spirit teaches us what parts of the image really resemble God and what parts do not. Both agree that the Biblical images have an authority and normative standard as God's revelation. Both agree they are trivialized if interpreted as mere products of the early Church's creative imagination and are amendable as our creative understanding improves. Such thinking makes our theological images evolve like the varying images of Hinduism, where gross and crude images stand alongside advanced mystical speculation. In such a framework, there is no progress and no empirical norm, only the endless projection of images.

This is the error of J. A. T. Robinson's picture-thinking method. He invents new pictures which help him grasp the nature of his ultimate concern. This implies there is no organic link between Biblical images and the reality of God to which they point. God gives to us neither images nor concepts by which he reveals himself, but throws us back upon ourselves to create both and so to spin a silvery web of images to heaven. For Torrance, Biblical images are not detachable, mutable and relative, but are derived from within the Godhead, and permanent.

For Lewis, when Jesus uses bread, water, wine and most importantly, when he takes our flesh upon himself, he thereby hallows these things. We may not ignore the organic and sensuous images from creation which he filled with meaning and within which he teaches us about himself. This is far from Robinson's use of images detached from reality to express human subjectivity in its search for meaning. For Lewis, the meaning lies objectively embedded within the images, which in turn have their objective reference in the reality of God.

Is Lewis' theology basically irrational in the sense that he is ultimately concerned with a symbolic understanding of theology and not with a rational theology? No. Lewis' great strength as a theologian is his sensitivity to the
imagination, the feeling intellect. Yet he does not espouse it as the criterion of truth. Our images of Messiah must all be shattered. God's transcendent beauty comes to us in the very breaking of our a priori aesthetic criteria even as God's own Logos flashes as lightning from a clear sky to rend our a priori canons of rationality with his own Living Logos.

Torrance argues that God is not imaginable. Therefore, all images we invent are idols. But Lewis is not defending the primacy of self-made images, but the authority of the images given us in Biblical revelation. God tells us he is Father in a direct way he never uses to tell us he is Trinity.

But this is my inventing, this is the veil under which I have chosen to appear even from the first until now. For this end I made your senses and your imagination, that you might see my face and live.158

Torrance opposes any understanding of theology as story, for it implies that theology is non-cognitive.159 But I believe we may legitimately understand theology as art which in no way denies the unity of Word and image in Christ, but instead serves it. Theology as art embodies one aspect of truth and then another, just as a more systematic style of theology in scientific fashion discusses one aspect of the Gospel—inspiration, Christology, etc., in order to penetrate more deeply into its cognitive truth. Without the complementary understanding of theology as art, theology becomes emotionally barren and leaves aesthetic and affectional rationality at the mercy of the idiosyncracies of individual theologians and clergy.

1. Science and Images

In all scientific advances, De Broglie admits that "some theoretical picture is always necessary for the clear statement of results of an experiment". Einstein consistently emphasizes the importance of idealized experiments for scientific discovery. Repeatedly, he calls upon scientists to imagine and to worry later about verification. He describes his physical theories as the result of an attempt to form a picture of reality. He acknowledges that it was by means of a field representation, a diagram or picture of how the
forces interact and exist, that he came to see that the actions in a solenoid and a bar magnet are the same. That is, the field concept or word-image or better, embodied word, led him to new experimental facts.

In view of this, Torrance overstates himself when he argues that all mental pictures in modern science are rejected as distortions. True, science believes the imageless, mathematical formula, not the picture. But the picture serves a crucial role. It is better to say as he does elsewhere, that in all rigorous science, the images "serve the objective ontological reference, the importance being their reference to the invisible, intangible realities at levels beyond appearances and observation".

2. The Representation Theory of Perception

Torrance's aversion to images stems in part from his positive assessment of Thomas Reid and the common sense realism so influential in Scotland and also the precursor of realist philosophies in America (C. S. Pierce) and England (Gilbert Ryle). Reid rejected the view that nothing is present to the mind but an image, for this rests on a subjective bias. He identified this assumption as the unnecessary prejudice behind David Hume's devastating scepticism. Instead, he defended the common sense belief that we perceive external objects immediately and genuinely.

Torrance believes that behind Kant's active intellect with its subjective bias lies the Medieval representational theory. It distinguished the active intellect which renders intelligible what the passive intellect receives from the senses. Hence the mind only experiences its object through the image or phantasm. This approach was taken up later by Kant in his interpretation of the active mind. Early opponents of this view and harbingers of an intuitive and immediate apprehension of objects included Occam and John Major, Calvin's teacher. Following Kant came Ernst Mach and his sensation-alism with its radical subjectivism. As we have seen, this subjective trend has been powerfully opposed within science by Planck and later by Einstein and his commitment to an objectively existing world.
It is interesting to note that Lewis, even with his high view of the imagination and image-making, was not a devotee of the idea or representational theory of perception. This is because he understood images to be the aftermath of the prior imaginative activity, its by-product, and not its fulness.

In his 1924 lectures on philosophy, Lewis criticized John Locke's representationalism, and challenged Locke on two assumptions. First, Lewis questioned the tabula rasa mind. Second, he rejected the notion that only ideas are immediately present to the mind. Locke's assumption that secondary qualities belong to the ideal world only (colour, etc.,) is the "great fountainhead of subjective idealism", Lewis records. Further, Lewis notes as pointedly as Reid or Torrance that in scientific knowledge we believe "that we are experimenting on real bodies and seeing what really happens to them". Therefore Lewis argues that it is science itself which constitutes the chief difficulty in all representational theories. Lewis proceeds to criticize Berkeley and notes that his argument against matter is valid only if one can prove Locke's assumption that a colour or a smell is merely a state of mind and not a primary quality of the world.

G. The Limits of Images

Torrance gives priority to audits over images and prefers acoustic to mimetic relations. He gives priority to hearing over seeing and argues that early Christian art was essentially signitive and sacramental, not mimetic. That is, it passes on a meaning not embodied in the art form. The Platonic tendencies of the later Greek Fathers, however, posited a reciprocal relationship between the two.

In my defence of images and the imagination, I have argued first that it is God who establishes a reciprocal relationship between Biblical images and himself. This reciprocity does not imply one may move in a logically necessary manner from the creaturely to the heavenly. Secondly, Lewis would quite agree that images are not primary. They are the aftermath of the feeling intellect which grasps its object with a sensuous intensity and concreteness like that with which

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we experience the physical world. Images are thus transparent pointers to a reality beyond.

-Torrance argues that by intuitive penetration scientific thinking pierces into the inner ontological connections and leaves behind external images as primitive, pre-scientific thought. However, this ignores the positive function of imagination in art, where with the feeling intellect we participate in and enjoy the subject and do not seek to judge its veracity, but to know its meaning. In scientific imagining, we allow even potentially false pictures to be considered. Science creatively invents diagrams and pictures, which may or may not be true. Our intuitive and analytical empirical reason then considers the question of truth.

To give priority to audits over images or vice-versa, confuses the issue. If the Word became flesh, it can no longer be construed as pure voice or hearing any more than we can deny the inherent articulateness of the Word of God. Our sensible analogies point to the concrete Christ, whom we must hear, yes, but taste and see as well.

Certainly the misuse of images has encouraged the error of 'demythologization' and anthropological self-projection. Just as easily, however, can the emphasis on hearing or audits lead to the abstraction of a pure Word without connection to Christ's person and an exhortation for people to submit to the true dogmatic formula.

Lewis often thinks not only of the radical differences between the Christian view of reality and others, but also of the similarities. Thus, he happily concedes that a Christian understanding of literary theory has "remote" affinities with the Platonic doctrine of transcendent form partly imitable on earth. Further, Lewis often borrows pagan concepts and baptizes them, allowing truth to shine through them. But he never identifies them with the Truth. This is not unlike Torrance's use of scientific analogies to show the similarities with, and hence rationality of, Christian theology.

Torrance criticizes Thomas' epistemological dependence on sense experience and asserts the need for an intuitive and immediate knowledge which transcends sense limitations. On
the other hand, Lewis reckons that we are the kind of creatures who grasp things best when they are pictured or embodied--incarnated. In the incarnation, God has accommodated himself to our own physical and mental limitations in the divine-Word enfleshed, both aurally and visually.

Lewis views Plato as the philosopher who teaches that we are taught internally and hence, imagelessly by God, and not as Aristotle stressed, through the senses. But dangers are not absent here. For if we are not taught by external senses, it can appear we are self-taught or taught by that part of the divine Self in which we participate. The Christian claim that we are taught by Christ tells us that revelation is where a Word is spoken to us from without in space-time events where God concretely comes to us. Unfortunately, Bultmann so emphasizes the event of proclamation when the Word is spoken to us imagelessly, that he strips the message of all its original images and empirical historicities. I would suggest we say with Thomas that we are epistemologically dependent on sense-experience, that is, on the empirical reality of Jesus Christ for knowledge about God. But also we should affirm that in and through Jesus transcendence becomes concrete in our contingent existence where a cognitive Word is given to us immediately, not inferentially, as we indwell that reality through the Holy Spirit:

Torrance is right to emphasize that all thinking does not rest upon concept or image, but on the reality which we perceive through and beyond the concept or image. Lewis would agree that "all reality is iconoclastic". In coming to terms with his wife's death, Lewis became aware that the dead are like God--unimaginable. Images of his wife often got in the way of her reality. For with images, unlike the real person, there is the disadvantage that we may do with them whatever we want. Lewis could make his image-wife gay, tender, or argumentative, as his own mood demanded. Therefore, images in mind or on paper are not important for themselves. They are merely links.

The danger of all images, like all concepts, is that "images of the Holy easily become holy images--sancrosanct".
But "my idea of God is not a divine idea". It needs to be shattered. This is the great mark of God's presence, for God is the great iconoclast. The incarnate itself leaves all previous ideas of the Messiah in ruins. Though many are offended by the iconoclasm, "blessed are those who are not". 185

A priori concepts, images and passions all stand in the way. A paradigm shift, or intellectual repentance, as Torrance says, is needed. 186 We must stretch out arms and hands of love, not just eyes or ears, to God's reality, across and through the changes of our thoughts and images. We cannot rest content with our ideas or images and worship them as God. "Not my idea [or image] of God, but God." 187 In The Screwtape Letters, the tempter seeks to direct his patient's prayers to his mental images and to stop there. "Get him to pray to it--to the thing he has made--even thoughts." 188 True prayer is addressed "not to what I think Thou art, but to what Thou knowest thyself to be". 189

There is one other important limit to images or stories especially for theology. When the artist uses images to present truths or describe what it means to know God, they are, after all, imaginary and not identical to the reality. "I know them, Lewis," says Ransom. "That's what you can't get into a story." 190

H. Images and Analogy

Torrance's opposition to reading back the Bible's creaturely images in the Godhead as inappropriate is related to his criticism (following Barth) of the Roman Catholic doctrine of the analogy of being (analogia entis). For Torrance, the chief difference between Latin and Reformed thinking centres on a renewed emphasis on dialogical contact with the Word of God. 191 Scholastic theology translated a dynamic relation in grace between God and man into a natural, substantival and logical one. This, argues Torrance, makes God a prisoner of a general conception of being. 192 Grace becomes the cause of our redemption with God; creation becomes the operation. It leads to the doctrine of an inherent likeness between truth and the logical forms of reason. And thus it eliminates personal dialogue by a philosophical ontology. 193 Here Torrance follows
Athanasius and rejects Origen's notion that the world exists eternally in God's mind. For Athanasius, the world is created by God, and this implies a disparity of natures. By contrast, Jesus is begotten or generated, and this implies an identity of natures. Thus there is no likeness in the being of God and the being of the world. Yet God in his personal activity tends and sustains his creation so that we do not know God by inference from the world, but rather in his saving activity towards us, his self-revelation in the world of space and time.

Latin thinking traditionally tries to steer between a univocal understanding of God's attributes which is too anthropomorphic and an equivocal view which is meaningless. It does so by the analogy of proportionality, in which, for example, there is something in God resembling wisdom in man. The problem is that it is difficult to combine an understanding of God's attributes by means of the neo-Platonic via negativa with a positive Christian understanding of God's attributes. Torrance argues that to say there is some likeness and some difference is only a frame, which tells us nothing unless we look to the incarnation for our positive theological knowledge. If the positive stress on God's attributes leads us to anthropomorphisms, we must accept that charge, for Christian theology must preserve the concreteness of the God who has come to us in Christ. For in that encounter, we are "confronted with something compellingly anthropomorphic, something commanding reciprocity, a primary Thou". Simultaneous with this admitted anthropomorphism, the Christian also puts an immense stress on God's sublime objectivity and transcendence. The anthropomorphic yet transcendent quality of the incarnate Lord conveys God's concreteness, not subjectivity or cosmological immanence.

Augustine found an image of God in our minds, prior to our knowledge of God. This, argues Barth, denies the Biblical understanding of grace for it makes God's image a natural possession. Or as Calvin put it, we err when we turn the gift of relationship into a substantival one or a likeness of being which may lead to an idealism or pantheism. The power and substance of the image lies not in the witness itself, but
in the object to which the witness is given.\textsuperscript{201} Our image is restored by the grace of God in Christ, not by nature.\textsuperscript{202}

Barth argues that a proper analogy, an analogy of faith, does exist between God and man, and this is dynamic and personal, not logical and necessary.\textsuperscript{203} Christ's parables reveal a different kind of human analogy which has at its heart "an eschatological event which, until it actually overtakes us, nothing in the material or historical order can begin to reveal".\textsuperscript{204} For Torrance, our intra-mundane language is stretched and adapted to point beyond spatio-temporal limitations, and yet it ought not to be detached from the contingent world out of which its reference came.\textsuperscript{205} As Lewis puts it, we speak of supersensibles in the language of sense objects.

The movement of revelation is God-manward. We stretch out empty hands in order that they be filled. For Calvin, Biblical analogies are not ontologically related to God, but functionally; God accommodates himself.\textsuperscript{206} This creates a sacramental relation "which has its validity through the Word and Spirit using the analogy in order to convey the truth".\textsuperscript{207} Flesh and blood do not reveal the kingdom of God. Analogies of themselves are unable to point to the truth.\textsuperscript{208} However, once we emphasize God's electing and personal initiative, we should also stress the \textit{a posteriori} appropriateness of the analogy once it is given by God to be genuine and rationally linked by Word and Spirit to the reality of God. Otherwise we have a mere functionalism without an integral and ontological link, which can become a nominalism and empty even Biblical images of their trans-temporal character. God hallows 'Father, Son and Spirit' when he uses them and makes them normative for our worship and thinking. They are not to be discarded for imageless thoughts or idealist-egalitarian language. Scriptural images are not good news from nowhere, but news from God's creation and redemption. God's eschatological hallowing of nature and sensibles as pointers to eschatological realities fulfills and truly orientates contingent rationality and beauty to its transcendent source. We must not neglect a proper understanding of nature which is perfected \textit{through the cross}.

Let us look briefly at Lewis in regard to this issue.
Bede Griffiths recalls that Lewis was "very unsympathetic to the Thomist revival of the 1930's and 1940's and neo-Thomism he objected to most strongly". We shall see part of this reason when we consider his understanding of analogy. Unlike the Thomist, Lewis refuses to structure the God-man relationship within a logical-substantival philosophical ontology.

For Lewis, Plato with his transcendent forms, is behind the Protestant approach to image and analogy. Aristotle with his immanent forms is the philosopher of Roman Catholicism. The Latin Church gives material form to that of which Protestants would stop short and symbolize only with a concrete image. Thus a Protestant uses spiritual whips for penance and seeks in an important sense to live cut off from the world. The Roman Catholic uses material whips and builds a monastery with walls of real bricks and mortar, with rules in red ink. The actuality for which Roman's aim, Protestants deliberately avoid, and argue that "nothing retains its spirituality if pushed to that degree and in that way".

Torrance echoes Lewis' criticism of the Latin over-concretizing. He argues that Luther saw in ex opere operato a focusing on the formal office of a priest so as to create a "great respecting of persons", and made priests into idols we serve, but who do not serve us. Similarly, the doctrine of Papal infallibility parallels the rigidifying of the thought-being link into a formalized relationship of Aristotelian logic. The Latin suspicion is that spiritual gifts or rationality are falsely claimed if they cannot be embodied in "bricks and mortar or official positions, institutions", definitions or formal logical laws. By overly formalizing and materializing, Latin thinking makes God a prisoner of theological doctrines and concepts.

Lewis sees one of the values of allegory and, by implication, art, for Christians on both sides of the Roman-Protestant divide is its use in presenting theological truth. In the natural world, we may disagree over the degree of incarnation or embodiment which we should give to the spiritual or the conceptual. In the imaginative realm of art, necessary and unlimited embodiment is proper to both. The greatest force
for Christian unity, of course, is Christ himself, for in him alone does the concrete embodiment take place, which Latin theology demands everywhere and Protestants negate. He unites transcendence and contingency in his own person.

Lewis argues that Medieval art at its best did not, as we normally suppose, fashion heaven in the likeness of earth, but quite the other way around, even to the point of insensitiveness to contingent rationality and beauty. 

Medieval social pageantry and ecclesiology "were dim reproductions of celestial hierarchies".

This leads to a most striking Lewisian theme in the light of the analogy of being versus analogy of faith discussion. Lewis reverses the usual view of the concrete to reflect the priority of transcendent reality. God is nothing like an Original Principle or Generality, but is supremely and utterly concrete fact and reality. Compared to him, we are mere metaphors. Our sensuous experience, for example, our biological sonship, is a flat representation of which his celestial Sonship is the solid reality. Our body and personality are "what's left of God's positive being when it is sufficiently diluted to appear in temporal or finite forms". If we set aside the rather neo-Platonic tone (the potential suggestion of continuity and emanation), Lewis displays a profound understanding that our creaturely reality is contingent and dependent on God's transcendent richness of beauty and truth. For all their dimness, we marvel at our contingent riches. With this in mind, we can understand Lewis' art as an attempt to help us taste and feel God's positive and concrete reality.

Lewis recognizes that it is very hard for us to grasp that God is concrete but immaterial. This is why he follows the form of his incarnating Lord and embodies by (imagined) sensuous-empirical means, the reality he wants us to taste. This too, was Dante's method of using an emotion or experience we do know to express one we do not know in order to give us an indirect but sensuously analogous experience. The indirectness of this imaginative feeling-meaning is similar to discursive-rational thinking in that we experience directly the imaginative reality and then must
inferentially transfer it to God. But in the imaginative experience of theological art, when images are singularly appropriate, as in Biblical images, the link is not logical-inferential, but intuitive and immediate. Lewis' notion parallels that of Hilary, who discusses the use of analogies to communicate to others the knowledge of God, not directly, but indirectly. The gap between our inadequate analogies and the truth is not bridged by some comparison or principle of proportion, but rather by God's immediate activity upon us. 222

Lewis saw creation and redemption in an Athanasian-like unity. Images linking a lamb to the Son of God were seen as uniquely appropriate to revelation, but images of a whale or a badger would not have been. The rationality of redemption creates some natural, one-dimensional discord, but brings down eschatological harmony from above. Though not logically inevitable or based on formal rules, theological rationality is grounded in the beauty and God-established coherence in creation and history which he personally climaxes and fulfills in the downright immediacy of his presence in incarnation.

I. The Unity of Word and Image

There is, as we have noted already, an important sense in which images are prior to concepts. The Father and Son image takes precedence over all our later artistic representations and conceptualizations. Revelation speaks of God as Father. Theologians speak of God as Trinity. And as Lewis muses, "naturally God knows how to describe himself much better than we know how to describe him." 223

For Lewis, the symbolic 'God is moved with bowels of compassion' is epistemologically more valuable than 'God is an absolute being to which human attributes are inapplicable'. To prefer the concept is in effect to prefer our abstract conceptual symbols for God's concrete symbols. 224

In the converting of the mind, the first frontier is often the imagination, not the intellect. Only if both are converted, does the will follow. If we are not imaginatively open, no exposition of the rational coherence of Christianity will move us to repent. Though these distinctions of intellect, imagination and will are themselves the product of an analytical
breakdown of an interconnected mental process, it is a helpful way of acknowledging that the discovery of knowledge is far from a mere intellectual affair.

Lewis the poet was not shy or apologetic about anthropomorphic imagery and found increasing pleasure in using it to enjoy the rationality, beauty and passion of the Christian revelation. Images are natural and organic. But Lewis is an artist; Torrance is a scientist. For Torrance true concepts are indwelt and organic as well. Thus his confidence in noetic reflection is grounded in the same organic empirical proximity which Lewis finds so arresting in images.

Bevan notes that Biblical symbols like 'God is light' have a unity and simplicity which gives them much greater power than that of the analytic breakdown of God's various attributes in scholastic theology, Roman Catholic or Protestant. For here, concept and image are in organic union. That is the power of Biblical reality. The symbol is not literally true, however. God is not literally the physical force and energy known as light. But the metaphor tells us that our apprehension of God invites "something analogous to the feeling now aroused in us by highly concentrated light".

If in Jēsus, God actually became a man, Biblical reality is inevitably anthropomorphic. Theological doctrine consists in freely invented concepts, and therefore is essentially limited and can never exhaust the meaning contained in Scripture. Lewis often prefers to work directly with the anthropomorphic images and seeks to communicate their meaning to others primarily with the mortar of conceptual truth implicit if not explicit, as the invisible scaffolding which holds together the sensuous empirical images. For as Torrance has demonstrated, the two cannot really be separated. Here is the propriety of Torrance's insistent focus on the rationality of theology and its cognitive link to reality. To say we have only a picture link, only images, destroys the Biblical unity of word and image. It is as if God gives us fascinating pictures and then leaves us on our own to interpret them according to self-understanding drawn from our cultural experiences. That is foreign to both Lewis and Torrance and would deny the
inherent rationality of the self-interpreting Word internal to the trinitarian heart of God.

Lewis was once asked if he saw Jesus as a poet or a philosopher. His answer: "Neither and both".227 That is, in Jesus was implicit perfection of both, but neither was developed. At times more Socratic than Shakespearian, Christ's words contain what Lewis called a homely, peasant shrewdness. So the coming of the Son of man.

Bede Griffiths and Owen Barfield both speak of a great gap between the imagination and the intellect in Lewis.228 Lewis himself admitted the gap in his autobiography, and wrestled with it throughout his writings. But he sought in these same writings to give an account of the healing of this old wound. Rough edges certainly appear. His imagination was slanted towards the Médiévals and the Romantics. Modern art held little appeal to him. Due to his idealist background, his theology lapses into a rationalism which his debate with Anscornbe highlights. But after taking these things into account, I would suggest that in Lewis there is neither an imaginative synthesis nor a rational integration, but a Gödelian-like demand for an explanation in which imagination and reason break off and yet in so doing point to reality. The reality to which they point is what Lewis describes as the marriage of heaven and earth, myth become fact: the God-man, Jesus Christ. In Jesus, not in the interior world of his imagination or his reason, Lewis found his integration.

Barfield found his synthesis of reality within his own imaginative consciousness. As some of his advocates put it, in the imagination we experience the ultimate homogeneity of world and mind.229 By its ultimate allegiance to the imagination, Anthroposophy claims to be free of all intellectual abstractions.230 But its focus and answer is a dynamic internal-mental event which links them to God the cosmic ocean of mental-imaginative energy. Griffiths advocates an integration by a 'Return to the Centre' which for him is the highest Self's inherent union with the Divine, in a union of Hindu and Roman Catholic mystical piety.231 Lewis' friendly accusers reject his own point of integration, or rather, the
Person who integrates his imagination and intellect. For Lewis, the imagination's task is to represent and enjoy this unexpected resolution in all its titanic power. His intellect seeks to serve with its borrowed coherence and clarity the purity and rationality of its true object. Within himself, Lewis may have remained a man besieged by two giants. But in union with Christ, he had experienced an eschatological foretaste of the ultimate resolution. This resolution, this surprise of joy, came from without, 'plumb down from above'. His response was one of gratitude and thanksgiving, serving Christ with all his mind and body—imagination, intellect and will.

It is here, most importantly, that Torrance and Lewis speak with one voice. The incarnation overcomes the disruption between language and being, word and event. It is the incarnate Logos, not human logic, the Image of God, not human imagination, who concretely integrates and reconciles intellect and imagination. In Christ we meet God, hear his Word and see his face. That is why Athanasius spoke of Jesus as the only logos and eidos of God. Jesus is not only the image of God, but also the reality and substance of God.

In Christ, the vision-image emphasis of Thomism and the Word-audit focus of Torrance are united. In Christ, Word and Image are not in conflict. This unity held indivisibly together by Christ is called a mystery by the New Testament, and though not ultimately reducible or explainable in concepts or symbols, it throws light on vast oceans of experience: "We believe that the sun is in the sky at midday in summer, not because we can clearly see the sun (in fact, we cannot), but because we can see everything else."

The imagination truly enjoys. The intellect truly judges and reflects. Theology does not seek to suppress, but to renew and convert human thought forms and the imagination to the service of its Lord. Theological writing at its best reflects the inherent integration of its object. The two overlap and interanimate one another. In reading Torrance, one is often emotionally aroused, as when one reads Lewis, for his intellect is not merely analytical but intuitive and
participatory. Though we distinguish the gifts of both men, we err to separate them.

Imagination does not with some sort of aesthetic inevitability lead one to Christ, even as logic does not necessarily lead one to faith. As myth transcends thought, says Lewis, so incarnation transcends myth or imagination. Incarnation explains myth, not vice-versa.

For Lewis, the unifying and cohesive power of the Gospel and its object—Jesus, means that the incarnation is the truth which throws a flood of light upon all reality: theology, science and life. Jesus compels us. He slays all the dragons and captures all the epistemological fortresses.

In the wake of Christ, theology is an art and a science, concerned fully with word and image, aesthetic rationality and word or conceptual rationality. In theology as in science, we penetrate into the'physical concepts' which serve as the glue holding the image-event bricks of the Gospel together. One cannot bypass or ignore the foundational work of, for example, the Nicene-Constantinopolitan Creed, the only creed accepted by all branches of the Christian Church, for it enshrines the physical concepts of homoousion and the trinitarian formula.

However, theology as art performs its own irreplaceable task. Art seeks to re-present and re-arouse the qualitative encounter with reality by a revivification or rebirth of images. The foundational images are God-given in Scripture. The ongoing representation serves the Truth as a humble 'sub-creation' (Tolkien), and points to that primary Reality with an avalanche of images, evoking desire and whetting the appetite to taste and see for ourselves that God is good indeed. We see glimpses of this in works like Dostoyevsky's The Idiot (Alyoska), Lewis' Aslan or the little Christs which are Christ-figures recurrent in Western art and literature. In their diminutive ways, these multitudinous characterizations and evocative scenes represent, as little dim incarnations, the beauty and love which breaks itself in pieces to heal, and which regathers in a resurrection beyond hope.

In all these is a glimpse, a hint, a whiff of Christ's
incarnation. They serve as reminders, goads and pointers to the one incarnation that marks the turning point of history, art and science. Theology as art is an unending probe into the beauty, truth and goodness of Reality, which is God come down.

Lewis would be the first to admit that Aslan is not definitive for the imagination as homoeousion is for the intellect. Both point to the reality of Christ, but quite differently. The former is a revivification, a tour-de-force retelling of the old, old story. The latter is a physical concept, not a closed definition, but rather an intellective penetration into the reality itself. The epistemological grammar and syntax inherently indwell the original semantic intention. Neither exhausts the reality, but each serves it in its own way.  

1 Bodleian Library, ms. facs. Letters of C. S. Lewis, June 3, 1956, p. 63.

2 Ibid. Lewis also notes in this letter that the self-centred use of the imagination is the root of masturbation, which substitutes an imaginary lover for a real, concrete person with real needs and moods and to whom I have obligations.

3 Biographia Literaria, p. 92.


6 e.g. by Polanyi. cf. The Place of Polanyi, p. 65.

7 quoted in Adey, p. 81.

8 Bodleian Library, Manuscript of English Letters, c. 220/1 CSL, March 25, 1943, p. 28.

9 The Personal Heresy, p. 110.

10 Theological Science, p. 21.
11 review of Thomas Reid, p. 142.
12 noted in *Theological Science*, p. 19, from *The Glass of Vision*.
13 *Theological Science*, p. 20.
15 *Theological Science*, p. 20. But Hilary also says these images "did not say anything unworthy of his own nature". Images point out meaning rather than exhaust it. De. Trin. ix. 40.
17 *The Hermeneutics of St. Athanasius*, p. 96.
18 quoted in *English Literature in the 16th Century*, p. 460, from *Ecc. Pol. III. vii. 6*.
19 *A Grief Observed*, p. 51.
20 *Surprised by Joy*, p. 176.
21 *The Hermeneutics of St. Athanasius*, pp. 102-103.
22 *Theological Science*, p. 238.
23 *Theology in Reconstruction*, pp. 90-91, 218.
24 *The Hermeneutics of St. Athanasius*, p. 102.
25 Bevan, p. 340. Lewis regularly refers to Bevan as a valuable guide. e.g., *God in the Dock*, p. 181.
26 *The Hermeneutics of St. Athanasius*, p. 100. cf. also pp. 240-241.
28 *God in the Dock*, pp. 63f.
29 *The Discarded Image*, p. 208.
30 Elsewhere, Torrance acknowledges that in Thomism, the mind does not terminate on the image, but passes through the image to the object. *Hermeneutics According to Aquinas*, p. 269.
31 *Selected Literary Essays*, p. 261.

265
Bevan, p. 275.

Biographia Literaria, pp. 173-174. For Coleridge, the imagination seems to link us to reality as logic does for the rationalist. cf. p. 167.


Ibid., p. 495.

Lewis refers to the ancient understanding of wits in which the productive, seminal and creative wits are distinguished from the critical wit (the faculty of judgement). The three former wits are closely akin to the imagination as now understood. Studies in Words, pp. 91-92.

Theological Science, p. 27.

Of Other Worlds, p. 56.


Selected Literary Essays, p. 265.

Bodleian Library, Ms. facs. c. 53, Letters of C. S. Lewis, p. 96.

The Pilgrim's Regress, p. 19.

God in the Dock, p. 214.


Bodleian Library, ms. facs. c. 54, The Great War, p. 59. This accounts only for meaning's relation to ratio, not intellectus.


An Experiment in Criticism, p. 85. (Italics mine.)

God in the Dock, p. 41.

Ibid.

The Personal Heresy, p. 97.

Christian Reflections, p. 135. There is an analogy here with the noetic necessity of basic theological concepts.
53 Of Other Worlds, pp. 8, 10.

54 This will be discussed fully in Chapter VI An Object-Centred Approach to Art.

55 J. R. R. Tolkien, The Tolkien Reader, New York: Ballantine Books, 1966. This includes Tolkien's essay 'On Fairy-Stories', a lecture which he gave as the Andrew Lang lecture at the University of St. Andrews in 1938. (pp. 2-84), p. 47.

56 Bodleian Library, ms. facs. c. 54, The Great War, p. 63.

57 Out of the Silent Planet, p. 154. cf. Christian Reflections, p. 83, where Lewis argues that 'Darwinism' first appeared in imaginative fiction and poetry of the times. Only later did scientific evidence come along to support it.

58 Of Other Worlds, p. 17.

59 Screwtape Proposes a Toast, p. 43.

60 Selected Literary Essays, p. 83.

61 Studies in Medieval and Renaissance Literature, p. 78.

62 The Discarded Image, pp. 206-207.

63 Ibid., p. 208.


66 Reflections on the Psalms, p. 113.


68 English Literature in the 16th Century, pp. 319, 345. Also Tolkien, pp. 22ff.

69 A Grief Observed, p. 71.


71 Bodleian Library, ms. facs. Feb. 5, 1960, p. 73.

72 Letters to Malcolm, pp. 83f.

73 God in the Dock, p. 45.
The imagination never imposes emotions, except the pleasure at having something vividly conveyed to the imagination.


The Four Loves, p. 23.

The Discarded Image, pp. 98, 112.

Bodleian Library, ms. facs. c. 54, The Great War, p. 9.

Screwtape Proposes a Toast, pp. 126-128.

Selected Literary Essays, p. 31.

Sidney, An Apology for Poetry, p. 491.

Screwtape Proposes a Toast, p. 98.

95 The Allegory of Love, p. 160.
96 Tolkien, p. 54.
97 Ibid., p. 21.
98 quoted in Busch, p. 474.
100 Bodleian Library, ms. facs. c. 54, The Great War, p. 2.
101 Adey, pp. 42, 81.
102 Letters of C. S. Lewis, p. 288.
103 Surprised by Joy, p. 66.
104 Screwtape Proposes a Toast, p. 42.
105 Ibid.
106 Christian Reflections, pp. 82-89.
107 cf. in this regard Tolkien's memorable words: "The Birth of Christ is the eucatastrophe of Man's history. The Resurrection is the eucatastrophe of the story of the Incarnation. This story begins and ends in joy. It has pre-eminently the 'inner consistency of reality'. There is no tale ever told that men would rather find was true, and none which so many sceptical men have accepted as true on its own merits. For the Art, of it has the supremely convincing tone of Primary Art, that is, of Creation. To reject it leads either to sadness or to wrath." Tolkien, p. 72.
108 Bodleian Library, ms. facs. c. 54, The Great War, pp. 39-40. Adey alleges that all Lewis' fiction presupposes that "divine truth enters the human psyche" through the various manifestations of the imaginative faculty--myth, dream, etc. But the point of Lewis' mythology and story-telling is to allow people to entertain and to enjoy the qualitative impact of Christianity's truth without closing up their openness by warily studying the truth-claims of a religion. Dreams and stories just happen to be the working tools of his favourite genre, fairie. Adey, p. 76.
110 Surprised by Joy, p. 146.
111 quoted in Paul F. Ford, Companion to Narnia, New York: Harper and Row, 1980, p. xxii. If the child continues to worry, Lewis recommends the following prayer: "Dear God, if the things
I've been thinking and feeling about these books are things You don't like and are bad for me, please take away those thoughts and feelings. But if they are not bad, then please stop me from worrying about them. And help me every day to love You more in the way that really matters far more than any feelings or imaginations, by doing what You want and growing more like You."

Lewis adds a postscript: "And if Mr. Lewis has worried any other children by his books or done them any harm, then please forgive him and help him to never do it again."

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113 The other side of Bonhoeffer's concern may have been Barth's avoidance of a broader philosophical discussion whereby the rationality of the Logos was connected to the rationality of other fields. Barth was content to plunge relentlessly on with completing his dogmatics. I believe this important task has been significantly rectified by Torrance, and is one of the crucial contributions of his theological writings. cf. Newton, Einstein and Scientific Theology, p. 248.


118 Ibid. Two exceptions were certain people and nature. Also the grim world was at least free from the Christian God.


120 God in the Dock, p. 69. cf. Miracles, p. 76.

121 Miracles, p. 74.

122 Screwtape Proposes a Toast, p. 51.

123 God in the Dock, p. 71.

124 Miracles, p. 78.

125 Ibid.

126 God and Rationality, p. 23.

127 God in the Dock, p. 236.

129 Studies in Medieval and Renaissance Literature, p. 50.

130 Torrance has born further witness to the metaphorical influence upon thinking in his analysis of the receptacle versus the relational model of space which divided Lutheran and Calvinist notions of Christ's real presence in the eucharist. God and Rationality, pp. 126, 128. cf. Space, Time and Incarnation.

131 Mere Christianity, p. 58.

132 Ibid.

133 The Ground and Grammar of Theology, pp. 124-125.

134 Screwtape Proposes a Toast, p. 101.


136 Though Lewis praises Buber for grasping the immense depth of the Thou experience, he criticizes Buber a) for ignoring the incarnation, where God objectivizes himself in history and becomes a 'he'; b) Lewis also notes that Buber ignores the 'ye' (you plural) experience. Bodleian Library, Ms. Eng. Lett. c. 220/1 CSL, p. 141.

137 Bodleian Library, ms. facs. c. 48, p. 183.

138 Letters to Malcolm, p. 52. In this way, following Coleridge, Lewis rejects the logical-causal reduction of reality by denying logic right of entry into the imagination.


140 The Problem of Pain, p. 42.

141 Bevan, p. 259.

142 Ibid., p. 260.

143 The Ground and Grammar of Theology, p. 156ff.

144 Letters of C. S. Lewis, p. 147. (1932).

145 Studies in Medieval and Renaissance Literature, p. 92.

146 Miracles, p. 87. The focus on the negative side of the spiritual (e.g., immateriality) is a recent development. The modern distinction between literal and spiritual is not a part of the ancient Hebrew (or Greek) mind. Ibid., pp. 81, 82.

147 God in the Dock, p. 222.
149 God and Rationality, pp. 196-197.
150 Selected Literary Essays, p. 254.
151 Bevan, pp. 337, 332. cf. Torrance on Mansel in Theological Science, p. 23, where he says Mansel limits intuitive knowledge to the visual element.
152 Christian Theology and Scientific Culture, p. 8.
154 God and Rationality, p. 81.
155 Ibid.
156 The Hermeneutics of St. Athanasius, pp. 240-241. In science, says Jaki, interpreting science by means of its images or paradigms (Kuhn) is unhelpful unless we face the question whether such images are merely part of the subjective state of the scientist or have objective referents. The Road of Science and the Ways to God, p. 285.
157 Theology in Reconstruction, p. 90.
158 The Pilgrim's Regress, p. 217.
159 The Ground and Grammar of Theology, p. 29.
161 Einstein and Infeld, p. 214. Heron seems to have a similar exploratory notion as fruitful for theology in his notion of 'models' as heuristic preparations for more permanent paradigms. Alasdair Heron, 'Logos, Image, Son': Some Models and Paradigms in Early Christology, Creation Christ and Culture, pp. 44f.
162 Einstein and Infeld, p. 294.
163 Ibid., p. 133.
164 God and Rationality, p. 102.
165 The Ground and Grammar of Theology, pp. 115-116.
166 review of Thomas Reid, p. 142.
167 Theological Science, p. 77.
168 Theology in Reconstruction, p. 91.
169 The Road of Science and the Ways to God, pp. 172ff.
The difference is that science is itself grounded ultimately on axioms whose source is Biblical revelation. Lewis would see Plato's true insights as God-given too, within his limited conceptual framework.

For Barth, 273
this is a "pandering after direct signs" which Jesus gave no man. Brown, p. 157. Even post resurrection appearances are not theophanies which confound all possible unbelief. Signs reveal Jesus, but do not prove him logically. cf. Theological Science, p. 238. cf. Chapter VII. E. Theology--Realist or Idealist?

194. Theology in Réconciliation, pp. 220ff.
195. Bevan, pp. 313f.
196. Ibid., pp. 309f.
199. Ibid.
200. Theology in Reconstruction, p. 106.
201. Calvin's Doctrine of Man, p. 58.
202. Ibid., p. 153. cf. Reason in Christian Theology, p. 40, where Torrance explores the proximity of pantheism to the analogy of being. Tolkien describes the "eucatastrophe" i.e., the good catastrophe with its sudden and joyous turn as the true form of fairie. Here we see an aesthetic structure grounded in grace; for consolation is always miraculous, "never to be counted on". Tolkien, p. 68.
203. Theology in Reconstruction, pp. 113-114.
204. Conflict and Agreement, II, p. 60.
206. Calvin's Doctrine of Man, p. 141.
207. Ibid. (Italics mine.)
208. Torrance opposes C. H. Dodd's understanding of parable as truth showing through "because of the divineness of the natural order". quoted in Conflict and Agreement, II, p. 60.
209. Griffiths, The Adventure of Faith, p. 21. Also Bodleian Library, ms. facs: c. 48, Letter to C. S. Carnell, 1958, p. 110. Lewis says it is a false track to see himself influenced by Thomism, though he is influenced by Aristotle's ethics. Lewis also tells Carnell that on points at issue between Christian Platonism and Christian Aristotelianism, "I have not got a clear line". p. 111.
Lewis does not leave Protestants uncriticized however, noting the perennial danger is that without the material embodiment of Christianity in liturgy and history, its piety and theology easily degenerate into "a vague mist of ethical platitudes". The Allegory of Love, p. 323.

Studies in Medieval and Renaissance Literature, p. 60.

To know God is to know "this particular character". Miracles, p. 92.

For Lewis, the best kind of allegories treat the spiritual as concretely real and enable others to experience them as such. The Allegory of Love, pp. 276, 289. For example, Lewis looks at the man-dog relationship and its training which involves pain to see if it sheds any light on the problem of human pain and a loving God. The Problem of Pain, p. 43.

Miracles, p. 95.

cf. Miracles, p. 95.


Studied in Medieval and Renaissance Literature, p. 70.

Hermeneutics According to Hilary of Poitiers, p. 54.

Mere Christianity, p. 147.

Bodleian Library, ms. facs. c. 48, Letters of C. S. Lewis, p. 183.

Bevan, pp. 141, 150.

Ibid., p. 150.

Christian Reflections, p. 3.


W. C. Johnston, Jr., C. S. Lewis, Barfield, and Imagination, Man's 'Natural Powers', p. 36.

Barfield, Introduction, Light on C. S. Lewis, p. xvii. For Barfield, Lewis never encountered ideas immediately for he refused to acknowledge the value of Barfield's introspective
beta-thinking. See Barfield's *Saving the Appearances*, chapter 1.


232 *God and Rationality*, p. 150. cf. *The School of Faith*, p. xxix. See here John Zizioulas, *Human Capacity and Human Incapacity: A Theological Exploration of Personhood*, Scottish Journal of Theology, 28, 1975, pp. 434ff. Zizioulas sees the turning of differences (e.g., reason and imagination) into divisions as the breaking of man's communion with God, the purpose of creation. Christ is the one who heals and restores all divisions.

233 *God and Rationality*, p. 166.

234 *Hermeneutics According to Hilary of Poitiers*, p. 47. This is also the point of the doctrine that the *Logos* is *homoousios* with the Father, i.e., the Word of God is identical with the reality of God. p. 44.

235 *Theological Science*, p. 150.

236 *Miracles*, p. 114.

237 *Theological Science*, p. 278. Though Torrance omits it, I have included the imagination in his notion of renewal and conversion.

238 *God in the Dock*, p. 66.

239 As a postscript, if we recall that even the *homoousion* is not to be identified with the truth, but is a paradigmatic pointer to the truth, then in the light of the fruitfulness of theology as art and science, we should ponder the suggestion of Lesslie Newbigin for the future of ecumenical theology, particularly Christology. "It is by no means to be assumed that a truly 'ecumenical Christology' will be found in the form of systematic statements framed in the style of Western philosophy rather than in the form of story and parable typical of much African and Asian thought--and typical of the Gospels!" Lesslie Newbigin, *Christ and the Cultures*, Scottish Journal of Theology, 31, 1978, p. 8.
CHAPTER V

OBJECTIVITY AS PARTICIPATORY KNOWLEDGE

A. Introduction: The Denial of Doubt and Detachment

Once we recognize the seminal role of belief for discovery, we can reconsider the notion of objectivity as detachment. The germ of science's disinterest and detachment from nature, instead of dialogue with it, probably lies in its rejection of alchemy and medieval science's false fusion of meaning or telos with science. A disinterested science seeks only a knowledge which man controls and dominates, where dialogue and listening are replaced by controlled manipulation.  

Reaching its zenith of popularity in the nineteenth century, detachment as a laudable scientific habit received philosophical buttressing and was radicalized in Descartes' venture of systematically doubting all until he could arrive at something which he could not doubt. Thereby he could build deductively all further knowledge from this ground core. The modern habit of doubting probably stems more directly from Kant's demand that we investigate nature as judge and require answers in strict accordance with prior stipulations.  

Kant's motive was to restore a stable epistemological structure to science in the wake of Hume's denial of necessary connections in the real world. Kant boldly strode forth, but was a knight infinitely resigned to the conviction that a rational structure could not inhere in the external world. His self-acclaimed Copernican revolution counterattacked Hume by transferring causality from an unpredictable world to man's mind, and thus gave it a new and safer home. This forceful reply was achieved by abandoning the quest for the knowledge of ontological structures in the real world. Kant retreated to a knowledge of phenomena, and reformulated Greek dualism in terms of an unbridgeable gap between phenomena and noumena. Doubt about
objective knowledge was the inevitable result.

Torrance calls upon a Kantian-permeated theology to a dialogue with a modern science which has abandoned these idealist categories, and has replaced them with a non-dualist approach which is grounded in actual scientific procedure. "The scientist does not doubt the object of his inquiry, for he is committed to a profound belief in its intelligibility or else he would not be involved in its investigation." In freeing science from a legion of a priori presumptions, this approach also ends doubting questions. The doubter's implicit self-certainty does not permit his own views to be questioned by further empirical investigation. The only escape from this self-reflecting lens is to replace self-authority (and all its mental habits and accoutrements) with the authority of the object. Attachment to the object and commitment to seek the truth at whatever cost detaches the questioner from his presuppositions and frees him to know the object.

Lewis, too, had little sympathy for detached and self-confident inquiry. He found "the boundless self-assurance of the pure text-book" to be repugnant. Lewis also mistrusted the detached objectivity of the journalist and his "air of being a specialist in everything...of taking in all points of view, and being always on the side of the angels". Detached objectivity trivializes both subject and object. This is epitomized in the television photographer/journalist who with his technology (a camera), distances and insulates himself from the sheer immediacy of experience. While recording experience in flat, two-dimensional images, he fails to participate in the mystery that is there.

Doubting questions are unreal, for they are posed in self-isolation from the object. But scientific questions are open to whatever the object may disclose. The proper role of doubt in the scientist's toolbox is doubting his own prior assumptions about the object.

And yet, a certain validity underlies the principle of detachment and doubt, namely, that one cannot pass true judgement on an object if one's active relation with it affects and distorts one's knowledge of it. Coleridge quite properly
describes impartiality as "an honest and enlightened adherence to a code of intelligible principles previously announced and faithfully referred to in support of every judgement on men and events". This implies not detachment, but submission to the object in order that we might think in terms of it and not in terms of what we think we already know.

Should science detach itself from presuppositions about its object? Yes. Science has a passion for the truth and this means a readiness to repent of presuppositions. But should science detach itself from its object? No. Kierkegaard saw that disinterestedness is a mental disease, a sign of indifference to reality. The call to objectivity is a call for indifference and impartiality toward all things outside of the object, a methodological disengagement from other points of view. By this means our knowledge will not be an illegitimate relationship between knowing and being, but a relationship governed by the object, and not by things and concepts outside of it. The desire for the honest impartiality implicit in detachment is valid when we direct it to ourselves and our assumptions, not to our object of inquiry. Besides, since we are inevitably and inescapably inside the knowing relationship, we cannot step out to an indifferent standpoint. A detached and formalistic pursuit of science isolates itself from man's higher faculties, both rational and ethical, and severely restricts its range and power of insight and understanding. Beyond all else, the actual historical record of scientific discovery makes the heuristic benefit of doubt, detachment and scepticism most dubious. We have already documented Einstein's belief in the world's rationality as essential for discovery.

In the case of theology, Austin Farrer reminds us that a detached impartiality towards the Gospel is impossible. No man can serve two masters. Believers err who over-indulge the scepticism of their hearers. It is our own unadmitted and unquestioned preconceptions which limit our freedom to know. As in science, so in theology; preoccupation with mental states of consciousness (Hume) or with prior rational
categories (Kant) engenders a doubting attitude towards the object which makes one unable to properly attend to it and its rationality.

Lewis actually lived this epistemological mistake. Due to false burdens, he had begun to lay upon his prayer life. Lewis began to dread Christianity. He thought that true repentance required him to feel deeply each sin he confessed and to grieve agonizingly over it. This only increased his distress because he was not attending to the supposed object of his prayers, God, but was self-preoccupied with his (lack of) emotional response. He began to doubt.¹⁷

The reductio ad absurdum of doubt in theology occurred in the radical scepticism of those critics who denied the historical existence of Jesus. In literary criticism, a similar kind of critic denied the canon and text of Shakespeare.¹⁸ In fairness to Descartes, Butterfield reminds us that he sought to use his methodological doubt at a high level and under strict discipline.¹⁹ Its regrettable vulgarisation into the simple and persistently unbelieving attitude was the very thing that he sought to eliminate. Fortunately, the era of scepticism seems to have run out of credibility. As Polanyi puts it, "Since the sceptic does not consider it rational to doubt what he himself believes, the advocacy of rational doubt is merely the sceptic's way of advocating his own belief."²⁰ Lewis acidly comments that,

It's reasonable to suspect that this [scepticism] method will soon be used only on Christian documents and survive only in the Thinkers Library and the theological colleges... Everywhere, except in theology, there has been a vigorous growth of scepticism about scepticism itself.²¹

We have seen that objective knowledge comes not by detachment, nor through rational laws mechanically joined to nature, nor through sifting and ordering what is indefinite and unintelligible by a priori patterns. Nor does it arise from doubt and scepticism. Instead, by believing, probing questions, the knower opens himself to the mystery of a reality which is other and outer to himself.
B. The Nature of Participation

We have seen that for Torrance, theory and experience are linked not by impressing on to nature external laws of reason, but rather by penetrating into the organic structures which inhere within nature. In this mutuality wherein the knower listens to the object and perceives the form which inhere in being, the wonder of knowledge occurs. That is, the noetic form appropriate to ontic structure is discovered as the knower penetrates into reality's structures with empirical axioms and mental tools formed under the impact of the empirical. This penetration, whether one calls it an extra-logical, intuitive apprehension (Einstein) or tacit non-formal inference (Polanyi), is the primary movement of active and kinetic thought which produces objective, rational knowledge, a knowledge which has real, ontological depth.

The question of an objective rationality is bound up with the question of a participatory penetration into the subject matter.

To think of objectivity in participatory terms requires the (previously discussed) twin fiduciary axioms of commitment to truth and commitment to belief in the rationality of the object. The knower must relate to the object in good faith and rigorously respect honesty in research and in communication. And the knower's respect for the givenness of the object entails the belief that the object is rational and capable of being understood. Polanyi describes this 'personal knowledge' which springs from an attitude of trust and openness to the object as an informal but true relation to the object.

John Macmurray further points out that the quality of our awareness in large part determines the quality of response we receive from any object of inquiry. An appropriate openness is the sine qua non of rationality. Thus, an objective knowledge which seeks to penetrate and to participate in the intrinsic rational structures of the object, demands far more from us than the empiricist Agassiz's accurate observation of his fish. Mere observational accuracy trains us to act towards objects only cerebrally. This arbitrarily and prematurely limits our inquiry. To apprehend an object in its full
rationality demands the training of the emotional life's capacity to sense the qualitative depth of objects. The object may have more to reveal to us than quantitative, digital information.

Torrance has applied Macmurray's insights in the following manner. Science's concern to "think connections" between the theoretical and the empirical, compels it to push beyond detached, quantitative analysis. If science pursued only one rational mode exclusively, (say, number or quantitative rationality), then it artificially abstracts number from the organic coherence in which it naturally resides. This is a conceptual folly "which nature punishes by limiting our discoveries through it".

1. Indwelling

A crucial aspect of intuitive, participatory knowledge is the process of indwelling. It connotes a 'looking from' awareness, rather than a 'reasoning to'. Polanyi's notion of indwelling replaces phenomenology's shallower notion of empathy and differs from Gestalt participation (e.g., Kuhn) chiefly by its ontological commitment. That is, the thought forms we derive from indwelling are grounded ontologically.

Similarly, Lewis describes 'looking along' a sunbeam (indwelling) from out of a dark toolshed. He sees green leaves swaying on tree branches and the sun shining. Lewis contrasts this with 'looking at' the sunbeam: all one sees is little specks of dust. Thus a man 'in love' has a very different experience from the psychologist who 'looks at' love and sees only an affair of genes and biological stimulation. The implication is that knowledge occurs not by carving up the continuous field of experience into its particulars through analysis, but rather as we penetrate into the interior connections of the theoretical-empirical field.

Auerbach describes a similar artistic process as the "romantic penetration into the total atmosphere of a milieu". This indwelt grasp of the situation is not argued for rationally "but is presented as a striking and immediately apprehended state of things". The artist communicates this "state of things" by an appeal to "memory pictures of similar persons..."
and similar milieux which he may have seen. When this indwelt apprehension is aesthetically re-presented, Auerbach calls it 'atmospheric realism'.

In the science/art of Biblical hermeneutics, it is by indwelling that we apprehend the author's intention. That is, we allow ourselves to "get drawn into its process and operate within the subject-object relationship inherent in the situation". In the Biblical documents, we find ourselves confronted with God's own involvement in history. To indwell these events demands that we consciously allow ourselves to become implicated in this interaction. Otherwise, we cannot apprehend the meaning of the passage. We shall never know the answer to the question of what the text actually says. For Torrance, the key to the relation between Christ's speech (lalia) and hearing his word (logos) is abiding. As we abide in Christ and he abides in us, we dwell within the Truth, and therefore know the truth.

The question arises: "How do we understand a poem, play or book written in a different time period?" Lewis describes one answer as the 'doctrine of the unchanging human heart'. This way removes all the differences between that context and ours and concentrates on those things which remain the same. It assumes that all differences and historical particularities are superficial. Strip them away and we discover what the play or poem really is about. Logically it certainly follows that when all differences between ages are removed, what remains is the unchanging human heart. However, the least common multiple may not be the actual theme of any particular poem we are reading. "Our whole study of the poem will then become a battle between us and the author in which we are trying to twist his work into a shape he never gave it."

There is an alternative. Instead of stripping the knight of his armour, Lewis suggests we try to put it on and immerse ourselves into the very differences and changes which the work exhibits. Otherwise, when we have stripped what was actually a heart in this or that culture, "you are left with a miserable abstraction totally unlike the life lived by any human being. For Lewis, all criticism not based on reading..."
authors as they wished to be read; i.e., for what they have to say, is chimerical. 42

Lewis sees the quest for an unchanging essence, the true kernel without the husk, as a misunderstanding of the nature of a universal.

The idea is that an engine is most truly an engine if it is neither driven by steam nor gas nor electricity, neither stationary, nor locomotive, neither big nor small. But in reality, you understand enginehood or humanity or any other universal precisely by studying all the different things it can become—by following the branches of a tree, not by cutting them off.43

The task of hermeneutics, therefore, is to indwell. We must plunge right into the specifics and peculiarities, "to see his world..."44

In Theological Science, Torrance describes two views of universals, one as concrete and one as abstract.45 Abstract universals are used in exact science to analyse particulars in order to abstract, compare and generalize common forms. But a concrete universal is apprehended not through abstraction, but through penetration into its own innate pattern.46

Lewis would designate the 'unchanging human heart' as a way of using the text instead of receiving it. By receiving an object (book, poem, or person) we rest in it.47 For the receiver, it is an end (temporarily at least). In receiving a play or book, we exert all our sensory, intellectual and imaginative powers "according to the pattern invented by the artist".48 It is like being taken for a ride on a bicycle by a man who knows many roads we have never explored. But in using a work, we use it to assist us with our own activities.49 It is like adding a motor attachment to our own bicycle and going on a familiar route. Ironically, a user never fully uses the object, for he only wants enough of the object to use for his present concern.

Lewis catalogues various ways readers may use instead of receive a text. The 'professional' user is one who, due to economic necessity, overwork, ambition and hostility, no longer enjoys or appreciates his object. Reading and study have become work.50 The 'status seeker' is one who reads in

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order to make himself acceptable to his literary or theological circle. The 'devotee of culture' reads to improve himself. (As early as 1916, Lewis tells Greeves, he is out for enjoyment, not improvement). The grave weakness of all these approaches is that they "fix the ultimate intention on oneself".

Another inadequate way of participation is a subject-centred longing or as Lewis calls it, "egoistic castle building", which is exemplified in "twaddling school stories" wherein one enjoys vicariously the triumphs of the hero. In 'adult' literature, they are the usual 'best sellers' which consist of millionaires, beauty queens, posh hotels, palm beaches and bedroom scenes. Rather than existing to lose the reader in the new, the strange or the other, such literature exists precisely to feed the reader's own ambitions. These psychological fantasies are the opposite of fantasy literature. The egoistic or subject-centred reader wants to be deceived and to imagine the story might be or could be about himself, or that it should have happened to himself if he had been given a fair chance. Therefore, the story must be closely realistic in order that the reader may pretend that "maybe this could happen to me".

2. Radical Openness

The nobler or worthier the object, the greater our disappointment to find it approached with anything like languor or constraint.

--Keeble

Following the well-publicized comment of the Russian spaceman who saw no God in outer space, Lewis retorted, "Much depends on the seeing eye". Similarly, Farrer notes that when we judge the world looking for evidences of God, we do so by our standard, not God's. Hence, we do not find him. The only solution is to "identify myself with the mind of the maker" and to see the world from his perspective. Only when that is done can we echo the joy of the psalmist who cries, "The Heavens declare the glory of God".

If we read Shakespeare, says Lewis, by trying to psychologize it, we misread it. Or if we study fairies in Medieval literature by bringing to it a ready-made, modern concept of
a fairy and read old texts in the light of this concept, we reverse the proper procedure. "We must go to the texts with an open mind and learn from them what the word 'fairy' meant to our ancestors."61

The intellectual-affectional shift from analysis to indwelling, from centrifugal to centripetal thinking, only occurs as we surrender our trust from the self and its rational categories to trust in the object. Torrance finds in the Biblical-Hebraic tradition the source of this kind of objectivity. That is, here we have a radical openness in which we know something as it is, not as we think of it a priori.62

Lewis' literary discussion casts valuable light on the issue in theology. He roundly rejects all a priori methods which judge literature by some fully developed value system, for example, judging a work to be bad if it does not teach or exemplify such and such a criterion. To accept such criticism, one must accept its whole philosophy of life. For Lewis, this is utterly wrongheaded. "You cannot be armed to the teeth, and surrendered at the same moment."63 Rather, we "must empty the mind and lay ourselves open".64

Lewis first began to practice a radical openness in his youthful enjoyment of nature. He tells Greeves he was in the habit of keeping himself free from thought in order to become a "mere sponge" for sense impressions. He called it "mind emptying" in order to be filled experientially with sense impressions.65 At Oxford, he met A. K. H. Jenkin who continued and deepened Lewis' training as "a seeing, listening, smelling, receptive creature".66

I learned from him that we should attempt a total surrender to whatever atmosphere was offering itself at the moment... a serious yet gleeful determination to rub one's nose into the very quiddity of each thing, to rejoice in its being (so magnificently) what it was.67

Though nature does not teach us there is a God, it does teach us one crucial epistemological lesson. "The only imperative nature utters is 'Look. Listen. Attend.'"68

Though Lewis acknowledged the importance of radical openness to one's subject of study, as early as 1916, Lewis
recognized a loathing to open himself up to transcendence. He admits to Greeves he might be keeping the door shut.\(^6^9\)

Reflecting, upon the difficulty of attaining a proper object-centred participation helps us to appreciate the task Lewis set himself in *Miracles*. There he labours for nearly 200 pages of "preliminary inquiry" and deals with the philosophical question of 'fitness'. Lewis believed that unless one is genuinely open to the question of miracle as reality, (which many inquirers are not), it is more than pointless to undertake a study of the historical records (namely, the New Testament) to see if the 'Grand Miracle', that is, the incarnation, really took place. If one is genuinely open, then one goes to the New Testament (not works about it) to examine the records themselves and allows them to disclose the truth on their own merits.\(^7^0\) Thus for Lewis, a fundamental problem with Bultmann's exegesis is it presupposes miracles cannot occur. Man, Bultmann announces, is a "self-subsistent unity immune from the interference of supernatural powers".\(^7^1\) Lewis complains this is not learned from the text. It is a pure *a priori* philosophical assumption brought to the text.\(^7^2\)

Torrance would describe it as an obsolete, nineteenth century cosmology obtruded on to the text which distorts its meaning and therefore forces Bultmann to spiritualize his exegesis.\(^7^3\)

The modern awareness of the subject's relation to truth as an essential part of knowledge was one of the new developments of the Reformation. Thomism tended to use Boethius' definition of man as a logical entity. This presupposed that the object of knowledge is "entirely determinate and posits a necessary and timeless relation between the knower and the object".\(^7^4\) But in the Reformers, a renewed emphasis arose on personhood not as an individual subsistence of a rational essence (Boethius) but as communion with the Father through the Son.\(^7^5\) Hence they stressed the relational and anthropological element in knowledge. To know the truth is to be in active relationship with it.\(^7^6\)

More recently, Torrance has written that true science transcends subject-object relations and relates with object-object relations.\(^7^7\) Formerly, he retained the subject-object

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format for fear that in giving up the duality, the subject might subsume the object as has been the tendency in modern Protestant thought. But his recent 'object-object' talk may be in danger of the opposite. That is, how can we speak of human knowledge (apart from a mystical experience) without having a human subject and incorporating the subject into the structure of objective knowledge? Nonetheless, his goals have not changed, namely, to restore the primacy of the dialogical and relational in theology and to restore the centre of gravity to the objective truth of God to which all human thought forms are subordinate.

The need for radical openness brings us to the heart of Kierkegaard's startling raising of the question of truth in a subjective manner. Kierkegaard forced modern man out of a pseudo-idealist objectivity, to a focus on his relationship to truth. Kierkegaard saw clearly that a right relationship or a proper subjectivity in relation to truth is crucial to a true knowledge of reality.

But as Lewis experienced early, there is a peculiar aversion to this subjective or relational question in theology because here the object is the Lord God, and this requires an "epistemological inversion" in our order of knowing. Torrance's stress, like Barth's, on the primacy of the objective pole does not seek to evade or deny the role of subjectivity and experience, but to focus it appropriately in accordance with the object. Thus for some critics to say Barth's emphasis on the primacy of the object does not insulate us from the issue of experience, is irrelevant. Barth has no desire to insulate us. In his introduction to Theological Science, Torrance states that one of the purposes of his book is to clarify the implications for the subject of the fact that he is addressed by God. Whereas Martin Heidegger, in desiring to carry on the search for objective reality, describes man the subject as his own object, (a human is "a being that makes itself"), for Kierkegaard, this search is successful only when man appropriates an Object.

The difficulty for the impartial (or objectivistic) thinker in coming to grips with the personal and sovereign nature
of this object is the staggering cost—engaging in a dialogical relation with the Lord God and not a hypothetical monologue. Often, in subject-object relations, the object is seen as passive when it is interrogated by the subject. But in theology, the object we know is One who actively reveals himself. Man receives. He does not discover. In Kierkegaard we see the dénouement of German Idealism's pride. Though man truly and genuinely receives, it is "bracketed within" the enabling, soliciting and disposing of God. Our human subjecthood is enlarged and lifted up by the action of the divine Subject. Therefore Kierkegaard's 'truth is subjectivity' does not mean that truth is created by the subject but that man the subject is summoned to empty himself, in a way which parallels Christ's own self-emptying.

For Torrance, the final resolution to the question of subjectivity in theological reference comes by seeing it in the context of the vicarious humanity of Christ. In this way, the issue of subjective appropriation never becomes a separate theme for theology. Why? "The humanity as the subjective reality of the truth is already enclosed in the objective reality of the truth." Our subjective role is to participate by the Holy Spirit in the objective reality of Christ's life, death and resurrection, which has enclosed within it our response of faith and obedience. The Church is the place where this subjective realization of the objectively and subjectively fulfilled revelation and reconciliation in Christ, based on the Apostolic structure, takes place.

Finally, in considering the need for openness, it is typical of Lewis to call upon his reader to participate. After dealing with the intellectual problem which the doctrine of Hell provokes, Lewis reminds his readers that this chapter was not primarily about Nero and Judas, but about "you and me".

3. Emotional Openness

There lies deep within all of us the desire to retain the beliefs to which we are emotionally attached. Thus the quest for knowledge is a continuing process of disillusionment as we struggle to subordinate this desire to the nature of the
world as it is, not as we would like it to be. It is therefore difficult to overestimate the difficulty which barriers in our emotional life create for genuine knowledge.91 Growing up in the technological, mechanistic world of popular science, it is easy to see how even expert thinkers develop a mental-emotional bias against certain ideas and attitudes such as participation. Lewis admits that the loss of his mother in his childhood no doubt gave his mind its earliest bias, "its habitual sense of what is or is not plausible", and contributed to his atheism and intellectual pessimism.92

Often we are emotionally closed to an object because of our personal familiarity with it. Lewis sees this as a common nemesis of Shakespearian criticism.93 "The first thing is to surrender oneself to the poetry and the situation", but that is very difficult to do with a play as criticized and analysed as, for example, Hamlet.

An insufficiently obedient reception of the text (object) is the pons asinorum of all hermeneutical (and epistemological) endeavour. At times this might be merely the barren result of "simple men trying to be subtle...the obvious meaning of any fact or document was always suspect".94 Such a man was Lewis' father. He was not easily informed; his mind was too active to be an accurate receiver.

4. Subject-Centred Participation

Exaggerated inwardness is barren...withdraws us too far from what we can see, hear and feel.

--Pater95

Though the Reformation gave man his full place over against God in dialogical relationship, there also emerged a tendency to give man the dominant place in theology by making man's appropriation of salvation, his thought forms about God or his experience of God the hidden (or not so hidden) starting point. Eventually, Protestant theology could speak only obliquely of God, and his act of salvation for us by referring to man's religious self-expression. This had the effect of tearing theological statements away from their context in historical narrative. As a result, no longer does God in Christ meet us in the concrete world of our earthly existence
and address us. God's presence in his activity is nearly dissolved away into a timeless event or an eschatological happening indistinguishable from man's own existential decision.  

Theological statements are seen to derive not from a real Word spoken to us, but from an interpretation of our existence. Theological statements have their referent in man's consciousness, that is, his understanding of his relationship to God. They are only obliquely or inferentially related to God, but directly related to man and his consciousness.

Kant greatly promoted this "subjective tendency or self-consciousness of the knowing mind", which in turn promoted a very non-empirical, speculative philosophy and theology. As James Brown observes, Kant's active reason fashions what it apprehends and thus exercises determining control over the object. Once we grasp both the importance and difficulty of radical openness and the inevitable tendency of man to use an object rather than receive it, Kant's claim that knowledge comes not by conformity to an object, but rather by imposing form on the objects we perceive, appears fundamentally misdirected. When Kant made space and time fixed a priori forms of man's consciousness, he transferred the point of absolute rest in philosophy and thinking to man himself. That is, Kant's one fixed point, his starting point, was man's self-understanding. Theologically, this amounts to an immanent idealism; there could be no God for man outside of himself or independent of his consciousness. The logic of this process was not missed by Kant, for his revolution went so far as to identify the categorical imperative with the self-consciousness or inwardness of human spirit with the Divine Spirit. He ended his life a pantheist, referring to the self as God.

The nature of participation with the object is closely linked to one's starting point. Schleiermacher's focus was on man's consciousness of God, not God, hence anthropological and not theological. As Lewis (using Alexander's words) would put it, Schleiermacher's starting point was man contemplating his consciousness of God, not contemplating God. This is to focus and reflect on my experience-in-consciousness of God, not immediately on God.
Lewis' main complaint against the feeling-centred focus or starting point is that, besides being incomplete, it makes a state of consciousness the object and true interest of our thinking and feeling. For Lewis, this is like "trying to take out one's eyes instead of keeping them in the right place and seeing with them".\textsuperscript{104}

Lewis learned this epistemological lesson the hard way. For consciousness or subject-centredness nearly ruined both his imaginative life and his spiritual life. In each case, with the gods of Asgard and the God of the Bible, the experience becomes problematic. Once we focus on our consciousness, our feelings, they cannot bear the strain. Screwtape advised Wormwood to fuddle his patient's prayers by teaching him to watch himself and try to produce pious feelings by will-power. Rather than ask for love, he should try to manufacture feelings of charity.\textsuperscript{105}

When Lewis out and out sought a feeling, what happened was that he wanted a state of his own mind. Having thus falsely made a state of mind (joy) his object, he used myth, poetry and even God to produce it. He used them. When these things ceased stimulating him to joy, he dropped them and sought it elsewhere.\textsuperscript{106} The error is simply that our states of consciousness—joy or absolute dependence, (and including 'intuitive concepts') are by-products of an object. They are the mental track left by the object's passage.\textsuperscript{107} To focus on these states of consciousness makes God the means to the end of a religious, aesthetic or intellectual experience—in-consciousness. For Lewis, feelings alone—joy, sorrow, dependence, are of little importance. We experience sorrow when we repent and joy when we adore, but both are by-products of our attention to a particular Object.\textsuperscript{108} Their value lies in their referral quality to the object they are about. To paraphrase Lewis, all images, thoughts or feelings (states of consciousness—religious or aesthetic) if idolatrously mistaken for the true object, confess themselves inadequate. "I am only a reminder."\textsuperscript{109}

The solution is object-centred participation. Lewis enjoyed the Psalms because they were not suffocatingly
spiritual or religious, but experienced worship as God's presence. In the Psalms, says Lewis,

I found an experience fully God-centred, asking of God no gift more urgently than his presence, the gift of Himself, joyous to the highest degree and unmistakably real.¹¹⁰

In his own way, Lewis rejects subject-centred participation as vigorously as Torrance.¹¹¹ In literature other than the Bible, he designates psycho-analytic criticism (a form of consciousness-centred criticism) as misreading. When Freudian criticism argues that 'once upon a time there was a King and Queen' means 'there was a Father and Mother', Lewis asks what 'means' means. It certainly was not what the author intended or how the hearers consciously understood the story.¹¹² To make the meaning of books primarily a reference to the self is to exchange the original meaning intended by the author for a subjective reinterpretation. If we are content to understand the words only in terms of their effect on modern man and his unrepentant pre-understanding, etc., "then of course we do not read the poem the old writer intended".¹¹³ The meaning we extract is our meaning, not the writer's. For Lewis, "this isn't reading the old poem", and to say it is, is self-deception.¹¹⁴

Of course any man is entitled to say he prefers the poems he makes for himself out of his mis-translations to the poems the writer intended. I have no quarrel with him. He need have none with me. Each to his taste.¹¹⁵

With literary criticism, Lewis goes no further. The question of truth is not at issue, only that of meaning. But the implication for theological statements is plain. If the subjectivizing of Biblical statements is another meaning than what is intended by the Biblical writers, they cannot both be true.¹¹⁶

C. Participatory Objectivity as Object-Centredness
We have seen from various angles how indifference or detachment shackles science and theology within an unacknowledged subjectivism. Unless something is prior to the self and its mental/emotional equipment, subjectivism follows. It is this high regard for that which is beyond the self, the
other, the external person or thing, that makes participatory knowledge a penetration into the object and not merely into objects of consciousness.

An undiminished respect for the irreducible otherness of the object epitomizes Torrance's quest for objectivity. It leads him to understand rationality as thinking and acting in accord with the facts, with what is the case. Because objective form and pattern reside in the object, not in the subject, science cannot invent theory willy-nilly by giving free reign to the imagination. It is the richness of the facts (those qualities which inhere in the external world) which "force us to invent new physical concepts".

It is this conscious focus on the object, within the subject-object interaction, which differentiates Polanyi's understanding from that of Niels Bohr's regarding the stick as an investigative tool. For Bohr, the stick necessarily entails subjectivity. It interferes with the thing-in-itself (Bohr's Kantian assumption). For Polanyi, the stick does not by definition interfere with our experience of the object. Salt does not necessarily distort our experience of a steak. We can use the stick to lead us deeper into what is beyond ourselves. Every apparatus, physical or conceptual, functions by looking from it, through it, to the object and reaching out beyond to reality. One may misuse the stick—even violently so, and compel nature to jump through one's hoop. Too much salt ruins a good steak. This means the intrinsic rationality has remained dumb. But sticks and salt have their proper place in laboratory and at table. Both places would be impoverished without them.

If the object indeed dictates the appropriate noetic structures, it follows that the "reshaping of thinking" which Holmer lauds in Lewis was the result of his relentlessly allowing the object of his thought to renew his mind. His old idealist wineskins simply would not hold the new wine of the Gospel.

In his autobiography, Lewis recalls that his favourite uncle was a man who "didn't talk grown up talk", but talked about things. "Our attention was fixed not on one another,
but on the subject." A recent critic has noted that the distinctive element in Lewis' lecturing was that he "above all...handed out information". Though not intended as a compliment, this remark demonstrates Lewis' preoccupation with facts, data, and experiences of all sorts about the object of inquiry. The point of the data, of course, was to help his students get inside the subject matter. In his critical introduction to Spenser's The Fairy Queen, Lewis describes his criticism as a means only. "The sooner you toss my selections impatiently aside and go out and buy a copy of The Fairy Queen, the better I shall have succeeded." It was Lewis' mental-emotional habit of utter openness towards and concentration upon his subject-matter which is the methodological secret of his literary achievement and his pilgrimage from various philosophies, to philosophical theism, to Christian faith. This is how I will interpret his quest for joy which is the theme of his autobiography. Ultimately, this quality of joy could only inhere properly and abundantly in its true object--God.

Lewis' personal theological journey was rescued from self-centredness when as a precocious undergraduate at Oxford, he discovered in Samuel Alexander's Gifford lectures, *Space, Time and Deity*, the explanation for the diminishing returns in his quest for joy. Alexander uses the words "contemplation" and "enjoyment" as technical terms to describe two very different mental events. When I see a table, I enjoy the act of seeing and I contemplate the table. In bereavement, I contemplate the beloved and enjoy the loneliness or grief. The one essential property of love, hate, fear and desire is attention to their object. When one ceases thinking of and attending to, for example, the dreaded object (be it a revenue agent or a dragon), one ceases being afraid. "But to attend to your own love or fear [or feeling of absolute dependence], is to cease attending to the loved or dreaded object." It is to contemplate the enjoyed. One cannot love and think about loving simultaneously. Though these two activities may alternate rapidly, they are distinct and incompatible. Further, thinking based on one's thoughts
about the object and not the object itself (contemplating the state of consciousness instead of the object), becomes increasingly subjectivist and abstract, and is related to the object only indirectly, either through an abstract conceptual link or through the self-consciousness, but not through an intuitive-ontological link.

The implications for theological science are enormous. "Newman," Lewis writes, "makes my blood run cold", when he says religion is the one subject of heaven, because it substitutes religion for God.\textsuperscript{130} In attending to one's feelings or reflections about God, one ceases attending to God. Therefore when theology begins with a subject-centred approach (man's piety, rationality, crisis, etc.), it is inherently and unavoidably subjectivist. A theology of reflections upon God, of feelings about God or of propositional definitions, but not a direct, empirical involvement with God, is actually a convoluted form of anthropology, \textit{homo religiosus}.

For Lewis, we do not read poetry in order to get acquainted with the poet. Nor do we read the New Testament to know the early church's consciousness of God. When reading a poem or the New Testament documents, the author invites us to look \textit{with} him through his eyes at a tree and leaf in poetry --or to Son, Spirit and Father in the Gospels. He is not contemplating himself and his piety. He is contemplating his object. Therefore, if we are to read aright, we do not look at the author. We \textit{share} his consciousness, but we do not study it. That is, we enjoy the poet's consciousness; we do not contemplate it. If we focus on the poet's consciousness, we have abandoned the leaf and the tree. For Lewis, we must look where the poet points and not at the poet or writer himself.\textsuperscript{131} If we start contemplating or studying the author, we have ceased attending to his concern. We have paid him an unworthy compliment. As we look through the writer's personality to something else, we share in what is public, common and objective, not what is private and personal to the poet only.\textsuperscript{132}

As I enjoy the Gospels, I meet Jesus Christ, whom they portray. If I insist on contemplating the Gospels, I may see
'the externalization of the Church's subjectivity', but that is an abstraction. It is something which I create by introverting the Gospel gaze inward upon itself. It is not really what the Gospels were written about. It is to rewrite them, giving them a new subject-matter. The New Testament is not an oblique autobiography of the early church, but represents and portrays the church's encounter with Jesus.

Lewis was not selective in his object-centred thinking. He considered the traditional cosmological argument to be guilty of the same error as the subjectivist interpretation of the New Testament. That is, to infer God from nature is like inferring knowledge about the poet from the poem. Both God and the personality of the poet are inferences twice removed from the poetic experience or the experience of nature. Similarly, to infer that the New Testament tells us about the early Church's spiritual personality is as problematic as inferring that nature points us to God.133

This brings us to the major difference Torrance finds between the Reformation and the later Reformed catechisms, especially the Westminster catechism. Whereas the Reformation catechisms focus on the Word of God as God's activity among men, the later confessions of Protestant scholasticism focus on the consequences of God's revelation, namely, man's appropriation of salvation through faith and the working out of one's sanctification.134

When theology attends to and focuses on the consequences of God's free salvation and forgiveness in Christ, that is, appropriation and sanctification, it ipso facto ceases attending to God. To paraphrase Lewis, the moment I think about my faith and my hope in God, I have ceased believing and hoping in him. Therefore, for Torrance, faith is always an extrinsic act of looking to Christ, never an introspective analysis. I cannot trust in Christ for my salvation and think about or evaluate my faith at the same time. One cognitive-affectional activity precludes the other. This is why the search for internal or external evidences or grounds for one's salvation is pastorally devastating. It leads people either to despair for their lack of faith or to self-righteousness.
when they discover pieties and good deeds done (bracketed off by introspection from Christ's indwelling activity and our participation in his righteousness).\textsuperscript{135}

For Lewis, the relevance of all Christian doctrine stands or falls on whether or not it is object-centred. For example, if the belief in heaven ceases to mean "union with God" and hell "separation", the "belief in either is a mischievous superstition".\textsuperscript{136} Elsewhere, Lewis argues that to understand the doctrine 'God is Love', "we must not begin with mysticism, with the creature's love for God...We begin at the real beginning, with love as the divine energy".\textsuperscript{137}

If object-centred participation alone leads to genuine objective knowledge, theology must begin, focus and participate where God actually is present with us, says Torrance, in the concrete space and time of his activity in Jesus Christ. Torrance does not begin with an abstract definition of God or a numinous feeling of him as wholly other, or as Reason personified.\textsuperscript{138} Nor does he begin with an intellectual argument which leads us inferentially to "God". Such a "God" would remain an abstract, albeit cerebrally stimulating intellectual concept. Nor is the object of theology "historical theology" or "church history" or "systematic theology". These latter are all highly formalized reflections upon God. They are not the object itself.\textsuperscript{139}

In abrupt and shocking contrast, Torrance begins head on with his real object. "It is immensely important for us to recover this concentration on Jesus," for it is Jesus Christ himself who is "the creative source and centre of our faith", and as light is the unique constant and dynamic base of all regularity and order in the universe, so by analogy is Jesus the light of the world, the divine constant of God's love.\textsuperscript{140} Hence, theology begins in worship and prayer to Father, Son and Spirit. Worship and prayer have always been "staggeringly important" in the life of the Church because "it was real interaction with the living God himself".\textsuperscript{141} It is a significant omission for both men, that the Bible is not their starting point. As Lewis puts it quite boldly, the Gospels are in no way the basis of Christianity. Rather, the
events of Christ's life, his acts, words, (particularly the resurrection and its consequences) are the basis of the Bible and of the Church. 

Not all objects are ready-made for the subject's acceptance. In theology, to know God requires knowing him in his uniqueness and in his Lordship, that is, in terms of himself. As we pursue the object of theological inquiry, the rationality of the incarnate Word directs and controls our emotional approach, our mental habits, our logic. Where this situation is reversed, where we begin by reflecting upon instead of receiving—by contemplating the enjoyed instead of first enjoying (using Alexander's language) we misconstrue our subject-matter by insulating our thinking and feeling within itself, with no empirical referent.

1. Empirical Questioning in Lewis and Torrance

Edmund Husserl rightly pointed out that science flourished by fencing itself off from speculative questions about the possibility of its knowledge. Instead, it boldly presupposed the reality of its object and the possibility of knowing it further.

In effect, science has its own dogmatic starting point. It refuses to attend to scepticism by stepping outside of its own arena and leaves its epistemological justification to its own positive content.

The priority of the participatory object-centred approach to knowledge has implications for the kind of questions which are appropriate in science. For Torrance, the initiating force behind this epistemological reversal from speculative to concrete, empirical questioning, is the genius of the Reformation. But the Reformation is in an important sense a re-awakening of a fundamental Christian insight long imprisoned in a Medieval twilight.

Medieval theology followed Aristotle's order of questioning. It began with an abstract question, what is the essence of an object (quid sit) and proceeded to ask about the possibility of such knowledge (an sit). Only then did it ask about the actual nature and state of that knowledge (quale sit). This process begins with abstract questions about
possibility and then proceeds to questions of actuality. Calvin reversed this procedure by beginning with the last question first. What is it we actually know? He allowed the actual object we know to determine the answer to the question of how we know it. As Husserl noted, this is the way of modern science. It begins with the actual epistemological situation, not with abstract questions of essence and possibility.

Similarly, if in theology our answers are to derive from the object of inquiry, and not elsewhere, the question becomes who is the object we actually know and experience in the Church? Valid prescriptions and questions about the essence of God arise from, not apart from, the actual knowledge of God in Jesus, the incarnate coming of God.

The problem with generalized and abstract questions concerning God is that they do not attend to the specific and actual context of knowledge. But concrete questions alter our general questions and make them open to the specific and empirical. In the former process our questions struggle to clarify and elucidate knowledge we already possess and straighten out logical connections in ideas. In contrast, Calvin's empirical, interrogative questioning sought a new knowledge not inferable from previous knowledge. It is a direct, intuitive apprehension of the object. Thus one cannot say in logical terms how the knowledge occurs.

Empirical questioning is not the art of drawing distinctions or untangling knots in old knowledge, but is the art of finding things out—of discovery. Concrete questions do not rely on the mind's ability to infer, but rely on the object to disclose itself. It was this direct, active questioning which Calvin applied to the books of God.

It follows that we must not bracket off our actual knowledge in order to discuss the question of possibility. We sin against the empirical method when we ignore the empirical evidence and instead defer to how detached, generalized questions of the knowledge of God ought to arise based on certain a priori cultural standards. The approach to the natural world with an implicit, a priori self-certainty was
one of the ballast stones of Greek dualism which had to drop off before modern science could become airborne. It was dogmatic science which advanced real knowledge of the world and replaced knowledge by deduction from abstract principles of reason with direct and intuitive empirical discovery of the object's own inner connections.\(^{151}\)

The movement from ignorance to knowledge is a creative, intuitive discovery. Though each object prescribes its own unique (subtle but not malicious) road, the road signs, the working axioms of discovery recur again and again. The once-atheist Lewis and the theologian Torrance could only progress along the same road.

On the issue of abstract questions of possibility versus concrete and empirical questions of actuality, we have a remarkable comparison between Torrance and Lewis which shows at once their epistemological unity and divergence. The issue arises in the context of communicating the Gospel to the nonbeliever. How does one teach the nonbeliever to move from the abstract question of the possibility of God to the empirical question of his actuality?

This is a practical epistemological problem. Theology as a practical science must probe here too. When a nonbeliever encounters the question of God's existence and beneficence, Lewis reckons it "must appear as a speculative question like any other".\(^{152}\) Lewis is content to operate within the sphere of speculative questioning, for that is where most inquirers habitually begin. As an artist seeking to communicate with an audience which does not share his beliefs, Lewis appears far apart from Torrance's scientific-dogmatic purity which brackets off questions of possibility. Lewis goes on to say, "Indeed, it is a speculative question as long as it is a question at all." But once this question is answered positively, "then you get a new situation". For to believe this God exists "means you are now standing in his presence. And now instead of variations of opinions, there are variations of conduct before a person...".\(^{153}\) Our response to what is real both is and ought to be quite different from our response to the imaginary or hypothetical.\(^{154}\) Lewis tells the speculative
inquirer
that his questions
will not do for very long •. A pos'itive answer to the question
of God demands a change in our
intellectual
approach and a change in our.behaviour.
The
alteration
"from int·ellectual
opinion to personal
conduct be'fore
the Ltving Goa· himself demands we cast off.the
proud bearing
of impartial
judge from wht~h intellectual
discus~ions
atiout
religion
begin, and stand naked before one who is the Lord. 155
Thus w~ see'that
for Lewis and Torrance,
the quality
of
the obj~c't d~terniines
the nat.ti"re of our questions
and inevitably alters
our approach·.
This is an implication
of Lewis'
radical
openness and.receiving,
and not of usin~.
From the
outset,
therefore,
we must be open to change our approach to
th1 object.
A radical ·openness to the object means that the
inquirer's
speculative
beginning
is self-aborting
if and when
it ge-nuinely fac~s its object .. The key is to allow 'the object
to form and alter
ohr question.
When this is done, a ·transitio~ occurs wi'thin the epi~temological
process.
We move dynamicai'ly' from abstra·ct
refl-ection
to personal
participation
in
the ooject of inquiry.
Here is scientffic
questioning
in
action.
·The nonbel.'iever
does not begin his thinking
in. the
oepth' of the a posteriori
scientific
objectivity
Torrance·
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prescrii:>es. i .• But i'f he is t'o pass from !. priori
~pinion to
empirical
knowledge 'he must end there'.
Wbere t~~rance prescribes,
Lewis describes
the-cognitive
journey that must occur
ff ·we are to move on fr'om abstract
questioning
to real encounter 'with empirical
reality.
He·re is the difference
between a scientist
arid an a'rt'ist:.
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Obje'ct...;·centredness,
·empirical
openness and restructuri"ng
of
orle..'s mental framework are all implicit
or de facto in Lewi~'
scenario.
But significantly,
unlike Torrance,
in the"· in~erests
of communication
there·., is no outright
or dogmatic rejection
of
the initial
speculative
questiorl.
Instead,
Lewis describes
how the intrinsic
rationality
~f the object of inquiry compels
us, if we are honest,
to change and adapt our inquiry 'to 'the
empirical
si~uation.·
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strategy
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as a ma'tter of)\ style i'rr theological
artistry,
Lewis ~oes not condemn the s'peculative
approach.
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Rather he s·e·eks to display
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The transformation from centripetal to centrifugal thinking had a fruitful ending for Lewis. In 1921, Lewis postulates "some sort of God as the least objectionable theory; [in regards to matter] but of course we know nothing". Ten years later, he writes the same correspondent: "I am a Christian". For Lewis, as questions move from the speculative outer fringe, where they are most subject-laden, and proceed on to the concrete, empirical, they become increasingly object-centred and hence, object taught. Lewis portrays the transformation of possibility, speculative questions into actual, empirical questions and penetration in which objective knowledge occurs. This same movement from speculative questions of possibility to empirical questions of actuality will be seen in Lewis' imaginative description of the a posteriori epistemology with which he implicitly operates, and that which Torrance scientifically prescribes. Formally, Torrance notes, we put our questions to nature, but in appropriately open questions, the material content of our questions alters in the wake of the object's impact upon our understanding. Torrance says we must know God as triune from the start. But Lewis, as an adult convert, did not begin his inquiry into God with an explicit belief in the triune God. His conversion has several prominent landmarks on the journey to trinitarian faith: idealism, theism, and only then belief in the incarnation. Along the way, the Trinity was just another foreign and rather arrogant dogma—until he had experienced the risen Christ. Lewis had to live the ontological argument. His theological and fictional works describe this lived ontological argument, that is, the impress of God's being on his thoughts and feelings. It was a heuristic process. He began with abstract, rationalistic questions and ended by indwelling the reality he had grown to trust. But his radical commitment to objectivity, his rational and emotional openness, and his object-centredness were crucial in leading him on. In communicating his own pilgrimage to Christ, he well understood how the nonbeliever can be so far away from comprehending. Lewis the pilgrim-artist portrays the heuristic process; Torrance the theologian-scientist dogmatically
expounds the rationality of the credo.

Lewis and Torrance agree that credo ut intelligam is the beginning of all knowledge, that radical openness is essential and that presuppositions must be questioned in order to allow the object to teach us appropriately. What is the difference between them? The answer is that Lewis is an artful teacher; Torrance is a master scientist. Lewis as an artist concerned with communication, uses a didactic, descriptive method which de facto represents the intellectual adventure of discovery or rather of being discovered by God. Didactically, Lewis begins where nonbelievers begin, with God as a dilemma. This is illustrated in Mere Christianity. He begins phenomenologically with man's predicament as a sinner who is aware of a morality he cannot and does not fulfill. Lewis then shows how Christianity both created and addresses this crisis. Jesus is thus Lewis' "secret starting point" whose presence and Lordship is in, with and under his anthropological discussions and descriptions. 159 Torrance starts dogmatically with God--his object. Revelation. He asks the question cur deus homo? from the point of view of his object, not of man's predicament. Lewis writes a theological detective story, Torrance a precise, scientific formula.

Does Lewis seek to establish a natural theology, that is, a natural point of contact with the Gospel based on some natural link, some analogia entis through which God encounters us? No. The point of contact is God initiating, God penetrating our self-chosen autonomy. As an artist, Lewis expresses a three-dimensional reality on to a flat two-dimensional surface. He does this in order to accommodate his knowledge of reality to his hearers by suggesting depth through the device of perspective. That is, Lewis seeks to communicate the reality of God to people who do not know God, by using factors within their experience as pointers to something outside their experience. 160 Lewis would agree with Athanasius that there is no comparison or proportion on the same level, "but of a para-bolic reference from one level to another that utterly transcends it". 161 One might argue this amounts to conveying the truth by means of a deception. 162 That is, he uses symbols to communicate reality. But all symbols, conceptual and imaginative, are inadequate in
doing justice to the reality they seek to convey. Though dogmatically, no point of contact exists but God's own in Christ, the artist may use his aesthetic tools to point to the reality of God's coming and trust the Holy Spirit to make use of his offering.

The endeavour to communicate God's point of contact through symbols is not unlike the theologian-scientist who endeavour to reflect the reality of God with imageless conceptual symbols. Similarly, Lesslie Newbigin notes that if he is to communicate at all to another culture (and unbelief may be regarded as another culture from the Church), he necessarily must describe Jesus in a way which inevitably will become increasingly less satisfactory as he grows to understand and absolutely accept Jesus as Lord. 163

None of us can begin to understand anything except by relating it to what he already knows and therefore to the models by which he has hitherto organized his experience. 164

These two approaches need not be utterly opposed. For example, the artist in portraying the quest for truth begins phenomenally by describing man's first experience of the religious life--"a knowledge of the broken law". 165 Phenomenally, I am punished. But dogmatically, one points out that this experience reveals that the Father's love undergirds and is the reason behind the discipline. At times God's love is experienced at the point of our rebellion against it, that is, in my experience of disobedience. I am conscious of my self-will. Man stewed in guilt and sin over against the reality of God's love. Lewis the theological artist communicates God's love by beginning in the middle with man's estrangement and his fallen awareness of the self-will. It would be wrong to translate the (de facto) awareness of disobedience to the dogmatic (de jure) statement that God loves us only once we have repented. That would be to allow experience to control dogmatics. One must not abstract dogmatic statements from an artist's or an psychologist's vivid phenomenological descriptions. That is akin to extracting the logical implications of Biblical statements, without regard to the intention. When Milton describes the war in heaven and Satan's powerful assault, he is not making the theological
statement that heaven might have been defeated. That is beyond his province. He wants us to grasp the power and arrogance of hell, not to speculate on their respective strengths. Theologically, the result was never in doubt.166

The knowledge of sin implies God. The portrayal of man's sinful state described in Romans, is re-presented in book one of Mere Christianity. Lewis penetrates artistically into non-being and seeks to understand it, in the wake of Christ. He identifies the steps that led him to Christ and communicates his own experience of reality to others who need to make (he believes) a similar journey. The non-believer reading the phenomenal account (testimony) moves along with Lewis on his journey. He is then given by artistic suggestion the resolution, what theologians term incarnation, atonement and resurrection. Lewis the artist is an apostle to the imagination; Torrance the scientist is an apostle to the intellect.

2. Object-Centredness as A Posteriori

The genius of the object-centred involvement of the knower, is that it allows the object to prescribe the mode of knowing. It follows that we must always be strongly a posteriori in our epistemology. All theory must be rigorously contextualized and moulded by the object and allow each particular field of knowing to direct the human role. For, as Torrance reminds us, we cannot abstract method from the actual process of concrete empirical investigation and consider it autonomously.167 Lewis artistically describes this epistemological process and thereby gives us the taste and feel for an a posteriori epistemology. That is the genius of his use of analogies.168

All theory must have an organic connection to empirical structures. A scientific question in one field will need to be reframed in order to be appropriate to the new field.169 Sometimes questions and procedures in one field may be quite inappropriate in theology and may be meaningless. Lewis once mused that perhaps half the great theological questions were not even answerable.170

There are some [questions] to which I may never know the answer: If I asked them even in a better world, I might (for all I know) be answered as a far greater questioner was answered: 'What is that to thee? Follow thou me.'171
This self-critical process is a necessary ingredient of
the a posteriori quest. Torrance warns us that unless the im-
 pact of the object alters our questions, we end up with the
"possibility" kind of questions the Pharisees asked, questions
which demand evidence and verification only within prescribed
conditions that are in accord with one's predisposed desires.
But such questions presume a self-authority which is completely
unself-critical. 172 And so when Jesus responded with a question
concerning the authority of John the Baptist, that is, with a
question which asked them a question about their sin and need
for repentance, they avoided further discussion.

Because form and method in any field are determined only
by the actual content, a proper theory of knowing in its par-
ticulars emerges only towards the end of scientific inquiries. 173
A posteriori science means a posteriori epistemology. As Lewis
puts it, to ask if the universe looks like the work of a good or
an evil God omits all the important facts. Christianity is not
the conclusion of a philosophical debate, "but a catastrophic
historical event following the long spiritual preparation of
mankind". 174 Torrance sees this as the precise reason for Karl
Barth's vigorous opposition to natural theology. In their
traditional forms, natural theologies consistently ignore this
basic a posteriori scientific procedure. If the object yields
its own rational structures, its own physical concepts,

It is the actual content of our knowledge of God,
together with the rational method that inheres in
it, that excludes any movement of thought that
arises on some other independent ground as ulti-
mately irrelevant and as an inevitable source
of confusion when it is adduced as a second or
co-ordinate basis for positive theology. 175

As theoretical problems arise within a field of knowledge,
one must not retreat from an object-centred, a posteriori ap-
proach. Théologie deals with conceptual and practical dif-
ficulties "from within our actual knowledge of Jesus Christ". 176
To abstract theological statements from the centre to which they
refer and where they have their truth and try to answer critical
questions from a standpoint foreign to their object is artifi-
cial and unreal. 177

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3. Object-Centredness as Empirical Investigation

"Never rely on second hand information when first hand is available." 178 Lewis' brisk maxim aptly expresses his concurrence with Torrance that the secret of science's superb rationality lies in experimental empiricism. Natural science triumphed because it directly explored the object and yielded a fertile harvest of concrete knowledge. As Macmurray notes, metaphysicians may talk the most about matter, but scientists know the most about it because they discuss it in the immediacy of active investigation into material facts. 179

The great modern hindrance to immediate, empirical inquiry must be traced to Kant's categories of the understanding, which dictated a priori to nature what she could or could not reveal about her own structures. Kant's critical idealism entails the triumph of abstractive, theoretical knowledge over the concrete knowledge gained by experience. This is the capitulation to idealism which Torrance decries in modern philosophy. 180 In all our theoretical reflections we must never forget that "all knowledge of reality begins with experience and ends with experience with arduous intellectual work in between." 181

What then are the implications of a forthright, empirical commitment for theology as well as natural science? Lewis was adamantly committed to the priority of experience—first hand knowledge, as he says, in all fields of knowledge for the reason that experience is very honest. Though we may take many wrong turns, if we keep our eyes and ears open, we will not go too far wrong before warning signs appear. "You may have deceived yourself, but experience is not trying to deceive you. The universe rings true wherever you fairly test it." 182 Here is a remarkable confession of faith in the heuristic benefit of empirical investigation.

Lewis' trust in the empirical encounter as the true guide to reality is reflected in his approach to philology and semantics. "Only by experience, not presupposition, do we find out what people mean by words." 183 When the Church of England sought to change its liturgy, Lewis hoped the revisors would prepare for it with a "prolonged empirical study of popular speech as it actually is, not as we (a priori) assume it to
Discarding what we presume people mean by words, "We must be wholly empirical. We must listen, note' and memorise". When asked to speak about evangelism, Lewis prefaced his remarks by clearly noting that his thoughts on the matter were "purely empirical".

This grasp of the empirical presence of God coupled with an awareness of his ontic priority for our epistemological reflections, led Lewis to conclude that how God thinks, has acted and acts towards us, takes ontological and epistemological priority over how we think and act towards him. "Indeed how we think of God is of no importance except in so far as it is related to how he thinks of us."

Because theology as an empirical science is about inquiry into its object, prayer as active dialogue with God becomes of fundamental importance. One must not abstract a "theological method" that works by itself, but one must dare to learn first hand of God. If theology must not cut itself off from God by beginning with presuppositions and definitions or formula about God (even excellent ones), it must instead begin with worship, prayer and thanksgiving.

4. Emotion in Science and Art

We have already discussed the scientist's dual axiomatic commitment to truth and honesty in research and to the rationality of the object he explores. The point I wish to make here is that the scientific method is not a sophisticated mechanism. Modern historiography of science has refuted the empiricist interpretation of science. Our commitments play such a crucial factor in axioms of belief and in the desire for truth that science can and must be called personal knowledge, as PóIanyi has so thoroughly documented. Objectivity and personal commitment are not polar opposites, (nor are faith and reason). Properly understood they are the dynamic of science in the making.

Science as something existing and complete is the most objective thing known to man. But science in the making, science as an end to be pursued, is as subjective and psychologically conditioned as any other branch of human endeavour.
Einstein has born compelling witness to the "passions" of science. He clearly recognized "the devotion which pioneer work in theoretical physics demands", and deplored the fact that most of science's interpreters and followers "fail to grasp the strength of emotion out of which alone, such work... can issue". In this way Max Planck laboured to unite quantum theory and electro-dynamics into a single logical system. His work came not from self-discipline or will power, but was "akin to that of the religious worshipper or the lover; straight from the heart". Similarly, Butterfield has spoken of Copernicus' "obsession" with uniform circular motion and the sphere as a perfect shape, which led to the overthrow of Aristotelian physics and Ptolemaic astronomy. His passion affected his whole view of the universe. Similarly, Kepler combined mathematical genius with religious fervour. His passion for order and the harmony of numbers led to a mechanical universe of clockwork precision which for him was glorifying to God. Scientific activity must not be misconstrued as primarily a cerebral achievement. Einstein says it quite clearly: "Most people say it is the intellect which makes a great scientist. They are wrong: it is the character".

When Kierkegaard made the shocking statement 'truth is subjectivity', he was asserting that true thinking is "infinitely interested thinking". It is the very opposite of irrational or solipsistic thought or the wish-fulfilling desire to believe. For Torrance, any true scientist is passionately involved in his object, for the sake of rationality and the control of subjectivities. The result is not detached thinking, but an object-centred thinking which "lays itself open to whatever it finds in order to take its shape from the object".

A proper passion is essential to acquire meaning. Lewis was especially fond of Spenser's poetry, in part because he stood at the opposite pole from a scholastic philosopher. For Spenser (and for Lewis) the intensity of passion purifies. Their whole outlook had been formed by radical openness and indwelling in the works for their own sake, seeing them in their
inherent coherence, and being illumined by their own brilliance. Such a passion purified Lewis, a lover of myth, legend, story and poem, and led him to consider 'new' theories about the real meaning of Shakespeare's plays or a 'demythologized' meaning of the New Testament utterly wrong-headed. "I see--I feel it in my bones--I know beyond argument--that most of their interpretations are merely impossible." 

5. Participatory Verification: The Way of Suffering

As our theological knowledge develops, we test and clarify our beliefs and steadily sift out the true from the false so that we do not have a blind commitment to God. The journey to verification means we "must be prepared to commit or refrain from committing ourselves" as we allow reality to reveal itself. Ultimately, verification comes only as we abide in the Word of God's own circle of love. No disclosure takes place apart from participation in Christ's own reality. Only he who indwells reality can weigh its evidence properly.

Participation may become for us a very painful objectivity. This creates a dilemma. Macmurray describes how our acculturation process has trained us--we train ourselves and our children--not to be open and sensitive to reality because, practically speaking, we know it hurts to be sensitive. By developing a capacity to enjoy beauty we have ipso facto acquired a new awareness of ugliness. The capacity for joy means a new sensitivity to pain as well. But generally speaking, we prefer the absence of pain (hence, stagnation), to the joy of knowing.

Here lies the unacknowledged psychological attraction of an epistemology which entails a detached, abstractive objectivity. The participatory experience of suffering, therefore, is one of the most important and neglected elements of participatory objectivity. Small wonder. Genuine sympathy is only real as we share a distress. Epistemologically, as we "suffer" an object, we also reduce our own autonomy, our self-control to the reality in which we share. If, as Christianity asserts, we are rebellious creatures, our aversion to allowing the reigns of knowledge to pass from us is an agonizing
procedure. To know God, therefore, is not primarily a self-realization, self-fulfillment or self-understanding, but a death to self. The roadblock to theological knowledge (the avoidance of suffering and pain), is therefore enlarged to a feverish pitch, making theological knowledge an impossible venture. The only question which grasps the enormity of the problem is St. John's: "How shall any of us be saved?" And Christ's answer is the call to suffer death to autonomy, self-priority and auto-salvation. The judgement of Christ's answer upon all human possibility must be faced.

6. Participatory Objectivity

To describe scientific knowledge, as Polanyi does, as personal knowledge, is not subjectivism. It is a confession of amazement at the "union which the act of knowledge creates between the knower and the known." The mind does not create this union (Kant), nor is it a rubber stamp impression of external objects (Locke). Union is a process of indwelling, not abstraction. This has nothing to do with imposing subjective factors on to the content of knowledge, but relates to the bearing of one's thoughts upon reality. That is why Polanyi thought Dilthey was quite wrong to see empathy (a less precise act than indwelling) as what chiefly distinguishes the humanities from the sciences. A proper indwelling underlies all knowledge.

In his literary criticism, Lewis openly warns his readers that he is a Christian. Thus he does not feign impartiality to Milton's viewpoint in his analysis of Paradise Lost. Similarly, in all science, Torrance argues the difference between subjective prejudice and belief is that beliefs are admitted openly and tested as the scientist deliberately employs them in the actual scientific work of discovery and verification. Lewis does not apologize to readers for his non-neutrality. It is an advantage to understanding and expounding Milton. "What would you not give to have a real, live Epicurean at your elbow while reading Lucretius?" A similar rejection of neutrality is made by Newbigin in the dialogue with other religions. Newbigin argues that the only proper way for Christians to engage in dialogue and evangelism is by openly confessing
Jesus Christ as Lord.\textsuperscript{214} Newbigin sees John Hick's dialogue with other religions as a feigned objectivity which hides his own commitment to an intellectualized form of idealism and which fails to take seriously the uniqueness of either Christianity or Hinduism.\textsuperscript{215}

Similarly, Lewis criticizes the 'Green book' in The Abolition of Man, for arguing that all values are subjective—except their own unacknowledged ones. Their scepticism is reserved for other people's values, not for their own.\textsuperscript{216} When Pannenberg criticizes Barth for the supposed subjectivism which his \textit{credo} posture entails, he too is guilty of ignoring or refusing to admit his own fiduciary commitment which conflicts with Barth's acknowledged faith. That is, Pannenberg shares the post-Enlightenment confidence that man's critical reason can and ought to prescribe what is and is not rational.\textsuperscript{217}

For Lewis, only from within do we really understand the Tao, the moral law. Significantly, Lewis even goes so far as to say that only those practising the Tao will understand it.\textsuperscript{218} Hence it is Paul, the Pharisee, the man who takes the Law seriously "who learns where and how the Law was deficient".\textsuperscript{219}

To judge anything properly—Christianity or Eliot's poetry, "it's necessary to have got inside both".\textsuperscript{220}

In his inaugural lecture as the President of the Oxford Socratic Club, Lewis gave classic expression to his 'committed rationality'. At once he lauds Socrates' exhortation to follow the argument wherever it leads and yet he clearly announces that those who founded the Socratic "do not for one moment pretend to be neutral".\textsuperscript{221} The subject matter was Christianity and specifically, the conflict between Christians and non-believers. But Lewis saw no incompatibility between reason and commitment.\textsuperscript{222} One unforeseen but happy result of this endeavour was that "everyone found how little he had known about everyone else".\textsuperscript{223} This worked both ways. The difference was indwelling. "We must attempt to enter for ourselves into the attitudes involved."\textsuperscript{224}

Torrance expounds the call for participatory objectivity when he urges science to

\begin{quote}
recover the natural unity of knowing and being.
This demands an integrative, intuitive thinking
\end{quote}
in which personal and objective are fused together. 225

Once we grasp that rationality inheres in reality we replace a process of indwelling for abstracting, participation for detachment and belief for scepticism. 226 Participatory objectivity brings us to a unitary understanding of rationality which grasps the difficult but essential truth that knowing is an activity which involves the whole man in correlation with the wholeness of one's object. 227

Here a question arises which may help us evaluate other religious truth claims. Can an ugly or bad object be received for its own sake or only used? In art, Lewis suggests that pornography can only be used, not enjoyed. 228 It is essentially self-centred, not object-centred. Once at a bus stop, he recalls how he sincerely tried to receive an advert of a girl and a fellow in a pub. "It would not endure the treatment." 229 The poster was not a pleasing object. But it could be used to gratify sexual desires.

We may enjoy ideas presented to us by bad art, for example, a wish-fulfillment suggestion about entertaining a pretty girl in a pub. By the peculiar state of enjoying what is not there and ignoring the real person I am, I may use the poster for its images and ideas. Similarly, I may not be able to enjoy an unattractive picture of an old man and his dog. But I may use the picture to enjoy the idea of 'fidelity'. The striking limitation of such a method is that a picture so enjoyed "never gets you beyond yourself. A picture, so used, calls out of you only what is already there". 230

When Bultmann de-mythologizes the Gospels, the question we must put to him is: "Do you do more than use it to enjoy the valuable existential truths of Martin Heidegger's philosophical anthropology or do you receive in them Jesus as absolute Lord of heaven and earth?" The problem is getting beyond oneself. Does the Gospel so used call out of us only what is already there or what an important critic or philosopher has perceived? Has a new frontier been crossed into the strange new world of the Bible? Or has one come heavily armed with a prior-understanding, namely, to enjoy only what
correlates with what we know already, that is, "the understanding of human existence which the New Testament itself enshrines."?

It is interesting to notice that what we have just done (with Lewis' proctoring) is to make use of a subject-centred method for the purpose of analysing our object. To focus on the activity of reading, thinking or worshipping may teach us that different objects lend themselves to different kinds of enjoyment. But some objects cannot possibly be enjoyed, only used. Thus, enjoying a woman's or a man's magazine is a very different activity from enjoying Dante. In enjoying the former, we focus on the self and therefore really use the magazine. The latter is a focus on Dante's world, and thus a receiving. Dante may, of course, be used if it is subjectively interpreted as a veiled psychological portrait. The New Testament may be read subjectively as a portrait of the early Church's religious psychology (and ad nauseam the portrait of the early Church is really a portrait of our own self-understanding of the early Church) and not of Jesus.

7. Participation as Enjoyment

One need not be a terribly observant reader to notice from Lewis' constantly joyous descriptions of nature in his letters to Greeves, how open he was to nature's beauty and how deeply he enjoyed it.\(^\text{232}\) In knowing nature, there can be either an arid classification knowledge or a rich sensuous delight which is far deeper than, but not excluding, intellectual satisfaction.\(^\text{233}\) In *An Experiment in Criticism*, Lewis defends the excitement and joy one feels in reading literature, as being as valid as the classificatory inquisitiveness which is aroused in the scientist or philosopher. He wholly approves of a vicarious participation through the characters in their pleasure, the winding up and down of their anxieties, etc. The weakness is enjoying stories for no other reason.\(^\text{234}\)

So it is with theological knowledge. "Love by definition seeks to enjoy its object," says Lewis.\(^\text{235}\) If God is our object, then enjoying him is an organic part of knowing him. This open enjoyment and delight therefore should be unashamedly confessed at the very heart of what it means to know God.

Lewis believes enjoying God was the living centre of
Judaism. Thus in the Psalms, this delight "is fully God-centred, asking of God no gift more urgently than his presence...". 236 From the Psalms to the Westminster Confession, there is a remarkable continuity of experience that man's chief end is to "glorify God and enjoy him forever". Chesterton once remarked that one can always measure a man's happiness by his gratitude, for gratitude is a fundamentally other-centred joy. 237 Thus it is significant to note that in the earlier Reformed catechisms the role of the Holy Spirit in creating and calling forth man's response of faith and understanding came under the rubric of "thanksgiving". 238

If all theological knowledge springs from gratitude, the best way to thank God is, as Austin Farrer suggests, to taste his goodness with our palate. It is dishonest to make speeches of thanks to a musician who has bored us. We may deceive a musician, but God knows our hearts. "Enjoyment is the sincerest thanks." 239 "Fully to enjoy is to glorify. In commanding us to glorify him, God is inviting us to enjoy him." 240 As we shall see, the road to joy, as to knowledge, is the way of obedience. 241

8. Participatory Knowing and Childlikeness

In wonder all philosophy began: in wonder it ends...
The first wonder is the offspring of ignorance:
The last is the parent of adoration.

--Coleridge 242

In all true knowledge, the road is the way of childlikeness. 'Childish' is often used disapprovingly, but Lewis isolates the negative qualities—fickle, cruel, boastful, ignorant, easily frightened, and uses 'childlike' to stress the positive: 'tireless curiosity, intensity of imagination, readiness to wonder, pity and admire' (not to mention energy, a well-thatched scalp and easy sleep). 243 The striking advantage of children over adults is their minimal stumbling blocks to object-centred enjoyment. They have devised fewer ways to eclipse the object with subject-centred motives. A child is unaware of the latest critical tastes and canon rankings. He reads not to improve himself, gain professional stature, etc., but "only to enjoy". 244

Until recently, modern criticism has commonly defined or ranked fantasy literature as belonging to children. Lewis
the literary historian notes how modern and local is such a notion. The adult taste for fantasy has been temporarily atrophied by a literary fashion to which children are obviously indifferent. Today, many who dislike fantasy or faerie are simply unable to enjoy it because of prior considerations.

Humphrey Carpenter considers Lewis' counsel of childlikeness to be a guise. Once inside, Lewis feeds his readers plenty of adult argument. But for Lewis, childlikeness is no guise, but the sine qua non of genuine knowledge. Childlikeness has nothing to do with age. "Youth and age only touch the surface of our lives." Childlikeness is essential in all literary criticism. No 'prig' can enjoy Spenser's poetry. Why? "It demands of us a child's love of marvels and dread of bogies, a boy's thirst for adventures, a young man's passion for physical beauty." Within Spenser lies a great palace of splendour, but for the sophisticate there is a real difficulty: "the door into it is so low that you must stoop to go in". The same childlike approach is necessary for Shakespeare. One comes to enjoy a play (for example, Hamlet) only by a 'willing suspension of disbelief', with the senses and the imagination. "If I err, I err in childishness, not in sophistication."

The whole point in reading, says Lewis, is to receive first, and only afterwards to evaluate. "Otherwise, we have nothing to evaluate." And young readers have this ability in abundance. But for an adult to achieve this ability demands a repentance, the hard work of "inner silence...that emptying out of ourselves by which we ought to make room for the total reception of the work". To read with the knowledge that we must judge (as do most professional critics and theologians) impedes our reception and participation.

The epistemological value of childlikeness compels Lewis to side with the ancients and the Medievals against the Humanists (Erasmus, etc.,). He characterizes sixteenth century Humanism as full of "spectral solemnity, the graded epithets, the dictionary language, the decorum which avoids every contact with senses and soil..." which seeks a richness and sobriety which never existed even in the classical writers themselves.

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Lewis also praises the child for attending to the concreteness of senses and imagination as the keys to approaching literature. "I am trying to recall attention from the things an intellectual adult notices to the things a child or a peasant notices... night, ghosts, a castle, etc...". Children attend to the very details which a grown-up may regard indifferently as worthy fodder for demythologizing. Lewis thinks the child is right when he points out that the second time the story is told, the details have been confused. "You think it makes no difference because you are not living the story at all."

Thus Lewis deplores literary criticism which is preoccupied primarily with motifs, themes and the like. They are abstractions and therefore interchangeable—"but the concrete imagination knows nothing of them". The child loves the details and the realism of fairy tales because "their absence hinders the serious suspension of disbelief which he wishes to make".

Lewis seeks in Coleridge's words, to "carry on the feelings of childhood into the powers of manhood". Tolkien points out that a childlike willingness to believe is not necessarily gullibility, but exists for the purpose of enjoying and knowing. "I had no special 'wish to believe'; I wanted to know." Granting, to enter Faerie one must have the heart of a little child, but

that possession is necessary to all high adventure into kingdoms both less and greater than Faerie. But humility and innocence... do not necessarily imply an uncritical wonder, nor indeed an uncritical tenderness.

Lewis never advocates childishness of intelligence. God wants us to be wise as serpents... He wants a child's heart, but a grown up's head. He wants us to be as simple, single-minded, affectionate and teachable as good children are... but also wants our intelligence to be in fighting trim.

Children grow up, not (hopefully) to lose their wonder, but that peril, sorrow and the shadow of death may bestow a deepened wisdom to their wonder.

In science, no less a rigorous empiricist than Francis Bacon likens the access to the Kingdom of natural knowledge to
the "entrance into the Kingdom of heaven, where into none may enter except as a little child". Torrance refers to Bacon in this regard. He especially has in mind the cleansing away of all idols of the mind in order that our understanding might be free and clean to observe reality more truly.

We have noted that childlikeness respects and revels in concrete details. This leads us into the theological implications of childlike participation. Lewis speculates that the monotheism of the Egyptian king, Akhenatem, failed to blossom because it was too transcendent to show us that God is an utterly concrete being. Since Christian faith tells us we must come to the utter particularities of Calvary and Bethlehem, perhaps it is best to begin at Passover, Ark and Temple. God's transcendent reality comes to man in the concrete particularities of space and time: Bethlehem, a Roman cross, and Nicodemus' tomb. A transcendence which strips these concrete empirical realities away is like the adult who confuses the details of a story the second time he tells it because he is not really living the story.

Torrance has written that the most important attribute of his mentor, Karl Barth, was his deep, childlike humility before the truth. "Barth has an uncanny ability to listen which is accompanied by an astonishing humility and childlikeness in which he is always ready to learn." These accolades to his mentor reflect Torrance's own priorities. It might be said that his own oft-repeated procedure, 'the object prescribes the mode of knowing', gives expression to the foundational emotion of childlike humility which seeks to learn and not to prescribe.

In the incarnate Christ, Lewis finds the central and concrete reality whose beauty and rationality echoes throughout his creation and which is central to art as well as theology. For a grown man to become as a child means he must empty himself and be "born again". Only as we empty ourselves of our wisdom and righteousness, may we participate in Christ's wisdom and righteousness. If in the incarnation, God himself actually became a little child, the principle, "in dying do we live; only in descending do we reascend" is a dim echo, a reflection of

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that truth in all avenues of knowing. 267

Through this bottleneck, this belittlement, the highroad nearly always lies... The doctrine of the Incarnation, if accepted, puts this principle even more emphatically at the centre. 268

Of course there is an alternative to childlikeness. Lewis has portrayed it in the vapid Episcopal ghost, who, on the brink of heaven, waxes eloquent upon his free mind and the impossibility of ultimate answers. The angelic spirit replies,

Once you were a child. Once you knew what inquiry was for. There was a time when you asked questions because you wanted answers and were glad when you had found them. Become that child again, even now. 269

But the ghost can only mumble something about putting away childish things. The Spirit's unanswerable answer: "Thirst was made for water; inquiry for truth." But the ghost's inquiry has little more to do with the ends of intelligence than masturbation with marriage. 270

D. Participatory Knowledge: An Epistemology of the Five Senses

No net less wide than a man's whole heart, nor less fine of mesh than love, will hold the sacred fish.

---Lewis 271

For Lewis and Torrance, while theological knowledge is empirical, it is not a matter of surface observation. Only mental, emotional and imaginative/intuitive experience, which culminates in action describes the true way of knowing. Christianity allows no separation between truth and reality, says Torrance. Truth cannot be apprehended apart from the real. "A man cannot form a genuine idea of the Truth without being altered in being." 272 Knowledge of Christ is existential knowledge in the sense that it is a unified act of cognition and decision. The will, intellect and whole person are involved in its apprehension.

Mere mental assent (like mere mental rejection) to doctrines is not primary, especially as one's climate of opinion can make one or the other at least temporarily inevitable. James reminds us that "Even the devils believe". 273 What is primary is the opening up of the entire self to know and to receive. This implies that the emotional life must be trained
just as much as the intellectual, and the body as much as the mind. Acting towards objects only with our brains must be replaced by acting with our whole selves. Lewis reminds us that systematic, ordered knowledge was never given by Christ, the Bible or even Paul. This very elusiveness to our systematizing intellect is because the Gospel demands a response from the whole man. This

should make it so clear that there is no question of learning a subject but of steeping ourselves in a Personality, acquiring a new outlook and temper, breathing a new atmosphere, suffering Him, in His own way, to rebuild in us the defaced image of Himself.

1. A Sensuous-Intelligible Unity of Experience

The whole man is to drink joy from the fountain of joy. —Lewis

Christianity is for Lewis, the poetry of the 'defeated senses', in that by its unfulfilled invitation to the senses lures us beyond them. For Lewis, even our favourite bodily pleasures ("eye hath not seen nor ear hath heard") are "dismal fancies... wide of the mark" compared to what lies in store. Why? Because "the body was made for the Lord". Reason and sense were both made to rest in God. Biblically, the two are a unit. The Latin 'sentio' means either 'I think' or 'I feel', and is unaware of the bifurcation we indulge. To 'sense', (originally 'sensus'), means "to experience, to know at first hand". 'Knowledge' in the Authorised Version refers to sexual intercourse. 'To see' is not necessarily visual, but like 'to feel', 'to catch', 'to suffer' or 'to taste' is a cognate which refers to first-hand experience. The point is that together, sense and intellect are meant to know and enjoy God. Faith and reason tell us God is adorable, but to find him so, we must act; we must "taste and see".

Truly to know and love God is to sensuously enjoy his presence. In the wake of Christ, Lewis sees each sensuous pleasure creation gives us (for example, splashing water from a brook on to our faces) as shafts of God's glory striking our sensibility. Lewis denies that nature qua nature manifests God's glory, but when the pleasing experience is integrated
christologically, and thereby seen and felt in its true theoretical-empirical unity, each creaturely joy is channelled organically into adoration of the Father, in the Spirit through the Son. Thus reality is a single, unified experience which we have cut up. Pagans cut up this unity and simply adore the thing. Secular man cuts thanksgiving and adoration right out of the experience and merely experiences. 284 (This is akin to Schleiermacher's cutting out all personal and objective cognitive content away from 'dependence' and making it the raw experience of all religion.)

It is this sensuous-empirical quality of participatory knowledge that we will now explore. We will linger over what the senses can teach us and how the sensuous-intelligible unity work together as we taste and see. Lewis' great capacity for object-centred openness gave him a gift of depiction for he listened with all of his senses as well as reflected, and is able to reproduce his own tasting of reality for others to enjoy as we 'enjoy' his consciousness and 'contemplate' his object.

2. An Epistemology of the Five Senses

In reflecting on epistemology, Lewis is concerned to emphasize all five senses. So too, is John Macmurray. For him, the senses are the gateway of awareness. 285 He reminds us that even knowledge of God is possible only through our senses of the empirical world. Therefore, it is vital that in order to be fully alive, we increase our sense capacity of the world. 286 For Macmurray, the key to using the senses, as with all things, is to use them not 'as means to an end, but for their own sake. They lead us to enjoy and to love the object, not ourselves. Hence in theology, adoration and praise is an inevitable outcome. 287

It is quite noteworthy for this thesis to see that Lewis, by his sensuous-empirical focus, demands we face up to the fact that Christianity is the religion of space and time, matter and sense. Spiritual joy must not be construed as sensuous things from which we need protection. Flesh and blood cannot inherit God's kingdom because they are too flimsy, not because they are too solid or distinct. 288 A negative spirituality
is forbidden to Christians because "their God is the God of corn and oil and wine. He is the glad Creator. He has himself become incarnate."\textsuperscript{289} 

Our language is also deeply indebted to our senses. Lewis reminds us that whenever we think of objects not perceptible by the five senses, we use words which refer to things that are sensible. Though thought is distinct from its accompanying images, our speech about things non-sensible "must talk as if they could be seen and heard".\textsuperscript{290} This enables us to reach into the emotions of reality as well as its reasons, its aesthetic as well as numeric and word rationality.

Lewis' concern for a full sensuous-empirical knowledge is seen in his approach to nature. He found that to enjoy nature genuinely demands more than a keen observational eye. When tasting the mood of a scene as well as its number, "my skin and nose were as busy as my eyes".\textsuperscript{291} The danger is to lapse back into a cerebral reflection upon nature, and to devour sense knowledge and relegate it as the ordering intellect controls, itemizes and organizes nature's bounty.

Radical sensory receptivity is an underlying reason why Lewis defends the doctrine of bodily resurrection. The soul, says Lewis, cries out for the resurrection of the senses.\textsuperscript{292} Lewis takes little pleasure in demeaning the value and worth of the physical world. He never envisages the physical body as the seat of sin. He reckons that if the imagination were obedient, bodily appetites would give man little trouble.\textsuperscript{293} Without the body, one vast realm of God's glory which we receive through the senses, would go unpraised.\textsuperscript{294}

The Christian artist uses an avalanche of images to suggest the glory of heaven, "but each is no sooner suggested than it fades--or dare I say? brightens into something invisible and intangible".\textsuperscript{295} In Lewis' portrayal of heaven, therefore, the senses, far from being diminished, are increased. There one may (for example) experience a waterfall as a whole--both its distant awe and immediate power. "I exulted."\textsuperscript{296}

It is a serious attenuation of the riches of first hand knowledge to represent it only by visual metaphors. Lewis, (not Torrance), says artists "lose something of the real love
of the earth by seeing it in eye-sensations only". To look in
depth, not just in the flat, means a scene is "not merely a
question of lines and colours but of smells, sounds, and tastes
as well.\textsuperscript{297}

Different objects call forth different senses. Pictures
demand we look. Music asks us to listen. In knowing God,
Lewis echoes the Psalmist's invitation to "taste and see".\textsuperscript{298}
Each organ has a special and unique function which receives
some aspect of reality's richness. The epistemological impor-
tance of touch—the tactile dimension, is often ignored
because we fear the immediacy it gives. Yet touch is the
organ of fruition and of action.\textsuperscript{299} Not surprisingly, Mac-
murray, the philosopher of man who acts, stresses this lost
insight.\textsuperscript{300} However, each organ has different talents, privi-
leges and obligations. The ear cannot say to the eye or nose,
"I have no need of thee".\textsuperscript{301}

It is the task of descriptive theology (theology as art)
to bring us to a full awareness of reality in a five sensory
way, that we might enjoy theology's object in a multi-dimensional
unity. Nowhere does Lewis the artist accomplish this better
than in his \textit{Chronicles of Narnia}. There we have no argument,
"only that 'quiet fulness of ordinary nature'".\textsuperscript{302} The special
cognitive tool Lewis uses for descriptive theology is the imag-
ination which reminds us by way of images to employ all our
senses in knowing God.

A descriptive theology which I argue complements Torrance's
scientific theology, finds its confirmation in the incarnation
itself. The Christian God is not known immediately, which as
Kierkegaard reminds us would be paganism.\textsuperscript{303} God comes to us
in space and time, matter and sense; God comes in his secondary
objectivity (Barth), indirectly, under the sign and covering
of the incarnate Christ. Because of the incarnate coming there
are things we know about God's love that angels never shall,
Lewis muses.\textsuperscript{304} For angels are purely intellectual and spiri-
tual beings, but we have sensuous experience by which reality
(God) is mediated to us.

Though Torrance is more silent on the role of sensuous
awareness in epistemology than either Lewis or Macmurray, it
is significant that his thinking is most informed by these concerns when he reflects on Christian worship. The sensuous-theoretical unity of our knowledge of God is most boldly revealed when in worship we engage in sacramental participation in Christ. In worship we meet Christ, God's being and act in unity. Therefore our worship is a proper response when faith wholly responds to God's activity by hearing his Word proclaimed and by participation in the eucharist where we respond to God's activity in an event. In our worship, Word and sacrament are bound together as an eschatological sign, first of the future healing and integration of man in total redemption, physical and spiritual. And secondly, as we take to our lips the bread and wine, we eschatologically participate by means of a physical sign, in the risen Christ, in whom that healing is a living reality we may taste and feel, cognize and contemplate. In this framework, the Reformed stress on the Word proclaimed does not diminish Christ's sacramental presence, for through Word Christ comes to us personally and worship reaches its focal point and culmination in personal encounter with the living Christ. It is then that Holy communion has its rightful place crowning faith with vision and enacting in our flesh and blood the real presence of Christ.

As with other symbols, problems emerge when we look at the eucharist and stop instead of looking through it to Christ. Though Torrance gives priority to Word over sacrament (as worship culminates in hearing the Word), he nevertheless sees the necessity of their unity in Christian worship and in Christian life.

Finally, a warning about a sensory epistemology: we are always tempted to desire experience and subjectivity without proper coherence or reference to reality. Auerbach records how the realism of Roman description degenerated into an emphasis on the magical and sensory at the expense of the human and objectively rational. Ironically this led to a sensory dehumanization. The later sensory vividness was not imitative. That is, it did not allow characters to speak and be known by reader's "out of their own premises, but looks down from above and judges". Wordsworth grimly prophesied that the artist in an industrial society would seek to excite the mind "with
gross and violent stimulants, which only creates a degrading thirst after outrageous stimulation.\textsuperscript{310} It is dehumanizing, says Kahler, for multi-media art to overload the senses to the point of blocking rational judgement and choice. Far from expanding consciousness, it drives the senses to numbness. Mere perception is not consciousness (that is, a larger scope of understanding and coherence).\textsuperscript{311} Modern man does not watch television for depth and involvement, "but for the sensuous involvement in the happening itself."\textsuperscript{312} There are similar superficialities and problems in worship that is not consciously grounded in the relations of Father, Son and Spirit. Both sacrament without personalizing Word and event without grounding in God's being, becomes a sentimental, mechanistic incantation, or an existential happening, where God is brought out and we partake of him in a dehumanizing display of magical priestcraft.

In science, Max Planck reminds us how the physicist progressively ignores the anthropomorphic, sensory specificity of heat, sound and tactile forces, in order to work out a mechanism based on energy.\textsuperscript{313} Classical mechanics with its three-dimensional space open to flat perception was by-passed for an understanding of non-observable four-dimensional space and a continuous whole.\textsuperscript{314}

Mere experience, as noted earlier, without a conceptual integration, is useless and proves nothing.\textsuperscript{315} A mystical vision of truth does not verify true religion. Rather, true religion verifies mystical experience.\textsuperscript{316} Verification and truth remain a mysterious unity of intellect and sense, Word and event.

3. Sight and Mental Vision

In discussing the five-sensory, mental-affectional grasp of reality, we cannot ignore the visual aspect of our indwelling in reality. First, we should differentiate various kinds of seeing or vision. Tolkien reminds us that fantasy is not easily dramatized because the former is imagined whereas the drama is actually beheld.\textsuperscript{317} The imagination is a mental, cognitive faculty, not a visual faculty. However, it gives us mental pictures.

On the other hand, though the eyes look, they may not see
what is actually there. If the inner light, the eye of the soul is darkened, we shall see nothing. The epistemological relevance of the visual imagination is that its mental pictures give us a lens through which we can focus our rather blurred intimations. Artful depiction is crucial in literature for it helps us "see through words...to the object."

For Lewis, poetry's task is to produce a mental vision, which includes passion as well. Lewis recalls Aristotle's notion that the intellect itself proves nothing. The transition from thinking to doing can be aided by a proper state of feelings. This proper feeling state only occurs by a proper vision of the object. Hence, the imagination contributes indirectly to right actions. The poet is the midwife of action. His pictorial efforts are especially important for aesthetic rationality because most people see better than they think. For Spenser as for Plato, it is reminders of beauty which most acutely inflame us. This is not because beauty in itself is more desirable than goodness or truth, but because (though we see only through a glass darkly) reminders of beauty are visual and sight, Lewis reckons, is our clearest faculty. Lewis believes in the future, the direct vision of wisdom will recover from beauty's unfair advantage of visibility. Regardless of Lewis' point here, it is the concrete manifestation and unity of God's beauty, goodness and truth in the incarnation which provokes belief.

By indirectly stimulating our feelings, an image as a representational object aids our worship and our thinking. An icon does not exist to fix attention on itself "but to stimulate and liberate certain activities in the...worshipper". A crucifix "exists in order to direct a worshipper's thoughts and affections to the Passion". But images are like teddy bears. They exist in order to be endowed with life and personality. Too close attention to them reveals their dullness and impedes a child's play. The more transparent and permeable the image, the better because the worshipper "wants to pass through the material image and go beyond".

A question arises. If we walk by faith and not by sight, should not a Christian epistemology deny the value of the visual?
Lewis would answer that in Scripture, worship, and above all in Christ, we unmistakeably behold the 'fair beauty of the Lord'. Unfortunately all such experiences come and go, especially go.

The operation of faith is to retain so far as the will and intellect are concerned, what is irresistible and obvious during the moments of special grace. By faith we believe always what we hope hereafter to see always, perfectly and have already seen imperfectly and by flashes.326

Torrance criticizes the 'vision' emphasis in Augustine for making understanding a kind of illumination. This resolves word into light, communication into illumination. Ultimately, it swallows 'word' as a metaphor for the shining of God's truth and as an illumination beyond reason and above words.327 One could also criticize Augustine's ontologism for its impersonal and nearly pantheist union of divine and human minds which ignores the incarnation and union with Christ as the backbone of participatory theological knowledge. But as for Torrance's concern, St. Paul himself is no more problematic for theological knowledge when he writes that knowledge and faith shall one day pass away. "But the greatest of these is love."328 Man's desire for the clarity of vision does not deny our need for faith. It is not necessarily the desire for an observationalist proof. Seeing is not believing. No senses are infallible. Seeing and hearing belong together as do Word and sacrament, and are brought together in Christ.

4. Imageless Thinking

There remains a realm of clear, precise thinking "which is wholly lacking in sensory contents", but not describable as sensation or perception.329 It is this 'imageless thinking' that has been rediscovered in our century, particularly by the new science, which has come to hold that the inherently invisible structure of space-time is primary in objective knowledge.330 This new mode of thinking frees science from a digital, causal sense-experience limited to perception.331 Knowledge, Torrance argues, results from indwelling the invisible, non-observable, imageless relations inherent in reality.332 Torrance calls this the rediscovery of imageless thinking because he finds
Hebrew thought relentlessly imageless. The Hebrews had "an ability to think without images" which was derived from the intuitive and immediate impact of the Word of God.\footnote{333}

One of Torrance's major goals has been to correlate theological and natural science by the use of non-picturing analogies, which disclose while not picturing.\footnote{334} He has drawn upon both Gödel's mathematical work to help clarify and co-ordinate language and epistemological structures, and Polanyi's hierarchical structure of levels of meaning, without images and picturing. Thus levels of reality are connected in a hierarchical manner but are not transferable down into sense-experience language without confusion. Each system is open downwards, but not upwards. In this imageless manner, Torrance's theological science seeks to refer to God without having to read back creaturely content into God.\footnote{335} Any yet the fact remains that Gödel's theorem and Einstein and Polanyi's hierarchical levels are natural, symbolic paradigms which were developed in natural science, and which Torrance then uses to express theological and transcendent truths.

In Torrance's theology, his "main concern is Word or logos". For Torrance, as for Calvin, the knowledge of the Word is intuitive, auditive knowledge.\footnote{336} Theological knowledge is therefore a heard knowledge.\footnote{337} Torrance realizes that imageless relations are prone to fall into an empty formalism which are detached from their objective reality in the sensuous, empirical incarnation of the Word of God.\footnote{338} Nonetheless, antecedent to the incarnation, the imageless Trinity is the ground and grammar of theology which invisibly coheres with the empirical reality of Jesus Christ.

In this regard, Lewis agrees that in science the real universe is not picturable. As Jeans notes in The Mysterious Universe, pictures which illustrate quantum physics move us further away from reality, not nearer to it.\footnote{339} If this be so in science, we cannot expect theological truths to be any more picturable ultimately--"or even explicable in terms of abstract thought".\footnote{340}

Lewis interprets the importance of hearing not primarily in terms of clarity, for seeing serves that function, but
interestingly, in terms of communication. In good writing, sound is an important part of meaning and the ear is as essential to please as the eye.\(^{341}\) Music is purely a heard art and communicates emotion most purely.\(^{342}\) Torrance acknowledges that 'theology as hearing' has limits. He notes that when John the Baptist refused to answer the Pharisee's unrepentant questions, he was refusing to answer in word when an act was required.\(^{343}\) Though Luther refers to putting our eyes in our ears in order to hear God, he also speaks of the visibility of God and his revealed kingdom, where the incarnate God rules and performs mighty deeds.\(^{344}\) In theology, "there is no disembodied word".\(^{345}\) Christian faith takes place, Torrance notes, in a kingdom which though it cannot be felt by hands, takes place in Word and sacrament through a spiritual event, but not one apart from seeing, hearing, tasting, etc.\(^{346}\) As Athanasius puts it, God's Word is his hand and his tongue. "For it is through his Word that God acts immediately without separation between his will and his acts which characterize human beings."\(^{347}\)

In science, James Clerk Maxwell was a strong proponent of 'embodied mathematics'. He preferred geometrical images and physical examples over merely abstract, imageless mathematical symbols.\(^{348}\) Olson notes how unhappy he was with a purely analytical mathematics which lost sight of physical phenomena.

Scientific truth should be regarded as equally scientific, whether it appears in the robust form and the vivid colouring of a physical illustration, or in the tenuity and paleness of a symbolical expression.\(^{349}\) Maxwell of course never identified any of his embodiments with ontological reality.

In science, imageless symbols of mathematics give us the finest precision of numeric rationality. In art, images give us sensuous-empirical contact, which engenders a precision of feeling and emotion. It is important for a theology of the Word never to emphasize imageless relations or a 'disembodied Word' (Torrance) at the expense of God's Word-become-flesh. This would unnecessarily make abstract what is concrete and foster an intellectualistic focus on ideas and conceptualizations (even
for example, *homoousion*), instead of a whole personed listening, tasting and responding in act and being to the act and being of God in Christ.

5. The Feeling Self and the Thinking Self

Lewis records that for Medieval man (following Plato at many removes) the total mind consists of a triad of Reason, Emotion and Appetite, the rational soul (thinking-head) governing his vegetable soul (emotions-belly) through his sensitive soul (moral values-heart). In the epistemology of the ancients, the Hebrew word Paul calls *kardia* would be more nearly translated 'mind'. In Latin, a *cordatus* man is a man of sense, not of feeling. The mind of man is neither pure reason nor mere emotion. For Calvin, piety (reverence and love of God joined) is an essential prerequisite to theological knowledge. Genuine knowledge is a product of all these elements culminating in activity. Thus Lewis tells Greeves that though he did not think Christianity false, ("My whole reasonable mind is convinced.") often he could not feel it was true. This was probably due, he admits, to the sceptical habits of the spirit of the age and the cares of the day. Earlier he wrote in his diary that his cold logic and facts were straight but shallow, whereas Greeves had feelings to offer. "Hence, I dealt in surfaces, but he in solids." The head keeps us straight, but the emotions give us depth. True knowledge brings these together. Lewis sees the two as ultimately complementary. Yet in a masterful piece of self-criticism, Lewis sees that he was overbalanced intellectually to the detriment of emotions, because of his repulsion at his father's ups and downs. He came to dislike and distrust emotion as uncomfortable, embarrassing and dangerous.

Following his conversion, Lewis diagnoses the fear of the emotional life as a shallow and crippling feature of modern educational life. Thus rather than safeguard children against emotion, like his pale opponents in *The Abolition of Man*, Lewis seeks to irrigate the emotional deserts of modern man and weed out false sentiment by planting right (rational) sentiment. Education which denigrates emotions as subjectivism, only starves students and makes them easy prey for propagandists.
"Famished nature will be avenged and a hard heart is no infallible protection against a soft head." 357

In Mere Christianity, Lewis confesses that whereas he once assumed the human mind was completely ruled by reason, he now sees that emotion and imagination are influential too. 358 Of course Screwtape seeks to make emotion unfashionable when everyone is lukewarm. When the world is Byronic, we decry mere understanding and rationalism. 359

A conversion is a movement and change in the whole of man. So it is that in a flash of insight Mark Studdock hears positivist-behaviourist slogans gush from Frost's mouth, and sees that such a view leads to Frost and his cruelty. The experience of that face and his prison experience "effectcd a conversion in his thinking". 360 The value of this literary portrait is that it gives us a concrete, non-analytic glimpse of the mind at work. That is poetry's epistemological value: it harmonizes attitudes with intellect into a wholesome, equilibrium and presents them in their living immediacy and inter-animation. 361

Depending on the angle and genre, Lewis mixes mental and affectional qualities in varying degrees. Thus in The Problem of Pain, Lewis writes a philosophical-theological essay on suffering. It is written by a man who has felt pain, but who seeks to have faith and to reason properly in the wake of the emotional agony which suffering produces. On the other hand, his book, A Grief Observed, journeys through Lewis' feelings and the quarrel with faith and faith's reasons. In both, a feeling intellect struggles, ("Lord I believe. Help my unbelief") but in a different balance.

When Macmurray understands reason as the capacity to act (not think) properly towards an object, he is affirming the validity of the feeling life to be as essential as the thinking life for rationality. 362 In fact, for Macmurray, thinking (like imagination for Lewis) is only indirectly related to acting, whereas emotions are directly related. (Similarly, the imagination for Lewis, is only indirectly related to emotion, by producing sensuous images which arouse our feelings.) But as Lewis has noted, often we must act first and trust our feelings
Properly understood, intellect and emotion make up the rational life which is crowned in the activities, not the thoughts or emotions, of a personal agent.

In his own way, Macmurray makes a strong case for a feeling intellect. Only the emotional life unifies and brings wholeness whereas analytical thinking divides. Hence if the emotional life is ignored, we do not know how to act and live. Characteristically, Torrance asserts that both feeling and thinking must be brought under control of reality. This is not dissimilar to Lewis' point that unless our imagination repents and changes (for it speaks to our passions), the intellect cannot apprehend properly or change its views. Therefore as an apostle to the imagination, Lewis seeks to baptize our passions through appealing to our imagination. Then we may see and love the beauty of truth in order to come to know the doctrine.

Lewis approvingly notes I. A. Richards' comment that belief-feelings do not follow reason except by long training. Instead, they follow grooves and ruts which already exist in the mind. The mind therefore needs its emotions trained and rerouted. But how? This is also Einstein's urgent question. For in the wake of a mechanized, technological society, man's emotional and personal life seemed much the worse, not better, for all his scientific progress. Einstein intuitively asks the right question, aware that the emotional life of man is crucial. It is, Einstein reminds us, the character that makes the scientist.

It is crucial, says Macmurray, to recognize that the emotional life needs education. Many of our feelings ought not to be felt; many we mistake or misrepresent because we are too insensitive to have the appropriate feelings. Lewis argues that in a universe where values such as rationality and beauty objectively inhere, certain emotional responses are either congruent or incongruent. That is, emotions must be trained to feel pleasure, disgust, etc., at things which really are pleasant or disgusting. But, says Macmurray, the emotional life cannot be trained by thinking. In Lewis' words, no theoretical justification of virtue can make a man virtuous. The intellect on its own is powerless against the animal organism.
Expounding Plato, Lewis argues that the emotions are trained when the reason rules the appetites by the heart—the seat of magnanimity. That is, the emotions are organized by trained habit into stable sentiments. 373

Macmurray believes we must recover the use of sense experience in order to be fully alive, for through the senses is the gateway to all experience. 374 And from Lewis we have seen that to be taught by sense experience means we must be taught through the mental organ which teaches by means of analogy from the five sense experience organs, namely, the imagination. If Lewis and Macmurray are right, the only man capable of thinking properly is the man whose belief-feelings are attuned to reality. Science flourishes in our society because modern man believes it is valid and he is prepared to give emotional and personal effort to labour in it.

Lewis is keenly aware of how important proper emotions are and so he meticulously avoids giving intellectual orders to them. The intellect, as we have seen, cannot teach the passions directly. When we give them cerebral orders, they ignore them (at the cost of guilt). This was Lewis' mistake earlier in his quest for joy. One ends up focusing on one's nervous system, trying to alter it by will-power. 375 If we consciously will to have the right emotion, we exhaust ourselves. But if we focus on the object and contemplate it for its own sake, the proper emotion comes as a natural by-product. That is, an object-centred indwelling organically arouses the proper emotion. Thus self-pity and self-assertion are equally wrong.

The answer is to shift our centre of feeling from the self to the world outside. As Macmurray puts it, if we are taught as a child to see, hear, taste, and smell objects for their own sake, without ulterior motive or concern for consequences, then our emotions can be healed. 376 For the object alone is the ultimate criterion of whether or not our emotions refer to it appropriately. 377

In the area of theological persuasion, Torrance admits there is a need to move people emotionally as well as to convince them rationally. 378 But ignoring or minimising the imaginative-aesthetic link to emotional rationality, he has
pursued the course of theological science, not theological art. He fears if we lead with feelings without word rationality, we lose integrity.\(^3^7^9\) In contrast, Macmurray and Lewis believe that unless feelings are moved, rational argumentation is ineffectual. If emotions are closed, genuine knowledge cannot occur.

In spite of making use of the ancient distinctions between reason, feelings and will, Lewis rightly questions whether the will and emotions are ultimately distinguishable. Perhaps "the great distinction between a great passion and the iron resolution are not all that different".\(^3^8^0\) Certainly the will and the passions are interwoven. Lewis praises the exquisite health of Spenser's imagination for combining moral purity and aesthetic power.\(^3^8^1\) This combination reflects the special task of the poet: to stir the emotions to do the right and to teach them the beauty of goodness.\(^3^8^2\)

The chief reason our minds fail to grasp reality is that we do not sufficiently desire parting with the comfort and familiarity of our own opinions. We often know very well right from wrong, but have not the will to follow the good when it concretely might cost us. We do not lack knowledge of the good, "we want the creative faculty to imagine that which we know; we want the generous impulse to act that which we imagine, we want the poetry of life...".\(^3^8^3\) In his Defense of Poetry, Shelley suggests that the great secret of morals is love and to be very good one must "imagine intensely and comprehensively; he must put himself in the place of an other and of many others...the greatest instrument of moral good is the imagination".\(^3^8^4\) The answer in part comes through poetry. Through poetic images art "entices" us to virtue.\(^3^8^5\) Poetry enlarges the circumference of our imagination by making enjoyable something besides the self.

Hence for Lewis, the intellect moves the will to good action by way of the imagination's illuminating the beauty of righteousness. Intellectual efforts to move us to right action which by-pass our aesthetic rationality move us only by rational and moral exhortation. The will desires the good when it sees the beauty of goodness. Here is an object-centred rather than consequence-centred motivation:

\(^3^8^5\)
Because Torrance interprets theology primarily as a science and does not stress the art of theology or the correlative function of the imagination, he has a tendency to make theology primarily an affair of correct thought forms, even though for Torrance, these are the result of a whole personed indwelling in the object. Torrance, using precise, imageless symbols, points intellectually to the truth and implores us to participate. Lewis, the imaginative man, believes that unless we see truth's beauty, we will not be persuaded. Therefore by using poetic language he arouses our emotions to risk the cost of participatory knowing.

Ultimately for Lewis, the beautiful and the good are a unity. The ethical is the aesthetic par excellence. Lewis applauds Sir Philip Sidney, who harmonized for his generation art, theology and ethics (delight, theology and the good). His synthesis succeeded because it is not a manufactured synthesis, but the natural form these things took upon Sidney's reflection.

Lewis descends to our five senses by incarnating the truth of Christianity in the passion and visual clarity of the imagination. Chad Walsh has testified that Perelandra gave him "the taste and smell of Christianity". An intellectual abstraction "had become flesh and dwelt in its solid bodily glory". Thus in Narnia, Lewis brings us inside Christianity imaginatively, to taste and feel the Christian vision of life lived in the presence of the incarnate Lord. This imaginative experience prepares us to understand the doctrine, its rationality, and its commitment to history, space and time. Lewis gives the will a proper passion in order to allow the mind to think correctly. Of course all this may be sub-Christian. A time comes when the lover of Aslan must dive into the baptism of Christ and his fellowship. Then Jesus Christ must confirm his own reality to him even as Aslan does to the children. One cannot but remark that if Lewis descends to the imagination in order to convert, how much more compelling is the saint who descends to the flesh and blood of love-in-action to his neighbour, where imaginative beauty is quickened to real life by healing hands and feet of love.

Macmurray is adamant that religion remains immature if
symbol, ritual and imagination do not culminate in action. Similarly, for Lewis, the imagination is merely the outer core of real man. He rejects Tillyard's "poetolatry" which lauds the courage of the poet to bravely "meditate on human fate". Sola art demands less virtue and takes less courage than stepping into a cold bath. Screwtape would prefer that all men confine their virtue to their imaginations and be malicious in their actions. For the will is the arena of concrete event. To imagine is not to act and only indirectly does it lead to action. It may never produce one good act. "As long as he does not convert it into action, it does not matter how much he thinks about this new repentance." In fact, the more we feel without acting, the less we will ever be able to act and in the long run, the less able to feel. Nonetheless, the poet has a valuable role to play. For to the degree he makes his readers enamoured of virtue and modifies behaviour, art produces genuine results in our historical world of space and time.

6. The Choosing Self and the Thinking Self

The notion of indwelling implies an active mind in that it does more than simply receive objects "but can in some way be said to enter into them". Coleridge saw the will as the basic energy which indwells. Within a participated understanding of knowledge, the interweaving of the thinking and choosing activity is radicalized. There is no will abstracted from intelligence; no intelligence exists apart from the personal agency of decision. Therefore Coleridge saw in the Calvinism of Jonathan Edwards the abstraction of will from intellect which makes God's power or will swallow up all other attributes. Similarly, one cannot discuss the mind without reference to the conscience, for the rational and ethical are also inseparably combined. Hence, as Farrer sees, to ask if the mind and the conscience denote mental faculties or habits is fruitless. Lewis echoes these concerns. Pride corrupts the whole of man. "The same rebellion which means misery for the feelings and corruption for the will means nonsense for the intellect." Elsewhere Lewis states "intellectual...error is inextricably mixed with moral instability, and the soul's desertion
of truth...has an element of willful rebellion as well as of illusion." A primary error of the Enlightenment was that it had "no conception that the purification of the will (ceteris paribus) leads to the enlightenment of the intellect". In later life, Lewis writes "when I say 'intellect' I include will. Attention is an act of will. Intelligence in action is will par excellence". As a matter of strategy, Screwtape seeks to engender "nonsense in the intellect" in order to "reinforce corruption in the will". But Screwtape's modus operandi as often darkens the intellect first by way of propaganda and half truths in order to assault man morally.

For Coleridge, the fallen will is the key to the fallen reason. Sin's essence is the willful desire for autonomy. Whereas the Greek way to truth was by enlarging and informing the intellect in order to purify the moral character, for Christianity the first step to truth is to cleanse the heart. Christianity restores the intellect as well because it presents to man "objects so great and bright...they cannot but enlarge the Organ by which they are contemplated".

The implication is that though truth be all around man, if the light reaches him against his will, he will reject the light. In The Great Divorce, this is the real tragedy of the dwarf/tragedian's refusal of his wife. The question is simply: shall we choose to be open to reality as it is, or shall we selectively seek to control it, imposing ourselves on to it and thus creating our own reality? To speak of the 'submission of will' is to speak the language of obedience, for obedience is the only road to love and peace. "Obedience is the key to all doors; feelings come (or do not come) and go as God pleases." Heaven is a place of unimpeded obedience.

In theology the epistemological question reduces simply to Von Weizsäcker's comment: "we must in fact know only whether we want to hear God at all--not where we wish to hear him, but where he really speaks to us". For Torrance, to apprehend Christ involves our cognitive and volitional capacities. That is, a change in our being is demanded as much as in our thoughts. This is why Kierkegaard steadfastly refused to isolate thinking from the whole activity of the empirical subject.
As John's Gospel puts it, we must not separate Truth from the way and the life.\textsuperscript{415} The error would be to bracket relation with God and turn it into a logical-formal relation. Because God's truth is his life, we cannot know truth without sharing or participating in his life, that is, without living the truth, doing the truth and without becoming true.\textsuperscript{416}

7. The Act of Knowing

Because God gives us knowledge of himself through his reconciling act in Jesus' life, our knowledge of God is bound up in our activity of love and prayer as the response of our whole person to God.\textsuperscript{417} Man's whole being is climaxed in his choice of action. This notion of a knowing agent is crucial for Lewis' participatory knowledge of God. As Coleridge notes, we remain ignorant "as long as we attempt to master by the reflex acts of the understanding what we can only know by the act of becoming".\textsuperscript{418} Lewis once asked a correspondent, "Do all theoretical problems conceal shirkings of the will?"\textsuperscript{419} Lewis was pondering the nature of gratitude—is it a feeling? His answer is to act your gratitude. The feelings will take care of themselves.

To say we know in an act implies that theological knowledge is primarily relational and ontological, not logical or an experience-in-consciousness. Knowledge as an act or event separates Lewis and Torrance from idealism. F. H. Bradley could quite eloquently state that "thought, feeling and volition are blended into a whole in real knowledge".\textsuperscript{420} In fact, this meant for Bradley what virtue means for Barfield, namely, "the state of virtue is a conscious realization that all parts constitute one whole".\textsuperscript{421} Idealism thus transforms the knowing of the living God through imitative participation in his concrete acts of love, into a mere affair of consciousness, an internal realization. Lewis describes how he had long held a "theoretic ethic", namely, to cease selfishness one must realise we are all part of Spirit. But following his conversion, he knew he must "attempt complete virtue and begin to do the will of the Father". From this concrete obedience, not a mental virtue, he began to "know the doctrine".\textsuperscript{422} This, in turn, led him to see his true self as a legion of lusts and selfishness
for which repentance was needed. Knowing the truth and doing the truth are intimately connected. The importance of the volitional in epistemology has implications for our doctrine of God. When Occam gave priority to God's will, he separated it from God's intellect.\textsuperscript{423} Calvin, in contrast, held to the primacy of God's intellect over will, and thus saw the knowledge of God not as arbitrary and inscrutable.\textsuperscript{424} For Lewis, God's goodness is his truest rationality; love is reason's final power and is much more important than God's omnipotence.\textsuperscript{425} Therefore he sees man's humanity as his participation in the 'concrete reality' of the moral life.\textsuperscript{426}

For Lewis, how a man acts is the core of who a man is. He may feel benevolent because he hates no one. But if he has never done a sacrificial act in his life, he is self-deceived.\textsuperscript{427} For Macmurray, knowledge without application is worse than useless.\textsuperscript{428} We are driven to conclude that knowledge in action is the primary form of knowing.\textsuperscript{429} The knowing self is fundamentally an agent who lives in space and time, and not merely a thinker or feeler. Abstract knowledge is valid but secondary, dependent on the primary knowledge gained in action.\textsuperscript{430} Thinking becomes perverse when it becomes a substitute for feeling and action.\textsuperscript{431} This contrasts with the concern in Greek thinking for an ideal world of ideas, not of actions, says Torrance. While Greek language has its formal logic, abstract concepts and substances, Hebrew language is a language of action.\textsuperscript{432}

Torrance finds in Athanasius a constant urging to integrity of life because proper thought forms or understanding cannot be separated from a way of life.\textsuperscript{433} The knowledge of God is not only through Christ, but with Christ and in the Holy Spirit.\textsuperscript{434} Knowledge is ontological and epistemological. Torrance finds the same point made powerfully in Anselm—where truth and doing are intimately connected. To participate in righteousness is to be in the truth and therefore to know the truth. Nothing is true except by participation in what is true.\textsuperscript{435} R. Campbell has noted that here is a great difference between Plato and Anselm. Whereas for Plato truth is fundamentally an object of contemplation (theoria) and enjoyment, for
Anselm, truth is something which is done (praxis). 436

Similarly, for Barth, "knowledge of God is obedience to God". 437 Christian truth is identical to the Christian life. As Lewis puts it, "At the maximum a man is what he does; there is nothing of him left over or outside the act." 438 Paul Holmer is right to argue, therefore, that the self in Lewis is a relation, not a thing. 439 The self as agent relates truly or falsely to reality, and his being is his relationship to what is real. True knowing is not a pure cerebral and conceptual accuracy, but involves emotion, imagination and intellect—each appropriately relating to the real. These aspects of rationality are then gathered up in a knowledge which involves us in concrete acts of enjoying, praising, loving and caring for God, for others and for creation.

Jesus, therefore, is neither a poet nor a philosopher-scientist, thinks Lewis, for his words are directed, not primarily to the imagination or the intellect, but to the heart, that is, the will and affection. 440 To Lewis' mind, the Christian apologist is one who speaks to the imagination and intellect, but the preacher is one who reaches the will. The apologist is one like John the Baptist; the preacher represents Christ himself. 441

Now we have come to the epistemological implications of Christ's command to love our neighbour. "Next to the sacrament, ...your neighbour is the holiest object presented to your senses." 442 In our Christian life of obedient service to all men, we serve and know God as we bodily participate in the truth. Imitating Christ in our actions is epistemologically crucial for what one wills to do is the core of the personal life. Concrete loving acts are the arena of the real. 443 Screwtape, we recall, seeks to keep benevolence in the imagination and the intellect. 444

For the Christian, person to person relationships in the world are not the absorption of others into ourselves which increase our sphere of power and authority. They are relationships of freedom: free of self-aggrandizement, which love the other for his own sake. This reflects and embodies God's own way of union, a union with loving sons who live in free conformity to his will. To act in this way fulfills our imagining,
thinking and desiring and leads to deeper joy, desire and rationality as we continue to obey and love. Our deepest desires are fulfilled, not by attending, brooding and cherishing them. Rather as we attend to our duties and obligations, "then it [desire] will blaze".

Of course in concrete terms, this means the epistemological breakthrough is often linked closely with suffering. The via crucis becomes the road to joy, an unavoidable station on the road to freedom, in Bonhoeffer's words. For all that we have discussed: indwelling, receiving, emptying, object-centredness and obedience, point to a death, the pain of self-death through which one must descend before one can be resurrected by grace alone. Our physical life is a concrete parable of this fact. We die in order to live. The eternal, eschatological life is sign posted by the valley of tears, the way of suffering, the cross.

8. Theological Participation

Divine Grace is Dancing. Dance ye all: Ye who are not dancing know not what we are knowing.

--The Apocryphal Gospel of John

To know God and to love him are not distinct from one another, nor from him. Nor is his love and knowledge. In Calvin, knowing God is never a mere objective knowledge. Abraham Heschel points out how for the Hebrew, to know God is to have sympathy for God, to be affected by the daath Elohim. Again in Calvin, the act of knowing God involves man in re-living qualitatively the movement of grace. Therefore Christian knowledge and participation in Christ cannot be separated. This does not imply there is a fusion between human reason and God's being. The cognitive truths of Christian theology are related to Christ along the analogy of the hypostatic union. That is, Christian truths are not connected by logical necessity but by a personal and relational necessity. The coherence of Christian theology is the coherence which re-lives encounter with its object. As the Christian allows himself to be re-addressed by God and responds to the Divine activity, he translates statements so that their necessity does not lie in themselves but in their object.
Athanasius' theology of union with Christ has greatly influenced Torrance. For Athanasius, the relation between Father and Son is a relationship that gives mutual and exclusive connection between the knowledge of the Father and the knowledge of the Son through the Spirit. In the incarnation, that intimate relationship has been inserted into our own human flesh and blood.\footnote{455}

Since in Christ all things are now fulfilled and he is the way back to the Father, we may take that way only through participating in the relation of the incarnate Son to the Father.\footnote{456}

It is as we participate in the incarnate life of Christ himself that we partake of Christ's benefits and blessings. If he does not give himself to us, his blessings are not ours.\footnote{457}

Thus our forensic justification rests upon our union with Christ and our union with Christ is our participation in the coming of God into our humanity in Jesus. Torrance points out that this understanding was reversed in the Westminster Confession, which inverts this relationship and makes judicial justification and faith prior to our entering into union with Christ. As a result, the judicial and cognitive relations displace the \textit{koinonia} of the Spirit. Within a judicial-cognitive scheme, the Holy Spirit is only introduced incidentally and instrumentally.\footnote{458}

But for Torrance, following Athanasius, our union with Christ is not a result of our faith, but is reality through the \textit{koinonia} of the Spirit, mediated to us from the Father, through the Son.\footnote{459}

We are not saved by the act of believing, but saved in the very act of believing by the faithful and obedient life of Jesus Christ on whom we rely, for He has already bound us up in covenant and 'carnal' union with him.\footnote{460}

Our faith is not a causal mechanism releasing God's love, but is our participation in the free gift of the incarnate, atoning God. Our faith response is "made within the ring of faithfulness Christ has already thrown around us".\footnote{461} Following Athanasius, Torrance argues that Christ not only died for us, but believes for us. Justification by Christ therefore is God's "revelation which already includes a true and fully human response as part
of its achievement for us and to us and in us." 462

Torrance believes Athanasius also had a profound influence on Calvin's understanding of justification as our real and substantial union with Christ. Justification is not a mere legal fiction, but has ontological reality. 463 Calvin rejected the notion of an infusion of grace or righteousness as christologically untenable. That is, it confuses the divine and human natures. But we receive the human righteousness of Christ. 464

By way of contrast, theological participation in Aquinas is wedded to neo-Platonic notions of grades of being and participation in a higher form of being. Thus "to know something is to become it", in a process by which one takes on a part of something and receives particularly what belongs to another more generally. 465 But for Torrance, as Christ dies for the whole man, we live in personal relational union with the whole Christ, not with an infusion of deity. 466 Therefore for Calvin, from the very beginning our knowledge of God involves a union, not a disjunction between subject and object. 467 As a creaturely relational union, it is an ontological relation, not a fusion of divine attributes into man, which change his substance into deity, but a relational participation of koinonia and abiding through the Holy Spirit. 468

Torrance notes that New Testament koinonia refers primarily to our participation in Christ and only secondarily to communion with one another. 469 As such, our koinonia is governed by Chalcedon's union of divine and human in Christ. It is not methexis, a participation in eternal realities, but koinonia—participation which entails an ontological union with Christ in his humanity. Man's humanity is not deified but recreated in its humanity. 470 The result of this is theosis, which Torrance interprets not as a divinizing of man, but an attempt to describe the power of Pentecost—the reality of man's encounter with the Spirit. 471

Partly in response to determinist and mechanistic notions of grace and sacrament, Lewis stresses the volitional aspect of our relational union with Christ through baptism, belief and communion. 472 Our participation is a "voluntary thing".

It is not voluntary in the sense we of ourselves could have chosen to take it or could even have
imagined it; but it is voluntary in the sense that when it is offered to us we can refuse it. 473

In other words, participatory union with Christ is not a mechanism yet Christ is the man "in whose suffering, resurrection and victories all men (unless they refuse) can share". 474 For Lewis we appropriate salvation as we "lay ourselves open to the Real Man...He will do it in us and for us". 475 As always, the primary agent is the initiating, seeking Father. Even in the eucharist, which Lewis sees as the central act of our worship, Lewis reminds us it is not our sacrifice, but "there it is manifestly, even physically, God who gives and we who receive". 476

An aspect of volitional participation Lewis particularly reflects on and which is closely related to knowing as an act, is imitation, whereby in our deeds Christ becomes formed in us. Man's task is not so much to be creative, free or spontaneous as to copy, reflect and mirror the Son, as the Son does the will of the Father. Through this process we are shaped (morphotha) and conformed to his image. 477 Our imitating of Christ clearly has nothing to do with acquiring salvation, but rather the response of those who have been loved is to participate in that love with their lives. Our participation in Christ is an imitation of the human life of our Lord--

not only of Calvary, but of the workshop, the roads, the crowds, the clamorous demands and surly oppositions, the lack of all peace and privacy, the interruptions. 478

Such is "the divine life operating under human conditions." 479

A further way of describing theological participation is to see it as a new centre for living--from subject-centredness to object-centredness. Auerbach speaks of the Christian blending of the sublime with the low and everyday, of tragedy with comedy, which breaks all previous classical rules which kept them apart. Greek tragedy especially is superceded in Christian art because no matter how serious or horrific life became

above them stood the towering and all-embracing dignity of a single event, the appearance of Christ, and everything tragic was but figure or reflection of a...complex of events...The Fall, Christ's birth and passion and the Last Judgement. 480

Auerbach's point is that life's centre of gravity has been transposed from life on earth to life beyond. It is better to
say that the centre has shifted from autonomy to union with God in and through Christ.

A theology which takes seriously feeling or emotional rationality is no more subjectivist than one which takes thinking seriously. Our thinking, feeling and our deeds must be redirected to live from a centre in Christ. This occurs within the historical particularity of space-time where man in Christ can live no longer out of himself, but only out of the Father's love for the Son. It is this love which has in carnal union come to grip us within our own frail flesh. Our lives are not devalued of their importance, but our tragedy is conquered as divine love transposes the self-centred catharsis of Greek tragedy into our participation through a death to self into union with Christ.

As a result of this union, there are not two separate kingdoms—heaven and earth, grace and nature. For in the incarnation God himself comes and gathers man to himself within space and time. Therefore by participation in Christ, within union with the incarnate Christ, we stand at once in the reality of the world and of God. 481

9. Metanoia

An object-centredness in theological epistemology summons us to "allow ourselves to be stripped of all our prejudgements and presuppositions". 482 In studying literature (e.g., the history of the Romantic sentiment), Lewis believes we must engage in imaginative repentance. That is, one must "by an effort of historical imagination," reconstruct a now long-lost state of mind. 483 It is very difficult for a modern man to imagine what it would be like not to experience the sentiment of romantic love. It takes a severe imaginative effort to reconstruct a world without it. But only if one endures this imaginative emptying can one really have a new imaginative filling. 484

In Biblical interpretation, Lewis finds a priori hermeneutical habits of both liberal and conservative to be major roadblocks to understanding. Lewis has been accused by liberals of fundamentalism because he believes in the historical character of miracles. But his openness to the historicity of the
miracle stories is not due to a "prior belief that every sentence of the Old Testament has historical or scientific truth". 485 Lewis rejects a doctrine of infallibility which is based on the argument that 'God must have done it this way because this is the best way. Therefore God has done it.' It is "dangerous to prescribe what God must have done--especially when we cannot for the life us us, see that He has after all done it". 486 The conservative a priori demands the orderly and lucid conceptual answer. But Lewis thinks neither Christ nor Paul ever gave any. He concludes that the orderly, precise answer we want a priori must not be best, because Jesus wants a response from the whole man, not just from his brain. 487

On the other hand, liberal scholars come to the Bible full of naturalistic assumptions which beg the question of miracle. 488 Such men are not necessarily hypocrites, for "we all have naturalism in our bones". Therefore the task for a Western man is to re-educate himself, to learn intellectual repentance, to "sniff out like a bloodhound" those steps in argument which depend not on historical and linguistic knowledge, "but on the concealed assumption that miracles are impossible". 489

The naturalistic a priori is a peculiar problem of Western, secular man in his approach to Biblical study. In part, Lewis attributes the problem with miracles to chronological snobbery, that is, the uncritical acceptance of the intellectual climate of the current age and its assumption that what is out of date is therefore discredited. 490

Methodologically the alternative to the Torrance-Lewis concern for intellectual repentance would be to bring a prior framework to theology, a piece of literature, science or philosophy, and use it as a lens to grasp the meaning of the subject matter. The most openly acknowledged and sophisticated form of this in recent Biblical studies is undoubtedly the "prior-understanding" of Rudolf Bultmann. 491 Through his 'prior-understanding', Bultmann seeks to distinguish the valid from the invalid, the kerygma from the myth.

Torrance recalls that Barth saw the 'prior understanding' as a flight from reality. For instead of wrestling with the
difficult and scandalous passages, one sets aside as Jewish, Hellenistic or mythological whatever one finds irrelevant to modern man based on, for example, Heidegger's anthropological analysis.\textsuperscript{492} For Barth, only by wrestling with the scandals and stumbling blocks do we break through to what the Bible itself has to say. The Bible cannot be fitted to any man-made synthesis, or be co-ordinated with any philosophical, cultural presuppositions. For example, the incarnation is a scandal and a paradox to an Arian because of his Platonic presuppositions—matter is evil, spirit is good.\textsuperscript{493} Good exegesis requires a tearing down of all modern or ancient scaffoldings in order to understand the text on its own terms.

A plethora of reasons exist why a proud mind would avoid a full and unprotected encounter with God. Some are profound, others are rather mundane. Once diagnosed, many \textit{a priori} are ludicrous.\textsuperscript{494} Often we are simply not aware how false our assumptions are.\textsuperscript{495} Einstein notes it was not malevolence that made nineteenth century science continually introduce new substances in order to shore up its faltering mechanical explanations.\textsuperscript{496} They simply never considered that a non-mechanistic universe was possible.

Our feelings incessantly alter and mould all our experience, delimiting what we can enjoy and understand. Lewis says he tolerated the war, for example, because he expected it would be bad, but his schooling was a disaster because he anticipated it would be fun.\textsuperscript{497} We avoid physicians because we fear something may be wrong.\textsuperscript{498} We put off seeing a dentist because we know it will hurt. Many unbelievers fear God. Hence they want to avoid him. They are not impartial. As Farrer puts it, "Unbelievers are afraid of God and evade the evidence. Of course. What else could one expect?"\textsuperscript{499} Some reckon that if God forgives honest disbelief and one can be good without Christianity, that should be the end of it. Lewis says such a man is shirking. He has not really done his best to discover the truth because he forsee's trouble. "You may not be certain yet whether you ought to be a Christian; but you do know you ought to be a man, not an ostrich, hiding its head in the sand."\textsuperscript{500}
Lewis admits to an element of wish fulfillment in his rejection of Christianity, even though in other areas, he sought to be free of wish fulfillment. Creative evolution is a pleasantly comfortable faith. Its "tame God" offers "all the thrills of religion and none of the cost". Lewis describes his own adolescent rejection of Christianity as a great relief.

From the tyrannous noon of revelation, I passed into the cool evening twilight of Higher Thought where there was nothing to be obeyed and nothing to be believed except what was either comforting or exciting.

Man has a natural reluctance to think about God, muses Screwtape, "but when thinking of him involves facing and intensifying a whole vague cloud of half-conscious guilt, this reluctance is increased ten-fold". And religion as man's search for God is the very thing which subtly is grounded on this reluctance. For religion dictates the game, initiates the proceedings. Not not so the 'tyrannous high noon of revelation'.

Men are reluctant to pass over from the notion of an abstract and negative deity to the Living God. I do not wonder... An 'impersonal God'—well and good. A subjective God of beauty, truth and goodness, inside our own heads—better still. A formless life-force surging through us, a vast power which we can tap--best of all. But God Himself, alive... perhaps approaching at an infinite speed... that is quite another matter.

Our ordinary mental-emotional habits often keep us from understanding or considering Christ. Our sheer conservatism dislikes to change its habits, mental or physical. All the patient's bodily habits, says Screwtape, are in the favour of Satan. This state of being is seen in Matthew Arnold's confident comment, "You ought to know that miracles do not happen". Similarly, Torrance attributes Bultmann's need to re-interpret all supernatural events as mythical to his naturalistic habit of mind. Men's thought forms have grown adapted to a world out of harmony with its Creator. In retrospect, Lewis sees his atheism as a "whirl of contradictions". "I maintained that God did not exist. I was also very angry with God for not existing. I was equally angry with him for creating a world." The rationality of these views was deeply tainted by
his lop-sided temperament, namely, more violent in its negative demands than in positive hopes.

Often emotional self-confidence tells us we understand the meaning of a word or concept when we in fact are mistaken. Thus Lewis thought he knew the meaning of the nineteenth century use of 'world', because of its proximity to the twentieth century usage. Only later did he discover his error by studying an earlier century's use (which he did not assume he understood). Confident feelings do not prove we understand, but only that we have met a familiar expression and feel no shock. To penetrate into a true understanding means we must cut back into ourselves and our assumptions.

If emotional over-confidence can mislead us, no feeling is a worse guide to understanding than dislike. Many Milton critics misread Paradise Lost because they simply cannot understand what the Fall is about, since it involves "an idea so uninteresting or so intensely disagreeable to them that they have been under a sort of psychological necessity of passing it over and hushing it up". When the American theologian Norman Pittenger reviewed Lewis' books, he consistently accused Lewis of ideas which Lewis explicitly denies. Lewis did not accuse Pittenger of dishonesty because "we all know too well how difficult it is to grasp or retain the substance of a book one finds antipathetic".

It follows that negative criticism is the most difficult to write. What we think bad writing or bad theology, we hate. Hence criticism easily degenerates to blows delivered in battle for my theological or literary school against my opponent. But Lewis argues that hatred, like evil, always overreaches itself and becomes impotent. Usually such criticism, instead of helping the reader see the inadequacies of our opponent rivets his attention on the author. The very desire to pulverize the opponent is a signal, therefore, that something is wrong within us.

It is not surprising that the language of conversion and repentance is increasingly used in all areas of knowledge. Einstein describes the heuristic process as a painful struggle between new physical concepts and old ideas because the initial
and fundamental steps in new advances "are always of a revolu-
tionary character". The breakthrough is not the result of
new observation or information, but a transposition in the mind,
giving the tangled mass of data a new interpretive framework.
Butterfield calls this the act of science, rarely discussed.
Butterfield recalls that Harvey's triumph in understanding the
circulatory system is the power of seeing by depiction and
imagination the whole subject in a new framework and re-stating
the issue in a way which made the problem manageable. This
mental conversion is the great paradox of science. Things so
easily instilled in a schoolboy once defeated the greatest minds
for centuries. A scientist who clearly broke through in one
area could remain quite primitive in another. As noted
earlier, there is no logical road in and out of these frameworks.
They are separated by a logical gap. Thus Niels Bohr had to
reconstruct the logic of science in order to understand nuclear
activity. Such a mental rearrangement requires a logical
reconstruction of our prior knowledge and a metanoia of our
prior understanding.

For Torrance, the early Church's struggle and conquest of
the pagan thought forms came about only by re-creating the very
foundations of philosophy, science and culture. It could not
merely operate within the ancient paradigms. Similarly,
the Church today cannot borrow ready-made thought-forms of
modern man, but must struggle to work out a logic and rationally
which is appropriate to its object. When theological
science does borrow terms and notions, it must always baptize
them, in order that their meaning is not grounded in their old
frameworks but is adapted and opened to its new object.

Therefore, no thought forms are sacrosanct. Torrance
rejects the Thomist belief that God created certain rational
categories with which we must think in order to be rational.
This is a kind of nominalism in that it identifies our propositions,
categories and statements of truth with the truth itself, thereby swallows up the real into our concepts of the real.

What can deliver us from the various fears, a priori
concepts and prejudices which keep us entrenched within
familiar opinions? Only empirical encounter with the object of inquiry. In literature, this means that rather than fix attention on the marginal or subsidiary themes which appeal to our prior framework; we submit to the theme and passion of the play as it stands.\textsuperscript{524}

Finally in the context of metanoia, the subject-object question arises with peculiar intensity: does the object evoke our change of heart, paradigms and thought structures, or does the subject, the knower re-orient himself? We must avoid a causal solution here which reduces the subject's role to a cipher, or the object's role (especially in theology) to a by-stander. The problem is that repentance can only be done by a good man, but we are not good. "Only a good person can repent perfectly."\textsuperscript{525} I may try to be obedient and moral, to wipe my eyes clean in order to see the sun, as Athanasius puts it, but how can I possibly be pure enough?\textsuperscript{526}

Lewis answers that we must not put the two into water-tight compartments. God is "inside you as well as outside".\textsuperscript{527} In prayer, "I speak to God, yet if the Holy Spirit speaks in the man, then in prayer God speaks to God".\textsuperscript{528} God's act does not exclude ours. Lewis refuses the mechanical-causal antinomy which ultimately makes repentance and faith a causal manipulation of man by God, or vice-versa. "Remember, this repentance, this willing submission, is not something God demands of you before He will take you back...It is a description of what going back is like."\textsuperscript{529} Shame and guilt arise when we cease 'going back' because of those things which occasion the guilt.\textsuperscript{530} For Torrance, true repentance springs from gratitude to God for sins forgiven (object-centred); it does not coerce God to forgive (consequence or subject-centred).\textsuperscript{531}

Torrance refines this question: How can we ever adequately repent—unless we receive the truth into our minds? Yet, how can we receive truth into our minds unless the whole of our minds has been altered by the Spirit of God uniting us to Christ's mind, so we can recognize the truth?\textsuperscript{532} The problem is our estrangement and hostility towards the truth. The Biblical answer is that God "enters into the very heart of our enmity and by revelation and atonement" overcomes and reconciles...
Relational participation, not logical-causal explanation, is the key. As Lewis puts it, if God became a man, we could share in his death, as we share in his reason, love, etc. Then we could repent. Torrance says Jesus Christ is the sole man who can repent perfectly. He takes the place of all men. What is not taken up into Christ's vicarious Humanity and offered to the Father cannot be redeemed. The Old Testament exhibits concretely (not abstractly) and schools us in how the Word of God wrestles with our stubbornness and deals faithfully with us in mercy and judgement, that we might learn obedience.

Lewis describes the relational nature of repentance in the undragoning of Eustace Scrubb in The Voyage of the Dawn-treader. Through greed and selfishness, Eustace has turned into a dragon. Here is the sequence of events. The Lion, Aslan, comes to Eustace in his distress and takes him to a pool of water. He tells him to undress. Three times Eustace tries to claw his dragon scales off, but each time they grow back even deeper and crustier. It had done no good. The Lion says, "You will have to let me undress you." Very afraid of the Lion's claws, but desperate by now, Eustace lets him. It hurts worse than anything he could have imagined. By contrast, his own peeling had not really hurt. Then Aslan throws him into the water and upon coming out, dresses him in new clothes.

10. Engendering

As Torrance discusses intellectual repentance, there is little to criticize and much to learn. Of special importance is his provocative demand that repentance involves changes in our mental framework, from a correlation to the subject, to a correlation with the object, and not merely the participation of our will. I believe Lewis' concerns complement this idea and build on to it a thorough grasp of the epistemological problem. Inevitably, Lewis' contribution lies in the realm of art as it affects pedagogy and communication.

Torrance perceives with utter clarity that the conversion/discovery process is not a logical step made by a neutral mind. In natural or theological science, argument within the old framework cannot induce conversion. In this light, evangelism
is a call to repent, which seeks to persuade men that they exist in enmity and need conversion if they are to know the truth. Torrance concludes that the primary task of evangelism is to induce rational conviction.

Inevitably, Torrance's concern to induce 'rational conviction', tends towards intellectualism, that is, a focus on changing our thought forms. A symptom of this is his giving priority to the hearing of the Word over tasting, feeling and seeing of the Word. The importance of the other senses is diminished as we are admonished to hear true concepts about Christ. This unnecessarily impoverishes his theology as we have noted earlier. The fact is, (as documented by Lewis and Torrance) that cognitive, affectional and volitional all make up our mental-emotional world. Attitudes are bound up with the cognitive.

Refusing to give priority to any sphere of man's rational life, we should recognize that all parts are intrinsically important and interanimated. An intellectual assault on unbelief, may like the preaching of the good law, only increase tresspasses. The truth needs to be felt as well as understood, and it is difficult to listen to what you cannot see. The drama and beauty of the Gospel need to be seen and God's love felt as well as his truth heard. Torrance himself puts this case most clearly when he says that in the unity of Word and sacraments, the true nature of communication is enshrined and the true nature of instruction revealed. For the finest teaching "must be an event of communication which is also an event of reconciliation".

One might reflect Lewis' concern for communication by seeing the problem of evangelism as a process of tempting or rousing the non-believer out of his customary and definite ways of regarding things. Lewis the artist, who sees art as communication, takes with utter seriousness the prejudices, fears and poor logic that all people bring to the study of theology. In his introduction to Reflections on the Psalms, Lewis notes the oddity of education in that two schoolboys often solve and understand their problems better than does their master--because he is too far away in learning and sympathy. A fellow student
can help "because he knows less". The difficulty is more easily understood and explained because he has more recently met it. The theologian's problem as dogmatic scientist is like the Master's; his attention and energy are elsewhere. He lacks imagination and empathy. The theologian as artist seeks to incarnate his subject to where the pupils are.

Often in the interest of communication one must first remove a priori and popular prejudices. That is no doubt how Lewis understands the task of Christian apologetics as well as much of the literary criticism he wrote. That is, in order to enjoy, one has to remove some emotional-intellectual-imaginative baggage to see what is really there. Lewis makes a massive effort to use his logic and imagination with sensitivity to the de facto starting place of his audience not unlike the way Jesus contextualized his discourses.

Because of false interpretations (heresy), theology is forced to continue to take the risk of structuring the Gospel into dogmatic statements, that is, to abstract a conceptual form (albeit an internal form) from the concreteness and immediacy of the dialogue and events of the Gospel. But the glory of art is to retain this emotional immediacy of dialogue and event inherent in Biblical revelation. The artist has a special way of tempting us out of our old frameworks. He does not battle directly the intellectual position of the old view or within the old frame of reference, for he knows that a man intellectually silenced is by no means converted. Instead, the artist subverts or sneaks past the 'watchful dragons' of subject-centredness, worries, fears of consequences, etc., by appealing to our imagination or the aesthetic rationality.

Lewis uses metaphors, parable, analogy, fairy tale and story to communicate Christianity. He knows there is a great risk in knowing God, namely our loss of autonomy. But a parable or story seems safe. Therefore one may abandon one's self (at least in one's imagination) to entertain a story without fear of the consequences (subject-centredness). The story is far enough away from Christianity that when we see meaning, we can really discover the point of Christianity with which familiarity has bred contempt. Theology as poetry "purges from our inward
sight the film of familiarity which obscures from us the wonder of our being". 549

In natural science, an extraordinary appeal to the imagination is unnecessary, partly because the a priori are not so strong as our religious a priori. For man's religious a priori is man at his most stubborn. In theological knowledge man's volition is most acutely bound up with his cognition. And as Torrance has shown, there is no revelation, no knowledge of God, without reconciliation. 550


2 Newton, Einstein and Scientific Theology, p. 240.


4 Theology in Reconstruction, p. 123.

5 Letters of C. S. Lewis, p. 122.

6 Ibid., p. 97.


8 Theological Science, p. 123.

9 Biographia Literaria, p. 120.

10 Theological Science, pp. 34-35.

11 This is the "masterful objectivity of the Reformation", Theological Science, p. 75.

12 Kierkegaard, p. 282. Lewis describes a lack of commitment or indifference between the choice of faith or atheism as "floating", because one can admit the comforts of one without the discipline and enjoy all the liberty of the other without its philosophical and emotional abstinacies. "There's no good pretending it is uncomfortable." God in the Dock, p. 251. Some have described atheism as courageous, but as Lewis, a former atheist puts it, such statements usually occur in publisher's adverts. There one is daring "when he defies gods who he does not believe in, or conventions that have no authority in the only circles he frequents". The Personal Heresy, p. 107.

356
13. The Place of Polanyi, p. 84.
17. Surprised by Joy, pp. 53-54.
20. Personal Knowledge, p. 298.
21. Christian Reflections, p. 182. In an almost farcical scene in Out of the Silent Planet, Lewis portrays the learned scientist, Weston, whose a priori scientism leads him into absurd antics in trying to communicate to the natives and to their God. pp. 122-126.
22. The Integration of Form, p. 161.
23. Ibid.
24. The Place of Polanyi, pp. 63-64, 72.
29. The Place of Polanyi, p. 86.
30. Ibid.
32. Space, Time and Resurrection, p. 10.
33. Auerbach, p. 473. Elsewhere Auerbach calls it "penetrating to the existential", which he contrasts with Voltaire's stylized portrait of a Jesuit. (p. 428).
34. Ibid., p. 471.
35. Ibid.
37 Ibid., pp. 332f.
38 Conflict and Agreement, II, pp. 63, 71.
39 A Preface to Paradise Lost, p. 62.
40 Ibid., p. 63.
41 Ibid., p. 64. cf. Samuel Johnson: "To judge rightly of an author, we must transport ourselves to his time and examine what were the wants of his contemporaries, and what were his means of supplying them." from Lives of the English Poets, (1779), English Critical Essays, 16th, 17th and 18th Centuries, (The World's Classics, number 240), ed. by Edmund D. Jones, London: Oxford University Press, 1961, (1922), pp. 326-327.
42 Bodleian Library, Ms. Eng. Lett. c. 220/5 d. 21 iii. p. 73.
43 A Preface to Paradise Lost, p. 64.
44 Ibid.
45 Theological Science, p. 243.
46 Ibid., p. 301. Also cf. Bevan, p. 266, where Bevan says that science's value lies in eliminating the peculiar, individual quality and exemplifying it objectively as a general type or law.
47 An Experiment in Criticism, p. 89.
48 Ibid., p. 88.
49 Ibid. Far too often our listening is, as Barth puts it, "in fact a strange mixture of hearing and our own speaking, and in accord with the usual rule, it is most likely that our own speaking will be the really decisive event". quoted in Karl Barth: An Introduction, p. 22.
51 They Stand Together, p. 106.
52 An Experiment in Criticism, pp. 7-9. cf. also pp. 28-30, where Lewis describes five other 'users'. Also p. 35, where he discusses the stylemongers "who attend to words too much" in reading, concentrating on style, and (for example) engaging in witch hunts for Americanisms!
53 Of Other Worlds, p. 30.
54 Surprised by Joy, p. 33.
55 Of Other Worlds, p. 30.

56 An Experiment in Criticism, p. 56. Paul Holmer's comment, "By paying attention to the subject one discovers the object", can be fundamentally misleading. Holmer, p. 104. But it is true that Lewis uses a phenomenological analysis of the way people read to reveal what their true object is, i.e. themselves or the story, person, etc. as an end in itself.


58 Christian Reflections, p. 171.

59 The Brink of Mystery, p. 142.

60 Ibid.

61 The Discarded Image, p. 123.

62 Theology in Reconstruction, p. 15.

63 An Experiment in Criticism, p. 128.

64 Ibid., p. 116. It is an interesting psychological aside to hear Ernest Becker describe Kierkegaard's knight of faith as one who is fully with the world on its terms and yet wholly beyond it in his trust in the invisible dimension. This allows him to be open, generous, and courageous, to touch other's lives and enrich them and open them in turn. Fear of life and death is absent in the knight of faith. Becker sees this portrait as the ideal of mental health, "the continuing openness of life out of the death throes of death". Becker, p. 258.

65 They Stand Together, pp. 324, 326.


67 Ibid.

68 The Four Loves, p. 23.

69 They Stand Together, p. 97. Interestingly, this self-criticism was uttered not about Christianity, but about the mystical philosophy of Maeterlink and George MacDonald's fairy romances. Screwtape questions if humans really want to experience the immediacy of God's presence as much as they claim. The Screwtape Letters, p. 28.

70 Miracles, p. 168.

Christian Reflections, p. 158.

Space, Time and Resurrection, p. 4.

Theological Science, p. 85.


Theological Science, pp. 85-87, 311, 308. Theology in Reconstruction, p. 69.

e.g. The Ground and Grammar of Theology, p. 115.

Theological Science, p. 169.

Theology in Reconstruction, p. 181.

Theological Science, pp. 5-6.

Ibid., p. 131.

Richard W. A. McKimney, Historical Relativism, the Appeal to Experience and Theological Reconstruction, Creation Christ and Culture, pp. 242-243.

Theological Science, p. xvii. For Torrance, the question of subjectivity is legitimate when we ask it in the context of how God bears witness to himself, i.e. which organs he touches, how he implants knowledge, how he gives us himself. Theology in Reconstruction, p. 30.

Brown, pp. 39, 91, 100.

Ibid., pp. 146, 148.

Ibid., p. 194.

Ibid.

Theology in Reconstruction, p. 134.

Ibid., p. 135.

The Problem of Pain, p. 128.

Reason and Emotion, pp. 21-23.

Surprised by Joy, p. 56.

Selected Literary Essays, p. 90.

Surprised by Joy, p. 30. cf. Studies in Words, p. 87, where Lewis notes that careful reading of the context often keeps us from misunderstanding meanings of words because the
context insulates words from contamination by later meanings.


96 Théologie in Reconstruction, p. 267.

97 God and Rationality, p. 48.

98 W. H. Sheldon, Some Bad Results of Kant's Thought, The Heritage of Kant, pp. 170, 179.


100 Theological Science, p. 88. So Werner Heisenberg says in order to understand, "we have to introduce some kind of order". Physics and Philosophy, p. 62.

101 Space, Time and Incarnation, p. 44.

102 Theological Science, p. 82.

103 The Road of Science and the Ways to God, pp. 113, 125. Jaki notes that Popper approves of Kant here. (p. 381.)

104 Letters of C. S. Lewis, p. 221. Bultmann says, "To believe in the cross of Christ does not mean to concern ourselves...with an objective event turned by God to our advantage, but rather to make the cross of Christ our own, to undergo crucifixion with him". New Testament and Mythology, p. 36. Bultmann's theology thus stands squarely in the subject-centred tradition of Schleiermacher, though he exchanges a psychological analysis for an existential, a sensible/spiritual dichotomy for a mythical/scientific and the religious consciousness for the self-understanding. Conflict and Agreement, II, p. 126.

105 The Screwtape Letters, p. 25. cf. p. 39, where Screwtape tries to teach his patient to focus on the object of evil or sin and on the self in all good things, that is, to approach good self-consciously and evil object-centredly.


107 Ibid., p. 175.

108 Christian Reflections, p. 139.

109 Surprised by Joy, p. 175.

110 Reflections on the Psalms, p. 48.

111 Were Torrance not sufficiently consistent in reminding us that our thought forms have their meaning only by reference to their object, his own stress on thought forms would be guilty of an improper focus on thoughts about God, not God.

112 Selected Literary Essays, p. 291.
113 Studies in Words, p. 3.
114 Ibid.
115 Ibid.
116 The Discarded Image, p. 68.
118 Theological Science, p. 331.
119 Einstein and Infeld, p. 297.
120 The Place of Polanyi, pp. 72-73.
121 Ibid., pp. 70-71.
122 Holmer, p. 95.
124 That is, the subject matter. Surprised by Joy, p. 41.
126 Studies in Medieval and Renaissance Literature, p. 141.
127 Alexander, II, pp. 37ff.
129 Ibid., p. 174.
130 Letters to Malcolm; pp. 29-30. Lewis voices his approval of Bonhoeffer on 'religion'.
131 The Personal Heresy, p. 11.
132 Ibid., p. 19.
133 Ibid., pp. 4, 56. cf. Lewis' remarks about the cosmological argument in The Problem of Pain, pp. 13f.
134 The School of Faith, p. xviii.
135 Barth's pastoral concern presses him to ask Bultmann if his kerygma really speaks of an act of 'God as he intends it to be or is it rather an "act of man...of the transition which man achieves by his own obedience—though he is supposed not to be capable of it?". Karl Barth, Rudolf Bultmann—An Attempt to Understand Him, p. 97. But for the other side, cf. Bultmann, New Testament and Mythology, pp. 32-34, where he writes movingly
of the concrete love of God in Christ. Though even here Barth's question is both proper and penetrating. Barth also inquires (p. 96) whether the 'Christ event' Bultmann speaks of is Jesus himself or a principle found in the kerygma about him and in those who accept the kerygma and obey it. For Barth, Christ is the kerygma. Bultmann diminishes Christology and merges it with soteriology.

137 The Four Loves, p. 116.
139 McIntyre is not sensitive to this important distinction. cf. Theology and Method, pp. 204-205.
142 Miracles, p. 148. From this Lewis concludes, "Nothing could be more unhistorical than to pick out selected sayings of Christ from the Gospels and to regard those as the datum and the rest of the New Testament as a construction upon it".
143 Theological Science, p. 302.
144 quoted in Theological Science, p. 2, from Ideas: General Introduction to Pure Phenomenology, pp. 95f.
146 Theological Science, p. 44.
147 Torrance identifies the quaestio with Socratic thinking where the thinker is the centre of reference. Theological Science, p. 120. cf. God and Rationality, p. 34, and Newton, Einstein and Scientific Theology, pp. 236-237.
148 Torrance notes that Calvin made use of Valla's interrogatio approach to law, applying it to theology. Theological Science, p. 120.
149 Theological Science, p. 130.
150 Ibid.
This is Barth's phrase to describe Calvin's catechetical discussions which for didactic purposes discuss anthropological issues. *Church Dogmatics, III/2, The Doctrine of Creation*, p. 186.

*A Preface to Paradise Lost*, pp. 97, 131.

*Theological Science*, p. 106.

*Mere Christianity*, p. 139.

*God and Rationality*, p. 53.

*A Grief Observed*, p. 55.

*Mere Christianity*, p. 6.

*The Pilgrim's Regress*, p. 28.

*The Problem of Natural Theology in the Thought of Karl Barth*, pp. 128f.


*The Problem of Natural Theology in the Thought of Karl Barth*, p. 127.
The epistemological error of abstracting theological issues from their living ground in Christ can be seen in the Galatian error of beginning the Christian life by faith in Christ, but then abstracting that living reality from their present experience and seeking a new centre for sanctification somewhere besides Christ and his loving presence.

Surprised by Joy, p. 76.
Reason and Emotion, pp. 208-209.
The Place of Polanyi, p. 59.
The Integration of Form, p. 153.
Surprised by Joy, p. 143.
God in the Dock, p. 96.
God in the Dock, p. 254.
Ibid. So too with enjoying literature. We cannot know a book is bad unless we try to read it as if it was good and end up unable. An Experiment in Criticism, p. 32.
Theological Science, p. 106.
The Road of Science and the Ways to God, p. 249. Jaki notes that it is the virtue of Kuhn's The Structures of Scientific Revolutions, that he has registered a "spirited challenge" to 19th century rationalism and empiricism's hypothetico-deductive understanding of scientific progress. (pp. 243-244).
The World as I See It, p. 139. Polanyi has profoundly explored the informal structures of knowing beyond Einstein's brief suggestions. The Place of Polanyi, p. 60.
The World as I See It, p. 27.
Ibid.
Ibid., p. 126.
Butterfield, pp. 43-44.
Cf. That Hideous Strength, p. 152. Jane, having seen the director, was joyful. This affected her whole view of life, the way she saw the sun, trees, etc. They were never more glorious.
Butterfield, p. 75. Later, of course, this utter completeness and thoroughness of the mechanism began to worry
even Newton as apparently not having any need of God (p. 137).

197 quoted in The Road of Science and the Ways to God, p. 309.

198 Brown, p. 51.

199 God and Rationality, p. 9.


201 Christian Reflections, p. 158.

202 Christian Theology and Scientific Culture, pp. 68-69.

203 Ibid., p. 28.

204 Space, Time and Resurrection, p. 38.

205 Reason and Emotion, p. 46.

206 Lewis admits he sought to avoid pain rather than pursue pleasure. Surprised by Joy, p. 182.

207 The Road of Science and the Ways to God, p. 426.

208 Ibid.

209 The Place of Polanyi, p. 74.


211 A Preface to Paradise Lost, p. 65.

212 Christian Theology and Scientific Culture, p. 63.

213 A Preface to Paradise Lost, p. 65.

214 The Open Secret, pp. 187ff.

215 Ibid.

216 The Abolition of Man, p. 17.


218 The Abolition of Man, p. 32. cf. Chapter IV. D. 7.

The Act of Knowing.

219 The Abolition of Man, p. 32.

220 English Literature in the 16th Century, p. 331.

221 God in the Dock, p. 128.

222 cf. Von Balthasar, who comments that the beauty of
Barth's theology is that, unlike the all too discredited objectivism of many a Catholic theology, it combines passion and objectivity. quoted in Karl Barth: An Introduction, p. 216. Torrance adds that Barth always looks from the standpoint of faith to its material content. As Lewis would put it, Barth enjoys faith and contemplates his object (God), not his faith.

223 God in the Dock, p. 127.
224 An Experiment in Criticism, p. 13.
225 Christian Theology and Scientific Culture, p. 62.
226 The Ground and Grammar of Theology, p. 56.
227 The Place of Polanyi, p. 67.
228 An Experiment in Criticism, p. 20.
229 Ibid. The implications for our Western consumerist society are not pleasant.
230 An Experiment in Criticism, p. 21.
232 They Stand Together, p. 406. Here I use the word 'enjoy' in its usual sense, not Alexander's technical meaning.
233 Surprised by Joy, p. 66.
234 An Experiment in Criticism, p. 38.
235 The Problem of Pain, p. 145.
236 Reflections on the Psalms, p. 48.
238 The School of Faith, p. cv.
239 The Brink of Mystery, p. 68.
240 Reflections on the Psalms, p. 82.
241 cf. Chapter IV. D. 7. The Act of Knowing
242 Aids to Reflection, p. 171.
243 An Experiment in Criticism, p. 71.
244 Of Other Worlds, p. 41.
245 An Experiment in Criticism, p. 70.
Carpenter, p. 218. Carpenter calls this Lewis's boyishness and sees it as betraying a basic immaturity in Lewis the writer, critic and man.

That Hideous Strength, p. 21.

Studies in Medieval and Renaissance Literature, p. 132.

Selected Literary Essays, p. 97.

An Experiment in Criticism, p. 92.

Ibid. Lewis' avowed commitment to childlike openness and immediacy of experience makes Barfield's accusation that he preferred reflection to immediacy so profoundly inaccurate that only a fundamental disagreement can explain Barfield's comments. Barfield, Introduction, p. x, Light on C. S. Lewis. cf. A Preface to Paradise Lost, pp. 52ff.

English Literature in the 16th Century, p. 84.

Selected Literary Essays, p. 104.

Ibid.


Biographia Literaria, p. 49.

Tolkien, p. 40.

Ibid., p. 43.

Mere Christianity, p. 70. cf. God and Rationality, p. 74, where Torrance characterizes childishness as believing purely on the grounds of external authority.

Tolkien, p. 44.


Theological Science, p. 76.

Reflections on the Psalms, p. 75.

Karl Barth: An Introduction, p. 21.

Miracles, p. 165.

Ibid.
Torrance notes that for Hilary, God the eternal and invisible, must be felt or experienced (sentiendus). Hermeneutics According to Hilary of Poitiers, p. 53.

James 2:19.

This point is also attested to by Paul Tillich, who sees faith (but not knowledge) as an act of the total personality. See Paul Tillich, The Dynamics of Faith, Harper and Row, 1958, p. 4. Lewis writes, "We were made to be neither cerebral men nor visceral men, but men...". The Pilgrim's Regress, p. 18.

Lewis is not denying a difference between sensuous and intuitive knowledge, but is pointing out that linguistically, there is a central semantic area which resists dichotomizing. Other uses tend to separate from each other and yet work together in producing knowledge. Hence the five inward wits (memory, fancy, imagination, common wit, estimation) combine in Medieval thought with five outward wits or senses to turn, in a pre-established harmony, mere sensation into coherent experience. Studies in Words, p. 147. This similarity to Kant has not gone unnoticed by Lewis or Torrance. As we have seen, Lewis with the Medievals, retains objective knowledge in this scheme by the realist commitment to God's pre-established harmony. Torrance holds with Einstein to the miracle of knowledge which occurs through sense and intellect working together (even through freely-created physical concepts) but seeks to constantly transfer inward intellectual activity to objective indwelling in the external reality.
creation only are given voice through the **Word** of God. Without the Word, the "splendid representation of the glory of God would profit man nothing". (Calvin's *Doctrine of Man*, p. 23). Lewis has a penetrating discussion of obstacles to this theoretical-empirical unity of experience. 1. Inattention, i.e., no openness or participation. 2. The wrong kind of attention, i.e., subject-centred participation, focus only on the experience in the nervous system. 3. Greed. Instead of adoring it, to say 'encore'. 4. Conceit. 'Look at me. I see God's glory even in bread and butter.'

286. *Ibid*.
292. *Letters to Malcolm*, p. 121. Lewis was concerned to interpret the resurrection positively and not merely spiritually. Thus Jesus is still a man, elsewise his resurrected body was not objective, but just an appearance. *Miracles*, pp. 15if.
294. *Ibid*.
296. *The Great Divorce*, p. 44.
298. *The Great Divorce*, p. 44.
Conflict and Agreement, I, p. 55. cf. here the sermons of Robert Bruce, which Torrance edited and translated, where Bruce calls the sacrament a "visible Word". The sacrament conveys meaning to the mind by the eye and preaching conveys meaning to mind by the ear. Robert Bruce, The Mystery of the Lord's Supper, Sermons on the Sacrament preached in the Kirk of Edinburgh in A. D. 1589 by Robert Bruce, trans. and ed. with an introduction, by T. F. Torrance, London: James Clarke, 1958, p. 54.

Theology in Reconciliation, p. 122.

Auerbach, p. 53.

Ibid., p. 56.


Kahler, pp. 102-103. This is Marshall McLuhan's mistake. The only beneficiary of a sensuous overload is the businessman whose adverts benumb consciousness and induce panic purchasing.

Ibid., p. 100. This is not real involvement. "What they seek is pure surface, the opposite of depth."

The Road of Science and the Ways to God, p. 175.

The Integration of Form, p. 148.

God in the Dock, p. 25.

Letters to Malcolm, p. 65.

Tolkien, p. 51.


An Experiment in Criticism, p. 31. cf. Mere Christianity, p. 21. The inner eye judges clarity; the inner ear judges rhythm, says Lewis.

A Preface to Paradise Lost, p. 53.

Ibid., p. 54.

English Literature in the 16th Century, p. 377. Were the other attributes of God to strike us with a similar power, "terrible would be the fire of longing that would burn".
323 An Experiment in Criticism, p. 17.
324 Ibid.
325 Ibid.
326 God in the Dock, p. 176.
327 Christian Theology and Scientific Culture, pp. 99-100.
328 I Cor. 13:13.
329 Alexander, I, p. 213.
330 The Integration of Form, p. 168.
331 Newton, Einstein and Scientific Theology, p. 240.
332 The Integration of Form, p. 161.
333 Israel: People of God--God, Destiny and Suffering, p. 4.
334 Theological Science, p. 240.
336 Theology in Reconstruction, p. 81.
338 Christian Theology and Scientific Culture, pp. 110-111.
339 noted in The Problem of Pain, p. 86.
340 Ibid.
341 An Experiment in Criticism, p. 31.
342 They Stand Together, p. 112.
343 Theology in Reconstruction, p. 119.
344 cf. Kingdom and Church, pp. 22, 23.
345 Ibid., p. 47.
346 Ibid.
347 The Hermeneutics of St. Athanasius, pp. 244, 245.
348 Olson, p. 302.
349 Ibid., p. 298, from Maxwell's Scientific Papers, II, pp. 219-220.
350. Studies in Medieval and Renaissance Literature, pp. 58-59. Macmurray sees the Stoic dichotomy between reason and passion, with right living arising when reason dominates, as the forerunner of Kant's ethic of duty. Reason and Emotion, p. 123. Lewis seeks to integrate the emotions with the ethical and rational in order to account for the desire and joy element in Christian faith. cf. his sermon, 'The Weight of Glory', in Screwtape Proposes a Toast, pp. 94ff.


353. They Stand Together, pp. 398f.

354. Ibid., p. 25.


357. The Abolition of Man, pp. 8, 9.

358. Mere Christianity, p. 120. cf. Carpenter, p. 37, where Carpenter correctly sees that it was probably Barfield who taught Lewis that he could not separate his "emotional experiences from his intellectual process". What Lewis did, however, was to give this integration an object-centred focus.

359. The Screwtape Letters, p. 129.

360. That Hideous Strength, p. 296.

361. A Preface to Paradise Lost, p. 54.


363. Letters of C. S. Lewis, p. 216.


366. Miracles, p. 171. Here is an interesting agreement with I. A. Richards' didacticism.

367. Out of My Later Years, p. 17.

368. Ibid., p. 227.

369. Reason and Emotion, p. 34. cf. Arthur Janov's assertion that modern psychology has failed to heal mental disease but settles for controlling behaviour because it avoids feeling

373. Ibid., p. 16.
377. Ibid., p. 24. Macmurray says of all the ancients, only Plato saw this.
379. Ibid.
383. Ibid.
384. Ibid., p. 493.
386. Ibid., p. 346.
387. Ibid.
392. Ibid.
394. Ibid., p. 69.
The question whether the final vision of God is an act of intelligence or love is probably a nonsense question.!
God does not exist. This commits one to actions which may be misdirected and hence neither safe nor scientific. Bevan, pp. 379-380.


421 Adey, p. 100. Adey lauds this subjective state as the value of being over action.


423 The Road of Science and the Ways to God, pp. 40, 42.

424 Theology in Reconstruction, p. 85.

425 Letters to Malcolm, p. 120.

426 The Abolition of Man, p. 47. Torrance would go further and say man's concrete humanity is his participation in the incarnate life of the Word of God.

427 The Problem of Pain, p. 56.

428 Reason and Emotion, p. 87.

429 Theological Science, p. 4.

430 Ibid.


432 Conflict and Agreement, I, p. 304.

433 Theology in Reconciliation, p. 263.

434 Ibid., p. 264.


436 Campbell, Anselm's Background Metaphysics, p. 326. Here is where I believe Lewis too goes beyond Plato's contentment with contemplative enjoyment, while appreciating its value.

437 The Knowledge of God and the Service of God, p. 114.

438 Surprised by Joy, p. 189.

439 Holmer, p. 86.

440 Bodleian Library, ms. facs. c. 47, letter to Griffiths, May 23, 1936, p. 10.

441 God in the Dock, p. 222.
442 Screwtape Proposes a Toast, p. 109.
443 The Screwtape Letters, p. 54.
444 Ibid., p. 37.
445 Ibid., pp. 46f.
446 The Problem of Pain, p. 148.
447 Ibid., p. 99.
449 A Grief Observed, p. 57.
452 Calvin's Doctrine of Man, p. 32.
453 Reason in Christian Theology, p. 39.
454 Theological Science, p. 127.
455 Theology in Reconciliation, pp. 240-241.
456 The Hermeneutics of St. Athanasius, p. 247.
457 The School of Faith, p. cx.
458 Ibid., p. cxi.
459 Space, Time and Resurrection, p. 70.
460 The School of Faith, p. cix.
461 God and Rationality, p. 154.
462 Theology in Reconstruction, p. 131.
463 Conflict and Agreement, I, p. 64.
464 Ibid.
The centre of the Christian life is union or participation in Christ. When this centre becomes our obedience in daily living, then grace becomes not an objective act of salvation in Christ, but the receiving of God's aid to obey. *The Doctrine of Grace in the Apostolic Fathers*, p. 139.

As Torrance puts it, the centre of the Christian life is union or participation in Christ. When this centre becomes our obedience in daily living, then grace becomes not an objective act of salvation in Christ, but the receiving of God's aid to obey. *The Doctrine of Grace in the Apostolic Fathers*, p. 139.


Lewis notes that the more sacred a text is, the more subject it is to glosses and strained interpretations.

*Reflections on the Psalms*, p. 92.
488 Miracles, p. 108.

489 Ibid.


491 Bultmann openly adopted as his hermeneutical key Martin Heidegger's philosophical ontology. cf. Brown, pp. 103f.

492 Karl Barth: An Introduction, p. 48.

493 Brown, pp. 158, 195.


495 English Literature in the 16th Century, p. 449.

496 Einstein and Infeld, p. 95.

497 Surprised by Joy, p. 152.

498 God in the Dock, p. 111.

499 The Brink of Mystery, p. 111. cf. Out of the Silent Planet, p. 134. Weston cannot understand the Oyarsa because there is only fear, death and desire in his mind, and no room for anything else.


501 Surprised by Joy, p. 139.

502 Mere Christianity, pp. 33-34.

503 Surprised by Joy, pp. 52ff.

504 The Screwtape Letters, p. 62.

505 Miracles, p. 98. cf. The Magician's Nephew, p. 116. When Aslan speaks, Uncle Andrew does not want to hear him so he hears only a roar. This also shows how hearing is just as liable to man's subjective domination as seeing.

506 God and Rationality, p. 197.

507 The Screwtape Letters, p. 15.

508 quoted in Miracles, p. 170.

509 God and Rationality, p. 79.

510 The School of Faith, p. xxv. cf. Theological Science, p. 278.

511 Surprised by Joy, p. 95.
512 Studies in Words, p. 247.
513 A Preface to Paradise Lost, p. 71.
514 God in the Dock, p. 179.
515 Studies in Words, p. 329.
516 Ibid., p. 330.
518 Butterfield, p. 13.
519 Ibid., p. 64.
521 Theology in Reconstruction, p. 74. For Coleridge, metanoia extends only to the "Spirit or practical reason", not the pure reason. Aids to Reflection, p. 90.
522 The Ground and Grammar of Theology, p. 48.
523 Theology in Reconstruction, p. 74.
524 A Preface to Paradise Lost, p. 71.
525 Mere Christianity, p. 56.
527 Mere Christianity, p. 128.
528 Letters to Malcolm, p. 68.
529 Mere Christianity, p. 56.
530 The Problem of Pain, p. 86.
533 Theological Science, p. 49.
534 Mere Christianity, p. 56. "Hence we have a true and faithful knowledge of God when through union with Christ by the power of the Holy Spirit we receive the mind that was remade and renewed in him." The Hermeneutics of St. Athanasius, pp. 94-95.
According to Hilary of Poitiers, p. 64.

cf. Studies in Words, p. 311. Familiarity also distorts our vision. This is the problem G. K. Chesterton perceived as well and sought to imaginatively portray the miracle of the mundane by looking at the everyday from a fresh angle.

Biographia Literaria, p. 169.

The School of Faith, p. xxxvii.
CHAPTER VI

AN OBJECT-CENTRED APPROACH TO ART

A. The Nature of Art

In art, we enter the field of beauty where man feels and
thinks in a living unity. Often art is used as a vehicle for
self-expression. For this reason, Torrance criticizes certain
theologies as artistic, and hence subjectivist. But when he uses
this term as a polemical weapon, Torrance does not take into ac-
count the breadth of this subject which concerns Lewis, nor has
he reckoned with an object-centred aesthetics.

When Torrance links artistic thinking with self-expression
and self-projection, he resembles Lewis when he restricts science
to what is observationally controlled and quantifiably analyzed.
But as with Lewis' larger concept of science, there is within
Torrance's thought an appreciation of art's many parallels with
creative science and similar perils from subject-centred methods.

In Lewis, we have a man who was inside artistic experience,
both as critic and creator. As an Oxford don and later Cambridge
Professor of Medieval and Renaissance Literature, he was one of
a handful of great critics in this century. For over thirty years
Lewis grappled with epistemological and methodological problems
as they pertained to art. It is of no small significance for
this thesis that Lewis' literary criticism contains a most thor-
ough correlation with Torrance's theological epistemology.

As a professional literary critic, Lewis considered his
theological works a leisure occupation. "They have been done at odd
moments." This provides a clue as to the importance of his
literary critical method for evaluating his theology. His the-
ology illustrates "at odd moments" important epistemological
patterns and profoundly coheres with his literary criticism. By
his own admission, the imaginative, literary man, who inspired
his many writings, was deeper and older than either the ethical
The question arises: did Lewis' discovery of God, early in his professional life, influence his developing philosophy of art or did his literary development ignite his smouldering religious intimations into Christian faith? I propose no causal link either way, for the relationship between his love for literature and his love for God is probably misunderstood if we impose a causal explanation. What is essential to see is that a unitary epistemological method is at work in each field. Together, his religious and literary experience mutually confirm each other and integrate his theological reflection and literary experience into a rich correlation of his emotional and rational life and unite the poet and scientist in him. His way of approaching the object in theology and in art, though manifold in variation, is one in substance.

1. Art as Logos and Poema

Lewis remarks that as an author and a man, he wrote to please and instruct; the former (the artist) writes to please, the latter (the Christian) seeks to edify. Art is wisdom and beauty moulded into one. In later years, Lewis encapsulates his views on literary art by claiming that art is both something said (logos) and something made (poiema).

For Lewis personally, art as something said (logos) seeks to edify and instruct his audience in the way of Christ. This is what Lewis the Christian had to say. He speaks of truth and goodness as he discovered it in Jesus. But no less important for Lewis, art as something made (poiema) seeks to please, to entertain. The art form in which Lewis especially delighted above all others was mythopoeia and fantasy.

We must explore how Lewis weaves together these two aspects of art. For all art consists of the woven tapestry we analytically describe as form and content. As Erich Kahler puts it, it is art's genius to see and create the unity between external shape and internal structure, "for 'content' and 'form' are but two aspects of one and the same thing--the what determines the how, and conversely the how does not exist without what it is meant to convey". Thus as Hans Frei points out, to attempt to extract a meaning from a story which is "something different from
the stories themselves...is contrary to the character of a realistic story." Similarly, Lewis argues there is no real Hamlet if we abstract him from the poetry, clothes and stance as they are within the play. These things together are "the substance; the character 'as it would have been in real life' is only a shadow". The implication is that in art, and in theology, the two are intimately wedded. Of course in theology, since form and content are already bound together in Jesus the Logos and Morphe of God, theology as art merely re-presents this reality by its revivification or recovery of Christ through imaginative portrayal.

Though some zealous adherents attempt to wed art and reality, they are distinct. The critic who says, for example, tragedy is reality fails to laugh at the comedy which abounds in the world. The point is that by selection, isolation and patterning, art creates out of life's cornucopia. Similarly, Lewis argues, science is not reality, but quantitative (and qualitative) patterns selected to yield intellectual satisfaction. Art does not admit all reality helter skelter, but selects patterns qualitatively "chosen for their harmonious unity...balanced in a fashion which real life never permits...", and ultimately shaped to give satisfaction.

2. The Priority of Poiema

Before art can instruct, it must please. The first elementary condition of a good book, without which other merits are of no avail, is that it be "completely and certainly readable". It should be interesting, enjoyable, attractive and pleasing. Lewis strongly believes that art may quite properly provide innocent entertainment. It is a noble form of man at play. The philosophy of art for art's sake treats art too seriously and turns it into an ersatz religion.

Nonetheless, art as poiema implies that for the artist, art is work as well as play. And work entails creating and selecting a form. Lewis congenially dismisses much modern art as "fractant puddles of reflection" or "spilled sensibility", that are not works of art. Before his conversion, Lewis wrote that music is purest art because it consists of pure emotion. It is an emotion which is its form and its coherence, as an ordered
relationship of tones. Where there is no coherence, there is no music. The wines, oils and medicines of experience are but art's raw materials. Art demands a form designed and crafted to capture and to enshrine that quality of reality which has gripped the imagination.

Eric Auerbach contrasts two notions of form: the static and determinist form of the Roman Catholic hero, Don Quixote, and the dynamic, contingent coherence of a Protestant hero, Hamlet. Quixote is nearest in all Spanish literature to being a problematic figure, but behind his questions, God, king, love, class and decorum stand immutable and undoubted. "Compare the bewildered, easily interpreted and ultimately curable madness of Don Quixote with Hamlet's fundamental and many-faced insanity which can never be cured in this world." With which kind of form does Lewis operate? Peter Schakel sees Lewis as lying within the classical form of pre-existing and traditional types, in contrast to that of Coleridge who understood form as something organic which discloses itself in intuition. Schakel thinks Lewis' choice of form is "almost totally rational", in contrast to Coleridge's intuitive, spontaneous and self-determining process. And yet, Lewis himself comments that when he came to write Narnia, for example, "the moment I thought of that, I fell in love with the Form itself". This suggests that Lewis sought a concrete and organic form which best fitted what he had to say. The narrative character of a fairy story seemed perfect for Lewis in communicating the empirical concreteness and personal nature of Christian faith. In his autobiography, Lewis records that the Romantic man in him gave him his first taste of beauty. Natural or classical form had made no impact until one day he saw his brother's biscuit tin garden. Schakel's interpretation unnecessarily polarizes pre-existent, rational form and intuitive, organic form. This is a very non-Protestant dichotomy. Art, as Kahler puts it, operates at the frontiers of the expressible and seeks to break into new depths and hence integrate this new experience into a further and completed whole in order to reach a more comprehensive perfection of form. (This is also the unending quest of one who seeks to integrate form with being in science.
or as does Torrance in theology.) Lewis takes the traditional genre of children's story as it stands, but then baptizes it, changing and bending it to accommodate his message. Similarly, Karl Barth reconstructed the older dogmatics, by re-integrating traditional doctrines around a new integrating centre, namely, God in his being/act in Christ.

The form of communication, the *poiema*, constitutes the uniqueness of art. What is said (logos) belongs to other spheres as well, as in science or history. But art cannot be reduced to scientific, philosophical or theological reflection. Art invites us to come inside the empirical data to taste and feel as well as to survey the shape and contextualize the contours. By this creative, *poiema* element, the *logos* penetrates beyond the cerebral to the emotional and affectional level. Poetry's goal, J. S. Mill wrote, "is admittedly to act upon the emotions". Kahler describes poetry as being based on feelings, with its intense, concentrated and vibrant language. Its rationality consists in receiving, discovering and communicating the organic 'feeling qualities' which inhere in its object. To paraphrase John Macmurray, art is the rationality of the emotional life.

Lewis goes one step further. He argues that art as *poiema* binds reason to emotion. That is, art integrates our cognitive and emotional life. Its tool in accomplishing this is the imagination. Art moves our emotions by way of the imagination's representations of sensuous-empirical reality. For Lewis, the imagination or the feeling intellect, organically bridges empirical presence and intellectual concepts.

3. Art as Logos

Though Lewis felt art should please, he did not want simply to say that art's value consists in evoking pleasure. The work of Italian philosopher Benedetto Croce sets up the aesthetic as an experience irreducibly distinct from the rational and the ethical and views art as valuable for this alone. Under his influence, art has been construed as a mere arrangement of shapes, of which it is a mistake to ask what they represent. In the wake of his conversion, Lewis rejected this view because "it had nothing to say". When poetry exalts technique above content, the result is "indeed a wasteland". Lewis wrote these
words in the flush of Christian faith, when content, logos, had never loomed larger. In its wake, mere aesthetics-as-usual seemed trivial. Hence, it is a mere abstraction to say that art's value is aesthetic pleasure. There is more to art than poiema. All entertainment is not innocent. It should edify and instruct as well as please and entertain. Nor should art depreciate the logical and rational in favour of the vaguely suggestive or existential. How then does Lewis fit the two together without reducing art to clandestine ethics or philosophy?

His mature answer is that in the aesthetic experience, we experience the logos by means of the poiema. The poiema concretizes the logos for us and in us. In his earlier writings, Lewis describes this "something said" as instruction, edification, or "the handmaid of religious and moral truth", which may even serve to "evoke the divine presence". In his later thinking, Lewis draws these strands together by arguing that the value of art lies in what happens to us while we read (listen, view) and not in its consequences. Art enlarges our being by enabling us to experience feelings vicariously that we otherwise would never know. "Literary experience heals the wound, without undermining the privilege, of individuality...In reading great literature, I become a thousand men and yet remain myself." In the imaginative experience, we voyage outside ourselves into a new mode of consciousness.

4. Truth Claims and Art

In enjoying art we need not believe the characters and events in poiema really exist nor need we approve of it as we would in science or theology. As Lewis puts it, a poem tells you what meeting an elm tree is like qualitatively, but it does not entertain the question of whether this particular elm exists. Art is not concerned with the question of factuality, but is a way of experiencing the qualitative dimension unencumbered. That is its great strength and its great limitation.

B. The End of Art: Object-Centred Participation

At its heart, art receives and communicates the quality inherent in the living poiema/logos (form/content) unity of its subject matter. Art permits us entry into concrete qualities
of life and makes our knowledge more than just abstract and scientific data conceptually coded and filed. In art, the living quality of nature (and what is beyond nature) is tasted, sniffed and touched, and it involves all man's empirical-sensuous capacities. Whereas science deliberately eschews these so-called secondary and non-measurable qualities, art eagerly pursues and delights in them.

The poetic experience, therefore, is a pearl of great epistemological price, for it opens up the internal meaning of the other fields of knowledge. Only in art do the dry bones of scientific facts live. In the rhythm of self-emptying and participating in the other, the external, our own enlargement of being takes place.

Art explores and enjoys reality in its qualitative and concrete particularity. It is not subjective in the sense of self-preoccupied, non-real or non-rational. The encounter with reality in literature is as genuine in its aesthetic mode of rationality as the factual and scientific encounter is in its numeric and word rationality.

Thus in an object-centred and realist theory of aesthetics, qualities of value and emotion inhere in the object along with rational thought forms. Art is not concerned with what can be formed through its own fashioning and conceiving. It does not stare in the window pane of its own emotions, but focuses on its object and its qualities. Lewis contends as adamantly for the objective depth of qualitative emotions and values inhering in the object as Torrance does for word and number rationality inhering in its object. Sense and intellect alike must adapt themselves to their object. The rationality of our emotions as well as our thoughts depend upon whether or not their qualities inhere in the object or only in the self's subjectivity.

Because Lewis believed that emotional qualities inhere in nature, he argues that art must be willing to make commitments to the ontological reality of beauty and value. Lewis therefore endorses a psycho-physical parallelism, which Edwyn Bevan's Symbolism and Belief classically expresses. Bevan describes how images drawn from earthly experience are recurrently used to characterize the spiritual or divine life. Thus spatial height
as connoting spiritual worth is attributed to God. Though there is no logical correlation between distance from the earth's surface at right angles and spiritual worth, many of our words to describe God (superior, excellent, transcendent) have Latin roots which signify height.\textsuperscript{46} Light has a similar relation. "The languages of mankind bear witness to the fact that this sort of feeling connected with bright light is universally human." That is, there is a feeling analogous to admiration in the moral sphere which is evoked by bright light in the natural sphere.\textsuperscript{47} Time with endless duration, light signified by knowledge and glory and Spirit identified with breath are other inevitable physical-spiritual unities which Bevan explores at length.

Lewis begins his Riddell Lectures, \textit{The Abolition of Man}, by arguing that when the poet Coleridge refers to a waterfall as sublime, he is not making a remark about himself ("I have sublime feelings.") but about the waterfall.\textsuperscript{48} To turn 'sublime' into a subjective description of one's feelings is nonsense. For if the quality 'sublimity' is only something projected on to the waterfall by the emotions, the emotions which prompt the projections are correlatives and hence the very opposite of the qualities projected. That is, if I merely project sublimity on to the waterfall, the emotion which prompts it is veneration and humility, not sublimity. Even if a coherent subjective translation were made for all value statements, the working assumption would be that such subjective statements are irrational and by implication, says Lewis, contemptible. One who believes that values do not inhere within objective reality will not seek to educate people in experiencing the sublimity of a waterfall, but in debunking sublimity as a false sentimentalism. Lewis believes this only anaesthetizes us from reality.\textsuperscript{49} We do not impose qualities of value and emotion on to reality, but they objectively inhere. "Certain things, if not seen as lovely or detestable, are not being correctly seen at all."\textsuperscript{50}

1. Stock Responses

Lewis defends the validity of 'stock responses' in art as the "fundamental tendencies of the human imagination".\textsuperscript{51} For example, love is sweet, death bitter, virtue lovely, children and gardens delightful.\textsuperscript{52} In contrast, I. A. Richards deplores
stock responses and equates them with a substitution of "deliberately organized attitude" for the "direct free play of experience". Richards prefers to have a special sensitivity and openness regarding each choice and experience. Lewis sees this as very anti-Christian. He argues that "such deliberate organization is one of the first necessities of life and one of art's main functions is to assist it". Beauty (and hence, art) serves the good. "Every virtue is a habitus—that is, a good stock response." Lewis does not see stock responses as simply 'given', but as a "delicate balance of trained habits, laboriously acquired and easily lost. On their maintenance depend our virtues and our pleasures". Lewis believed that since the Romantics, the proper stock response to pride has been lost and is no longer a cultural habit. Today Milton's Satan is a mystery of interpretation, a development which Milton could not have predicted when he portrayed Satan in Paradise Lost.

In contrast to Richards, Lewis believes that the "free play of experience" is "too free and too direct in most of us for safety or happiness or human dignity". That is, Lewis denies that a raw or value-free experience exists. All data are theory-laden in science and are equally so in art. What Lewis sought, therefore, was to express the natural form which corresponds to the nature of the object or experience. When these natural coherences between reality and beauty and between reality and value are rejected in favour of raw experience, the realm of art is (in Torrance's words) cut loose from ontology and the natural coherences of stock responses disintegrate away. Thus Screwtape can seduce humans into believing that 'bare physical facts' are what is real and emotions are mere subjective sentiments. Thus to feel joy at a baby's birth is false sentimentality. Of course, if the physical event is bad, Screwtape unscrupulously and illogically does not seek to dissuade us that our emotional response to it is true, that war is really horrible and death is terrible and ugly.

Lewis steadfastly opposes the notion that literary realism is an unorganized stream of consciousness. He sees such raw experience in consciousness as a highly dubious discovery (and perhaps creation) of introspection. For Lewis, introspection
artificially suspends the normal function of mind (intention, morals and logical coherence), deliberately stops these natural, integrating and cohering processes of consciousness and tries to see what goes on when these are terminated. The unselective chaos of images and desires which result is hardly the essential characteristic of consciousness. Rather, "consciousness is from the outset selective and ceases when selection ceases".

Thus for Lewis, our mode of response to a work of art must accord with its own inherent structures. Our feelings of love, pity or anger should be the proper evocations pressed on us by intrinsic qualities demanded by the work. A passage from Chaucer is funny because the author is true to nature. And the author is true to nature because he "keeps his eye on the object". Wordsworth remarked that if he had any conscious "style" of writing, it was that "I have at all times endeavoured to look steadily at my subject".

Auerbach calls imitative art that art which seeks to build the character before our senses (eyes, ears, nose, skin, mouth) "out of their own premises", to let them speak, feel and think out of their own nature. The alternative is not to allow people to speak their own language, but to look down from above and judge. Coleridge considered Wordsworth's genius to lie in his natural organic images which

like the moisture or the polish on a pebble... neither distorts nor false colours its object; but on the contrary brings out many a vein and many a tint which escapes the eye of common observation, thus raising to the ranks of gems what had often been kicked away by the hurrying foot of the traveller on the dirty highroad of custom.

Whereas poor literature tells us which emotions we ought to be feeling, good literature presents an object or event in such a way that we feel certain appropriate emotions as objective correlatives.

Lewis thought that the current state of ethical education was very low. Kant's philosophy of duty for its own sake, with no thought of reward, was a pale and negative modern translation of the Christian ethic. By contrast, a Christian sees the reward of joy to inhere essentially in obedience, not as causal...
reward, but as the emotional reality inherent in goodness. That is why the psalmist cries out, "I delight in thy Law, o Lord". 69

In Lewis' quest for joy, his pre-Christian experiences of joy left the common everyday world (atoms and the void) behind as a desert. Real clouds and trees only reminded him of imaginary worlds "and I did not like the return to ours". 70 But in the baptized Romanticism of George MacDonald, Lewis experienced the reverse. MacDonald's web of beauty led Lewis into the contingent world he lived in. This was the world where the 'glad Creator' of oil and wine had himself become en-fleshed, and in so doing, had reinforced, enriched and redeemed creation's goodness and beauty. He did not ignore or minimize or abandon it. MacDonald's fantasy made the erotic and perverse look bad and the common world enchanted. "For the first time the song of the sirens sounded like the voice of my mother or my nurse." 71 The bright shadow had come out of the book and rested on the real world, says Lewis. "My imagination had been baptized." 72 Lewis now saw that real beauties inhere in the real world and he was now free to enjoy the world in a manner fundamentally different from the pagan or Romantic-idealist. The teeming richness of beauty and joy were gifts scattered broadcast, not auto-projections. The union of utterly concrete and empirical reality with inherent beauty was indeed wonderful to behold.

Though for Lewis art seeks to be object-centred and not self-centred, he does not for one moment disregard or minimize a proper subjectivity which participates in and reflects the qualities which inhere in the work. Art desires to entertain the subject. But the subject never dictates to art. The audience or reader receives the artist's participated experience of the object into himself in order that by acquaintance and participation he may know an experience, person or thing, which is utterly not the self, but something marvelously other. 73

What is the primary symptom of bad art? A lack of objectivity. If an author desires to please or instruct the reader by writing what he thinks the reader wants or needs or should want, whether or not he himself is interested or enjoys the story himself, a bad book will inevitably result. Why? The

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author's focus has not been on the subject-matter, but on the audience. Instead of attention to the object one describes, the plot, the characters, etc., are all subsidiary and suffer from the artist's true preoccupation: he wants to please his audience. Because the author's focus has no object within the story, it lacks depth and reality. Because he fails to attend to his characters, they lack reality. Art cannot bear such an emptiness at its core. 74

2. The Objective Form of Art

Modern critics often eulogize art for its creativity, spontaneity and freedom while they denigrate derivatives, conventions and rules. Great authors are pioneers and innovators. 75 All of this suggests a very different temper, if not an outright contradiction to an object-centred understanding of art. For Lewis, of all literary virtues, mere originality has the shortest life. 76 Lewis praises art which follows (or obeys) nature and natural form and blames art which departs. 77 The Medieval cosmology had a form, a meaning "built-in". 78 It did not have to be wakened into beauty or purpose. In contrast, the modern writer often seeks to discover a form or meaning out of his own subjectivity and to thrust his meaning on to what in itself has none. But if the world and its purpose has a built-in significance, the re-telling of that story is always worth the effort. A dullness of re-presentation is the chief aesthetic vice. The greatest virtue is an absence of strain, a graceful retelling. But always, the poema is a matter in which the people, artist and audience have a "complete confidence in the intrinsic value of their matter". 79 Hence the goal of Medieval art was neither self-expression nor creation. It sought a "handing on worthy not of one's own genius, but of the material itself". 80 In contrast to an objective form of art, the Romantics felt a tale valuable only "as an opportunity for lavish and highly individual treatment". 81

Rather than say art creates form, Lewis suggests that the best art discovers the form appropriate to the nature of the matter it seeks to communicate. For example, allegory as an art form is valid only when it does what could not be done any other way. 82 The object dictates the form. This principle
applies even to our manner of reading. Lewis reckons that "mouthing" is the infallible mark of the man who truly enjoys poetry. To read poetry any other way than with the lips, turns it into noble ideas or social history, etc., but it ceases to be poetry.

Lewis rejects any notion of art as self-expression. The artist seeks either to reflect or to reassemble natural form. Rather than striving to create beauty or wisdom which has never existed before, he strives to embody in his art a reflection or revivification of eternal beauty and wisdom. The loss of natural form (the technologizing of art) has become in modern aesthetics a major alternative which parallels the positivist and technological man's cynicism towards objective truth in science. Thus in music, John Cage intentionally pursues a purposeless, uncontrolled and inorganic conjunction of consciousness and unconsciousness. The loss of belief in objective beauty has also led to 'action painters' whose concern is the act of painting, not the finished product. This values painting as it guides the painter on his own quest for personal identification. Such an approach utterly dismisses any object-centred reception, for it uses painting solely as a technique to achieve self-understanding.

Kahler sees pop art as one more symptom of the "disintegration of form" whereby all human sentiment, all organic relationship between human subject and art object, is intentionally eliminated. What remains is a new formalism which reduces art to sheer materiality, raw data and a supposed factuality untainted by theoretical integration. This aesthetic version of radical, positivist empiricism paints only a flat reality which is immediately palpable and sensory and denies to art any depth or vital, coherent and internal form. The attempt to eliminate the personal in art goes hand in hand with the elimination of natural form. Rationality and language are divorced from their human and personal inter-relationship.

Because for Lewis art is not a subjective mental creation, but an imaginative discovery of a form which has a natural fit and connection with the object, Lewis opposes 'Richards' and Leavis' understanding of art because in its extreme application
it leads to subjectivism. "Since the real wholeness is not for
them, in the objective universe, it has to be located inside the
poet's head." As a result, like the Romantics before them, a
quite disproportionate emphasis is laid on the poet to the ex-
clusion of the object dealt with, the work of art itself and the
reader.

Lewis thinks his view stands "somewhat" alongside the
Platonic doctrine of the form partly imitable on earth, and has
remoter affinities with Aristotle's mimesis. But more im-
portantly, Lewis found Biblical confirmation of this objective
time of form in the Christian's encouragement to imitate Christ,
to participate in his new humanity. These imperatives suggest
that the qualities of form we seek are not self-devised, but
objectively inhere in the object. Lewis concludes that art's
highest goal is not to be creative, but to be creaturely.

J. R. R. Tolkien, Lewis' friend and colleague, proposed the term
"sub-creation" as a more appropriate way to designate art's true
intention.

3. Art as Communication

Early in his academic life, at a meeting of the Oxford
Martlet Society, Lewis challenged the theory that what mattered
above all in art was for the artist to express his emotion
perfectly. Mere expressionism, he argues, is related to art as
Narcissus is to Eros. As a social phenomenon, art seeks to
communicate de jure, not only de facto. It does not merely
express the emotional quality of its object (tragedy, drama,
etc.,) or the author's feelings. The artist passionately and
arduously alters phrases which are "merely expressive to himself",
and hunts for those "which will reproduce the right emotion in
the audience." Though Lewis' view is an unpopular opinion
amongst most poets, it has a noble lineage. As Wordsworth
puts it,

Poets do not write for Poets alone, but for men...
The Poet must descend from this supposed height;
and in order to excite rational sympathy, he
must express himself as other men express themselves.

4. Subjectivism in Art: Didacticism

To write a novel, play or poem solely with a didactic
purpose is another interference with objectivity. When a story
is simply used as a means of teaching ethics, it usually results in bad art. The artist, with only one eye on the subject, blurs his vision and divides his contact with the reality he is exploring. His concentration is shaken.

What is the alternative for those who wish to communicate truth and goodness? Lewis answers, "the story itself should force its moral upon you." The encounter with the object's inherent nature, when appropriately communicated, entails a true moral which springs forth, not an imposed moralization without organic grounding in the work itself. "Let the pictures tell you their own moral." A faithful recording of the quality (moral, etc.,) inherent in the object, discloses the object's urgency and appropriateness to the reader. Otherwise the work lacks reality because the author is double-minded. Lewis was deeply committed to instruction (logos) in art, but the authentic instruction rises naturally from delight. "The only moral of any value is that which rises inevitably from the whole cast of the author's mind." Unless the artist teaches from his own experience of what he needs to learn, he merely offers up platitudes "skimmed from the surfaces of our consciousness".

This has invaluable implications for theology. Unfortunately theology preached or taught has too often ignored these practical artistic implications. Ethical implications spring from the ontological reality. Lewis' examples of the truly didactic in art parallels the ethical teaching of the Bible. Here is the power behind Nathan's parable to David. As many scholars have pointed out, the imperatives of the Pauline epistles always spring from the indicatives of the faith. The objective quality of the Gospel prescribes its own organic ethical response.

In a candid self-criticism, Lewis confesses that his own greatest artistic error was ironically his greatest strength, namely his "expository demon". He tends to lapse into didacticism when he should be content to describe the object and thus to arouse and delight his audience. He found in the genre of children's story a form which freed him from this tendency, for by its very nature the children's story is narrative. In this sense, the fairy tale creates a most suitable form for the
Christian message Lewis desired to communicate, that is, the message about the God who acts.

C. An Object-Centred Literary Criticism

The academic world is full of scholarly skirmishes and credal power struggles. Majority schools of opinion clamp down their new orthodoxy, punish heresy or hurl anathemas at their opponents (for example, 'unscholarly' or 'reactionary'). In such a world, Lewis was an aggressive literary critic. His criticism was a heroic quest, an attack upon the mood and structure of the modern, post-Romantic critical schools of F. R. Leavis, I. A. Richards and others.

There are great risks in holding unpopular opinions. But to a "bonny fighter" like Lewis, this was the reverse of a deterrent. "It's more dangerous to tread on the corns of a live giant than to cut off the head of a dead one: but it is more useful and better fun." Lewis did not seem dismayed that his approach was a minority one. At times he revelled in it. But always, above the noise of battle, the goal of each literary skirmish was that people might enjoy art more richly and fully.

Lewis believed more than most that genuine progress in any field occurs only at an acute and particular point. The fresh waters of discovery do not reside in general moods and ponds, but are the lively breakthrough of a few creative streams amidst a baffling array of rivers that end in bogs and cisterns.

If art's goal is to "enlarge our being" by enabling us to penetrate qualitatively into the subject matter, what is the rightful role of aesthetic theory and, in particular, literary criticism? Lewis the rigorous empiricist sought to bring about an object-centred approach to a subjectivity-ridden criticism by proposing "An Experiment in Criticism". Written only a few years before his death, this is the mature statement of a lifetime of literary criticism. In it, Lewis proposes that we call a book good if it can be read in one way and bad if it can only be read in another. That is, he proposes to judge a work not by what kind of people read it or by its current canonical status, but by the way it is actually read. Only in this way does the work judge the reader. By this strategy Lewis reverses the usual relation between a book and the reader. The book has a fixed
value and the reader has the responsibility to approach it correctly. By this turnabout procedure, he seeks to force the reader to observe and attend first to the object, and not to his response or feelings about the work. "Attention to the very objects they are is our first step." And so we discover by strictly empirical means that enjoying a man's or a woman's magazine and enjoying Dante are not the same intellectual activity because the object is so very different.

Once we begin to read with this object-centred focus, we see the correlative need to analyse each work of art according to its own intrinsic nature and rules. As Barth increasingly wearied of books and theses about hermeneutical method, but longed for more actual grappling with the text, so Lewis rejects all "schools" of criticism in order to be radically open to each text's uniqueness. For that very reason, he is a gifted critic and interpreter. Holmer calls this approach 'theory-free criticism' for it recognizes the delightful complexity of literature and makes aesthetic allowance for it. The work itself begins to teach us the canons of response appropriate to it.

Torrance's hermeneutical approach to the Bible is no less radically object-centred.

The whole historical event of Jesus Christ must be interpreted out of its own inner intelligibility and that it will not yield...when subjected to a priori assumptions, extraneous criteria, or frames of reference that we may arbitrarily bring to it; rather we must allow these to be questioned before the fact of Christ, and be made to give way before His self-interpretation if we are to apprehend it.

In proposing this experiment on the act of reading, Lewis seeks to observe how men read. Are they attentive or inattentive, obedient or willful, disinterested or egoistic? That is, does the reader allow the work to enlarge his being by a reconstructing of his prejudices and reshaping of his understanding in order to see the world through new eyes? If in fact some books may be read in many ways, Lewis suggests that if it is capable of being read in the best way (disinterestedly, obediently, attentively), it is a good book. If a book will not endure this object-centred treatment, it is a poor work of art.
By implication Lewis rejects the whole anthropological, subject-centred approach of modern criticism, including Richards' spiritual function of poetry and Leavis' new didacticism in accordance with the scientific age.  

Because our prior categories may be in error, we must see with other eyes and feel with new hands in order to heal the limitations of our subjectivity. In the objective reception of art lies our remedy. Lewis boldly argues that because of an interpretative preoccupation with themes other than Milton's own, all Milton criticism from Blake until Charles Williams is fundamentally misleading. The reason? "The critic and the poet were at cross purposes. They did not see what the poem was about. Hatred or ignorance of its central theme led critics to praise and to blame for fantastic reasons." This parallels Barth's blast against modern theology which so infuriated Harnack.

It is utterly crucial to see that in all literary criticism the first step is an empirical one: to engage directly in the activity of reading. In this act one enjoys the activity of reading and contemplates the object (Alexander). Lewis focuses on the work of art. But far from excluding the reader (subject), this entails his radical personal participation. The focus is never on the abstraction of 'literature in itself', but on the event of reading literature. Another error is for the critic to extract himself from the reading experience and to focus on the reader's taste as judged by the things he has read. Literary criticism is not about the reader, but about literature. It exists for no purpose other than encouraging more people to enjoy literature. Criticism and scholarship are ancillary to literature. "Their sole function is to multiply, prolong, and safeguard experiences of good reading." Lewis never improves on his undergraduate statement concerning the reason behind all critical effort. "I suggest that the object of a work of art is not to be criticized but to be experienced and enjoyed." The purpose of literature is not that it be "true to life" or reflects certain values. The purpose of reading a book or story is to enjoy it for its own sake.

Lewis' willingness to observe, experience and then convey the emotional-rational qualities inherent in the art form without
premature criticism, is designated "descriptive criticism" by his friend and colleague, J. A. W. Bennett.\textsuperscript{119} A major source of misreading occurs when we prematurely adopt an evaluative attitude which makes every distinction a distinction of value. "The human mind is generally far more eager to praise and dispraise than to describe and define."\textsuperscript{120} The dominance of evaluative and subject-centred criticism in our thinking is seen in our use of 'poet' or 'theologian' as laudatory (for example, by Leavis) rather than descriptive terms.\textsuperscript{121} Lewis faults the critic, George Steiner, for using the pejorative 'melodrama' rather than a descriptive term in distinguishing tragedy and near tragedy.

I suggest as a fundamental canon of exposition, that a distinction of kinds should never be thus combined with a judgement of comparative values. This always weakens it and distracts our attention.\textsuperscript{122}

The first qualification for judging any work "is to know what it is--what it was intended to do and how it is meant to be used...The first thing is to understand the object before you."\textsuperscript{123} Auerbach similarly suggests that the primary task of literary criticism is not to interpret, but to "attain a clear understanding of what the work meant to its author and his contemporaries".\textsuperscript{124} The task of an object-centred critic is to "get ourselves out of the way and let humanity decide; not to discharge our hatred but to expose the grounds for it; not to vilify faults but to diagnose and exhibit them".\textsuperscript{125} Too often criticism is written to annoy the author, not to inform the reader.\textsuperscript{126}

If literary criticism does not lead one into direct encounter with the work, Lewis fears it only succeeds in fencing off a real experience of the object: mistaking retrospective analysis for qualitative experience. Lewis uses the word 'description' as a synonym for a thing's \textit{natura} (from the Latin for innate character). Hence in descriptive criticism, one seeks to penetrate to the very quiddity of a thing, its nature, kind, \textit{phusis}.\textsuperscript{127} By this descriptive approach, one artfully clarifies the meaning of a work and thereby enables the reader to enjoy the object more fully. Thus, in his criticism of Charles
Williams' poetry, Lewis spends five chapters enjoying, which entails explaining (in the sense of opening our eyes to receive more fully, not causally accounting for), and expounding. Only in his sixth and final chapter does he begin to evaluate. "So far I have been trying to explain rather than to judge." Following the descriptive process, we may decide that the work fails. A Marxist may conclude that a Cathedral was built for a bad purpose. But such questions come later.

Lewis' descriptive criticism has implications for New Testament studies. "Now as a literary historian, I am perfectly convinced that whatever else the Gospels are, they are not legends." Having read thousands of legends as part of his profession, he judges that the New Testament is "not the same sort of thing...They are not artistic enough to be legends. From an imaginative point of view, they are clumsy, they don't work up to things properly". How best then should we describe the Gospels? Lewis reckons there is nothing like them in ancient literature until the nineteenth century realistic novel. The sheer details, such as Christ scribbling in the dust, are often without doctrinal importance. Lewis concludes that the only explanation is that the author saw it occur. Similarly, Lewis' judgement as a literary critic leads him to reject the large and influential amount of modern scholarship which rejects the fourth Gospel as historical. He thinks it at least as close to historical facts as Boswell's Life of Johnson.

D. Subject-Centred Criticism

Leavis demands moral earnestness; I prefer morality.

---Lewis

1. Didacticism

After he acquires the proper focus, the critic has a choice, says Lewis: to use or to receive the work itself. F. R. Leavis, the influential Cambridge Professor of Literature, understood literature as an education in morally responsible living. For Lewis, this means that art becomes a certain approved list of books and authors one must cultivate in order to advance culture. But to value a work chiefly for reflections which they may suggest to us or for morals we may draw from it is a flagrant instance of using instead of receiving.
In a sense, Lewis rejects modern criticism for its Puritan conscience working on without a Puritan theology. "I have been a converted Pagan living among apostate Puritans." Or more precisely, as the focus on Puritan theology moves toward our behaviour and appropriation, similarly the focus in modern (Puritan) criticism is on our canons of taste and our feelings, but not on the work itself. Hence the literary Puritan approaches a work of art with all the rigour, scruples, self-examination and distrust of pleasure (and intolerance and self-righteousness) which his theological forbears applied to theology and the spiritual life. For Lewis, the literary Puritan is too serious a man to be seriously receptive as a reader.

To look for a philosophy or a theology in a piece of art is to "impede future reception of the work itself", because we then will go back to it "chiefly to find further confirmation for our belief that it teaches this or that, rather than for a fresh immersion into what it is". Unfortunately, if one is a determined enough critic, liberal or conservative, classical or Romantic, (and thus insufficiently detached from one's prior commitments) "you can find just what you want". Inevitably we must conclude that most criticism (like most theology) is a "kind of mould or cancer", feeding off the living work of art while making it unsuitable for further reception.

Lewis reckons that didacticism was the chief reason for his adolescent rejection of Christianity. He was constantly told how one ought to feel about God. Moral and spiritual obligations were the focus of the Christian preaching he heard. He found that an obligation to feel gratitude freezes one's feelings, because one's focus is self-centred (one's feelings), not object-centred in the story and person of Christ. One cannot enjoy Christ when one is constantly being told that one ought to enjoy Christ.

The result of reading to use: "We are so busy doing things with the work that we give it too little chance to work on us. Thus increasingly we meet only ourselves". That is, we meet only our beliefs, our values, our hopes, our fears. No 'enlargement of being' takes place, only the expansion of the sphere of the self into new territory. We have not entered into the opinions
and feelings of other characters in the play or poem. We have analysed their ideas over against our own.

Criticism wallows in quicksand whenever the focus is on the reader's taste, his response, feelings, and thoughts about the work, and not the work itself. This way judges art as good or bad depending on the user's personal critical a priori, which more often than not, merely reflect current cultural fashion. Quite frankly, Lewis lacks confidence in these "taste-centred judgements". For one thing, they are so chronologically dependent. "Tell me when you lived and I'll tell you what you think of Pope." 145

Inattention, lack of obedience and lack of openness to the work's own qualities are among the chief sins of modern literary criticism. Good criticism must lay aside its most cherished assumptions and values in order to participate in those of the work at hand. We must avoid the temptation to read between the lines (active intellect) in favour of the more rigorous task of seeing what is actually there. We misread a sonnet, Lewis says, if we look for a plot chiefly. "You are already turning away from the work of art which has been offered you." 146

2. The Deification of Art

The roots of the modern English subjectivist emphases of Leavis and Richards began with the great poet and critic, Matthew Arnold. Arnold identified art with spirituality. It is no mere coincidence that Arnold's elevation of art coincides with his loss of Christian faith. In his spiritual vacuum the deification of art begins. 147 Auerbach notes that when certain Romantics (for example, Flaubert) ascribed to art an ultimate value, didacticism or any kind of usefulness became deplorable. Instead a new rank is ascribed to pleasure in art, that is, to a sensory enjoyment of expression. 148 Hence the Italian philosopher, Benedetto Croce, viewed aesthetics as an autonomous form of the spirit. 149

More recently, the English critic, I. A. Richards, argues that by a taste for poetry we acquire the means of attaining the necessary psychological adjustments which improve a man's power for effective and satisfactory living; bad taste results in a corresponding loss. 150 For Lewis, this tradition implicitly
grants to art a soteriological value. In the absence of the Christian worship of God, the cultured apostate exalts art as a saviour. 'Unbelieving' criticism takes art so seriously it makes it a god. It turns a good creaturely activity into a surrogate religion. But for Lewis, when art is given a spiritual and godlike status, it has become a demon.

A man who is eating or lying with his wife or preparing to go to sleep in humility, thankfulness and temperance, is, by Christian standards, in an infinitely higher state than one who is listening to Bach or reading Plato in a state of pride.152

The Christian artist with his less exalted approach to art, sees that when one allows art to function properly as entertainment, one has served and honoured art more worthily than its worshippers.

Lewis had little sympathy with fellow Christian artists (such as T. S. Eliot and Dorothy Sayers) who consider literary taste to be a spiritual value.153 Similarly, to describe a poet as one with innate abilities and sensitivities others lack, leads to poetolatry.154 Moderns now worship poets. But Lewis argues that the common man is equally tragic and comic. Therefore poetry should be considered as a peculiar art or skill, not by any means the by-product of an exalted man. The sad fact is that the virtue of many artists ends in their imagination.

3. Art as Autobiography

"In my opinion, all criticism should be of books, not of authors."155 In a unique way, the artist rivets our attention on the object. He asks us to look not at himself, the author, but through his eyes to the world he portrays.156 The poet is a window, not a landscape. We err when we focus on the pane of glass and ignore the countryside. Attention to the object, not the author, is the methodological starting point for all art appreciation. This is Lewis' grand theme in his debate with E. M. W. Tillyard.157

For Tillyard, a poem is about (for example) Herrick's mind and mental patterns. So too, John Stuart Mill argued that description in poetry describes the state of mind which contemplates the object.158 But Lewis says Herrick's poem is about Julia, the beauty and charm of a woman. "To attend to Herrick therefore, is to cut ourselves off from the experience that Herrick is
trying to convey." Similarly, when reading the New Testament, one must not continually speculate about the authors and their situation. Lewis unflinchingly asserts that the first question we must ask the New Testament is, "Who is Jesus Christ?".

It is worth noting that here Lewis is more radically object-centred than Torrance. In expounding Schleiermacher's hermeneutics, Torrance describes how Schleiermacher seeks to "probe into the author's mind...and to reproduce in himself the "basic determination of his spirit...". Torrance affirms Schleiermacher's point that "interpretation involves a movement of sympathetic and intuitive penetration into the mind of the author, divining the basic disposition in his soul out of which the work emerged...". But Torrance also differs from Schleiermacher because he argues that a penetration into the author's mind does not exhaust the hermeneutical task, but only accounts for the subjective pole of knowing. The objective pole of reading, namely, the subject matter which concerns the author, must be penetrated into as well. Schleiermacher has left his task half finished. Lewis would more radically suggest that Schleiermacher has actually cut himself off from the experience the author is trying to convey.

Literature is not about the author, but about entrance into events and things which the author wants us to taste and see. Art seeks to communicate the quality of the object, not the author's feelings. Lewis' former pupil, John Wain, criticizes Lewis' autobiographical writings for being generalized and impersonal accounts of his conversion and his wife's death. The reason for this sour response is that Wain wants Lewis to describe himself, whereas Lewis prefers to describe his impressions and feelings about life and people. Wain wants the 'raw emotion' of introspection. Lewis prefers the natural organizing of his consciousness in terms of stock responses. Similarly Carpenter thinks Lewis' personal shyness leads him to reject the personal heresy. Lewis would reply that one cannot escape emotion, but one ought to avoid its misuse. He seeks therefore an object-centred emotional involvement and not a subject-centred emotional preoccupation, for this latter way walls off the experience of other things and persons.

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Wain wants the personal heresy, but Lewis will not give it. Lewis describes how devilish and self-defeating the grieving experience can be as we struggle against self-pity, self-centredness and against their onslaught focus on the bereaved and not the self. He breaks off his introspection because he mistrusts it and believes literature is not about the author, but about what the author sees, hears, and experiences. 165

4. A Priori Canons

Most critics, fond of some subservient Art
Still make the whole depend upon a part. 166

--Pope

One of the basic critical errors is the misreading of a text. From the failings of many hundreds of reviews of his own works, Lewis discovered that a careful reading of the work one criticizes is a rarity. 167 Naturally, misreading engenders further faulty criticism. Thus, when critics misread a story (because they are too busy using a story or judging it), they fail to get the facts clear. Hence it is no surprise that expounding and clarifying the story's meaning is a cardinal function of Lewis' descriptive criticism. 168

Early in this thinking, Lewis described criticism's function as two-fold: to discover the beliefs and content of a book or poem and only then to pass judgement on them. Inevitably the latter is done by critics as amateur philosophers, casuists and theologians. 169 But first things first. "It is very necessary to get the story clear." 170

The culprit behind misreading is often an a priori canon of beauty, form, etc., arrived at prior to the event of reading a particular work. This makes empirical penetration into that work of art impossible. "An a priori assumption as to what can, and cannot be the expression of real imaginative experience is the worst possible guide." 171 Lewis is continually critical of the Humanist's interpretation (for example, Erasmus) of Medieval writings and theology because of the damaging preconceptions they bring to the reading of ancient texts. 172 People often assume they know what the plot of a story is all about. Lewis tells of a friend who wrote a book about trees. When it was reviewed, a critic thought all the tree bits were padding. 173
Our array of assumptions make us very unattentive readers. To charge Medieval poetry with insincere adornment on the grounds of the modern canon of naturalness is pointless. One does not call an oyster insincere for making a pearl. They are two different types of poetry with two different goals. It is better to understand what the Medieval man values aesthetically and see how the poem embodies that. Or one might wish to describe the two styles and show how each fulfills its own laws. Afterwards, one may judge the strengths of various canons, Medieval adornment or modern naturalness. But to criticize one canon by another is folly.

This resembles Torrance's complaint against the form critics. They unself-critically take the socially conditioned paradigms of their modern philosophical-critical community and apply these abstractions as the normative interpretive rules for the New Testament, documents of another time and place. Inevitably this distorts the ancient texts.

This leads us to one of the serious difficulties with Bultmann's demythologization campaign. The explicit disapprobation of myth leads its practitioners to expunge the mythical as irrelevant. But how do they know it is irrelevant? To borrow an analogy from Lewis, to demythologize the New Testament is like going to a Mozart Opera only for the spoken bits. If we cannot learn to like a work of art for what it is, we had best give it up. There is no point in trying to twist it or force it into a form it was never meant to have.

Critics who misread the New Testament often find it incoherent. As a result, much time is spent speculating from the critic's a priori canons what Jesus could or could not have said. Thus, an important task of descriptive literary criticism is to make sure the reader first understands the Christian story as it comes, warts and all, before he criticizes or evaluates or translates it by other criteria. Hence, for example, Lewis expounds the uniqueness of the resurrection account. There he finds the point is not the mere survival of the soul, (else why did Christ keep having to expend such energy convincing them he was not a ghost?). Rather the point is "that a new mode of being had arisen...as totally new as the arrival of organic life."
That is the story." Once we understand the story we may proceed to ask what to make of it. But to argue that Christianity teaches the survival of the soul, one has to stress suppositions that are nowhere in the text and to reject as inauthentic all those elements which speak of bodily resurrection and empty tomb. Thus the a priori aversion to a crucial element of the story (bodily resurrection), leads to a serious misreading of the text.

What are the causes, Lewis wondered, for the persistence of the many subject-centred criteria which deter appreciating and understanding what is simply there in the story, play or painting? At times sheer proximity to an object may seduce us to misunderstand. Therefore it may be helpful to observe the nearby by means of something admittedly far away. It was the study of Latin and German that first taught Lewis his English grammar and syntax. Prevalent mental habits can cramp and distort objects to which we are surprisingly close yet fail to understand. "There are some things about your own village that you will never know until you have been away from it." Is there any cure for suppositions which distort? Lewis' answer: direct encounter with the object in its native context. To penetrate into an object's natura demands empirical involvement and implies the elimination of a prioris. Only then can we penetrate to a true understanding. Lewis arrived empirically at his understanding of the nature and function of myth by reading with childlike openness and pleasure thousands of myths, fairy tales and legends from many countries and ages. But unless Lewis had suspended his disbelief and enjoyed myth on its own terms, he could never have enjoyed them, but would have criticized them for what they were not. Neither useful criticism nor pleasurable reading is possible if we do not suspend our expectations and desires and receive the work on its own terms, and on its own intrinsic assumptions.

If object-centred, descriptive criticism seeks to help the patron enjoy the object more, this means that quite a bit of time must be spent 'hindering hindrances' to the appreciation of art. This may involve criticism in a kind of literary apologetics. Criticism at its best casts a retrospective and
a posteriori light on the object of art, in order to correct possible over-emphases which are prevalent in current reading and thereby to enhance future encounters with the object, book, poem or painting. 186

E. The Participatory Nature of Objective Criticism

For Lewis, only surrender to the object's own standards leads to a proper understanding and enjoyment. In his inaugural lecture as Cambridge Professor of Medieval and Renaissance Literature, Lewis describes his value to the academic world as that of a literary dinosaur, an old English man, who has come to have the taste and sentiments of Medieval-Renaissance man in his bones. 187 Initially, as with our discussion in natural and theological science, this creates dissonance within us. Might this not lead us to waste our time with disappointing literature? As Lewis' friend, Nevill Coghill puts it, did not Lewis' "habitual generosity of mind" allow him to be deceived or seduced at times by mediocre art masquerading as important?188

Lewis never seemed discouraged by this intrinsic danger. For no literature will succeed as good art if it is not read attentively, obediently and disinterestedly. No a priori list of good literature will enable us to short-circuit the rigorous participatory reading effort. Criticism which has not opened itself to a certain genre, be it poetry or science fiction, is a waste of time for reader and author.

Those predisposed against a genre of art are the least fruitful critics of all. "Who wants to hear a particular claret abused by a fanatical teetotaller?"189 Lewis refused the musicologist Erik Routley's invitation to be on a committee to choose new hymns because he was simply "not in sufficient sympathy with the project to help".190 In a word, he disliked hymn singing. "If you have never enjoyed a thing and do not know what it feels like to enjoy it, you will hardly know what sort of people go to it in what moods, seeking what sort of gratification."191 As Wordsworth said of poetry, so Lewis says of all art: "You must love it ere to you it will seem worthy of your love".192 Good criticism penetrates by openness and participation to the real meaning and beauty of a work.

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When circumstances demand a negative response to an important and valuable work of art (or philosophy), Lewis seeks to maintain his imaginative openness toward it and understand its appeal from within. For example, though he rejects as untrue the Romantic myth of man's evolutionary triumph over nature, he does not criticize it with conceptual contempt. Indeed, though he seeks to bury Romanticism in this guise, he eulogizes it as well. Only this approach can penetrate to the heart of philosophical or theological error and grasp the imaginative power and beauty, howbeit distorted, which undergirds its conceptual structure.

In a heartfelt dedication to Charles Williams, Lewis records in the strongest manner his belief in participatory criticism. He suggests that the greatest poets do not seek to teach morals, natural philosophy or anything else, but describe the object which they experience in its qualitative depth. "They were in fact adoring. And what we take for the didactic is often the enchanted." Perhaps the best expository criticism is adoring and uninhibited enjoyment. Hence, for the Christian, theology as doxology and worship is the deepest and fullest penetration into the object and the clearest vision of God's beauty and rationality.

Literature is concerned with the felt qualities of objects and events, not primarily the truth and falsity of propositions. For this reason, Lewis thinks it harder to understand and explain a feeling than to explain a thought. It is easier to teach amateur philosophy by debunking emotions and their value than to explain why and how a bad treatment of a basic emotion is bad literature. In criticizing one of Barfield's poems, Lewis struggles to explain why he dislikes it and finally admits he can offer no clear reason for his dislike, except to say "I cannot feel you have solved the problem..." Criticism of art requires our emotional response for proper understanding and analysis.

To genuinely understand an old book, one may need to entertain emotions and feelings perhaps unexperiencing in our day. Thus, to read Beowulf aright one "must imagine himself as an old
Saxon thane sitting in his hall..." in order to receive the atmosphere of terror which is endemic. The legendary Merlin taught young Arthur about fish, not by slicing one up before him in a sterile and off-white laboratory, but by magically transporting him into the shimmering skin of a fresh-water salmon.

The approach Torrance advocates for New Testament exegesis reflects this object-centred participation. To listen and appropriate correctly, "we must allow ourselves to be drawn into the effective and creative operations of the Word in its original sphere". The value of studying actual texts and historical background is "that we may stand in the place of the original witnesses and go along with them in all they suffer under the impact of the Word".

As we have seen, participatory criticism means that we initially criticize, for example, Medieval literature only from within a Medieval point of view. The wrong method, "the worst method", (Lewis) takes the impressions which the old text makes on our modern sensibilities and applies to this the detailed methods of modern, analytical criticism. "To use a microscope, yet not to clean it or focus it, is folly." One creates a phantasmal object and misses the real one. Literary history is not concerned, therefore, with the past "as it really was (sic), but rather with how it seemed to be to those who lived it". We want above all, "to know what it felt like (e.g.;) to be an early Protestant". We must first re-enter what was important at the time, not what later interpreters say was crucial from their viewpoint. Even "the stupidest contemporary...knew certain things about Chaucer's poetry which modern scholarship will never know". Only on this object-centred, participatory basis will the evaluative question be meaningful.

We have been arguing that objective criticism demands participation, an imaginative openness and entrance into the opinions and therefore, attitudes, feelings and total experience of other men. To learn from within what it feels like to be a materialist, one reads Lucretius. And in art, we must continually remind ourselves not to bother with whether or not we should alter our own opinions. This will fatally distract our.
attention from the object at hand and ensure we never know the work on its own terms.

Let us note some specific issues where Lewis writes descriptive literary criticism with the intent of making us participate in the object. In this spirit, Lewis presents his prolegomena to Medieval literature, *The Discarded Image*, a rich synthesis of Medieval information to enable students to enjoy more fully Medieval literature.\(^{207}\) Similarly, Lewis spends one hundred pages of prolegomena in *The Allegory of Love* to help us enter imaginatively and intellectually into the fifteenth century courtly love sentiment and its poetry.\(^{208}\) Owen Barfield, Lewis' close friend, suggests that criticism functions best as midwifery. That is, it brings the reader from a mere awareness of the finished poem to imaginative participation in its creation.\(^{209}\) If we replace 'creation' with 'quiddity' we have Lewis' intent without Barfield's Romantic self-intrusion. The avowed intention of Lewis' *The Discarded Image* is to get the reader to feel as a Medievalist felt: to experience the emotional effect of Medieval literature as it was felt by a Medieval man.\(^{210}\)

Secondly, we should note how Lewis discusses myth. As a lover of the myths of all ages and cultures, Lewis' goal as a literary critic is first to enable others to enjoy the myth (the object) as he does. Therefore, he deliberately avoids a definition of myth. He does not wish to embalm myth conceptually, but to convey the living impact, the "effect on the reader" of myth.\(^{211}\) Rather than provide a prescriptive definition of myth, Lewis prefers to lead the reader into an empirical encounter with myth and describe myth by its effects on the reader.\(^{212}\) To define myth, provide a classification system and dictate what is and is not myth, may foster a priori critical judgements, but not the enjoyment of myth. The reason for his reluctance is simply that at the heart of myth is the communication of the qualitative experience of the object: the battle of Culloden, the mighty Oak or King Cophetua's infatuation. An abstract and conceptual-logical definition tears myth from its living qualitative encounter with the reader.\(^{213}\) The lack of imaginative-referential bonding to the myth as participated in by the reader distorts its essential significance. The reader is left with a
definition, but very little meaning.

We might sum up the case for object-centred, participatory criticism with the following analogy from Lewis. There are two ways to enjoy a piece of literature, just as there are two ways to enjoy a foreign country. One man (the self-centred, anthropological critic) carries his Englishness abroad with him and brings it home unchanged. He always consorts with English tourists along the way. "By a good hotel, he means one that's like an English hotel... He complains of bad tea when he might have had excellent coffee." A man may carry his modernity and pre-understanding with him through all his reading of past literature and preserve it intact. The highlights of all ancient and Medieval poetry are those bits which resemble "or can be so read that they seem to resemble the poetry of his own age".214

When modernity was Romanticism, the great thing in Sophocles was the nightmare choruses in the Coloneus, Lewis recalls. The great thing in Dante was the Inferno and "the Inferno meant Paolo and Francesca and Ulysses...".215 Or if modernity is Heidegger's existentialism, the importance of the New Testament is the concept of existence which it enshrines.216

"But there is another sort of travelling and another sort of reading."217 One may eat the local food, drink local wines (and not complain about the 'fizzy' beer) and see a foreign country as it looks to the inhabitants and not the tourists. "You can come home modified, thinking and feeling as you did not think and feel before."218 As a result, we go beyond our modern sensibility and our pre-understandings. When criticism studies things outside the poem, we steep ourselves in the vanished period in order to re-enter the poem with eyes more like a native and to discover that modern associations given to old words are often false.

In so far as you succeed, you may more and more come to realize that what you enjoyed at first reading was not really any Medieval poem that ever existed, but a modern poem made by yourself at a hint from old words.219

If we wish to know as well as to enjoy, a tourist's holiday is rather a waste of Europe. "There is more to be got out of it than he gets."220 It is a waste of past literature to

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see only the reflection of our own faces. Instead of bringing our modernity with us into the past, we may choose to "put ourselves back" into the universe the ancients believed they lived in. This, Lewis argues, makes the author's work more interesting, nourishing and delightful, (as well as making our reading more accurate to the original intention of the author). 221

But I have no special wish to make converts. I write for those, whether few or many, who, like me, care to know more of this theatre and this play than can be seen from the particular row and seat of the mid twentieth century. 222

Lewis concludes his advocacy of descriptive criticism without a call for converts. But with theology, unlike aesthetics, the issue of truth as well as enjoyment is at stake. There is a great divorce between knowing God and knowing one's self, between loving God and loving one's self.

F. The Difficulties of Subject-Centred Criticism

1. The Anthropological Intrusion

In the true response to art, we enjoy the object, not the self. If the goodness which the artist seeks to evoke inheres within the work, we may well have to endure some disillusionment, as John Macmurray puts it. 223 Our prior aesthetic criteria may have to undergo drastic changes. The roadblock to appreciation in art, as with rationality in science, lies in the knower, not in the object. The self with its massive and willful intrusion must empty itself in order to be filled with a quality of experience beyond its own self-consciousness or self-creative capacity.

Perhaps the most remarkable mental trait of the modern period is the inability to undergo this necessary self-emptying. As a result, there has evolved a severe incapacity among many of the cultured and intelligent to respond directly and immediately to a work of art. 224 The critic, feeling the story itself lacks adequate depth to account for the qualities of feeling it prompts, invents new grounds in his own life as a reader. This is done by building up a second story or romance or narrative around himself, which he mistakes for the true source of enjoyment and quality of the work.

This rereading of, for example, the Grail legend, necessarily distorts the original story. The new version, though also
a quest, is about the reader, not Percival or Gawain. This anthropological approach to literature has engendered a whole new literary process by which one enjoys the Grail story for its Jungian archetypes, vestiges of real history or hidden hieroglyphics of esoteric wisdom. This development has enabled the critic to release his inhibitions and to enjoy. So J. Speirs argues that the focus on the mythic and ritualistic origins of Gawain preserves the reverence and mystery of Medieval romance and keeps it from being read as sheer fancy. But notice that what the subject-centred critic enjoys is not the object itself, but the suggestion that the object is enjoyable because it is the "last echo, trace, veiled presence of something else". Newly discovered anthropological backgrounds or Jungian archetypes, etc., give the reader rational grounds for feeling that more is behind the story than what meets the eye. Lewis was never convinced that these 'hidden' sources are the power behind Gawain and account for its attraction. They never seemed to him as interesting or powerful as the story itself. The anthropological interpretation was like asking him to believe that something which moved him very much was able to do so by the help of something which moved him very little. The thrill in this kind of reading depends not on the story itself, but on thinking you have uncovered the secret behind the story's pleasure, "that they [sic] have surprised a long-kept secret". This releases the sense of mystery which the story itself once released, but which is inhibited in the modern reader.

He is no longer afraid of being taken in. He allows himself to feel the wonder and excitement which the old poet intended to produce...because a sop has been given to his intellect and he now believes that his reactions can be defended on extra-literary grounds.

Lewis concludes that this psychological and anthropological method is a way of restoring to the reader his lost power of responding to and enjoying the story. But it is another matter whether these new grounds really explain how and why the Grail story affects us. In the end this turns the Grail story into a psychological novel about the reader. The object of joy is transferred from Gawain's quest to my own quest which critically reconstructs the original notions in the tale. "Mr. Speir's
The experience and excitement of the discovery of mythic origins or Jung's theory of myth is itself an exciting myth and is enjoyed in the same way.

In literary criticism, "this is better than nothing". But it is not the same reward that the object-centred reader receives. For the subject-centred reader has a new (or rather the same old) object—himself. Inevitably this anthropological interpretation harms criticism because the reader does not really enjoy Medieval literature. He uses it to enjoy brooding about dark things which may or may not have been in the past, things hypothetically abstracted and reconstructed in his mind which he has created through contact with the story and which he then connects to his present life experiences. He enjoys and explicates what is not in the text, but is a reconstruction within his mind of, for instance, the pre-history of a text.

For Lewis, to suggest that a supposed mythical origin or the earliest recorded meaning of a word necessarily throws light on its meaning in a particular romance or poem is as dubious as using etymology to define the meaning of a word. Whether or not Malory's Gawain has a solar mythic origin is literally irrelevant. It does not increase enjoyment or understanding of Malory's Gawain. On the contrary, the poem illuminates the myth. Within any given story, an object, person or place is neither more, nor less, nor other than what that story effectively shows it to be. For Lewis, the power of art lies not in its sources, earlier and lesser known, but in the talent of the writer and the work itself.

Lewis finds conjectures about the pre-history of a text a dubious project. Form criticism should be only done with ample warning that such speculation is probably wrong. Lewis' evidence for this negative evaluation is that when the pre-history of his own works was so analysed and his own psychology as an author explored (for example, this section an afterthought, that one laboured, etc.,) it was always incorrect.

Lewis calls 'anthropologizers' all those who enjoy art only by abstracting from the works mental discoveries of principles, ideas, etc., and who fail to enter into the work itself.
Only in the piece of art itself "do the dry bones of anthropological facts live''. Secret origins cannot account for the beauty and power of a finished poem.

The unknown cannot illuminate the known. What is merely conjectured or reconstructed or at best known only from without, cannot illumine what we encounter directly and receive deeply into our emotions and imagination.

In this regard, Lewis distinguishes two kinds of explanation. One way (the anthropological) accounts for a work causally by its similarity to some earlier thing. But Lewis prefers an explanation which opens our eyes and gives us the power to receive or receive more fully the talent and art of the work itself: "the new invention not the trivial and external similarity to some earlier thing''. The cathedral, not the rubble, is the advance to coherence and imaginative power. The cathedral is the only clue by which we can even imagine the rubble. Speculative origins are encountered only at a second level which extracts them from their concrete and living context in the work of art.

A special grievance to Lewis was undoubtedly that the great mythic sagas he loved were turned by subject-centred critics into autobiography, rather than received and enjoyed for the unique stories they were. For within all literature, Lewis' special favourite was that field in which "all critics between Aristotle and Maud Bodkin had left alone...", story or mythopoeia.

One need not look far in theological circles to see remarkable similarities to the anthropological literary trends. The tradition established by form and redaction schools of criticism inevitably produces a search for secret origins or psychological sources in the early Christian community, etc. This may indeed restore a response of mystery and excitement to the modern reader but it is questionable whether this is the reason why the Gospel affects us so powerfully. And it raises the difficult question whether the object that the subject-centred reader enjoys is the living God incarnate or is an anthropological, existential substitute. That is, we must ask the critical question to subject-centred or Cartesian theology whether its God has become a hyphen for man.
Fortunately, most of humanity has not needed this psychological aid to enjoy the Grail story or the Gospel. But the distortion of the story into a self quest reflects the need of one kind of reader who frankly lacks the fundamental critical skills of attentiveness, obedience and disinterestedness.

2. Subject-centredness as Unbelief

We have seen that self-centred criticism is unable to enjoy the tale itself. Instead, it invents new grounds in the life of the reader which becomes a new quest story in which the reader himself, not Gawain, is on a quest to find the true source of enjoyment.

Why cannot a direct response to the object be made by some? Unbelief. They cannot believe the object has anything sufficient to offer. That is, the anthropological and autobiographical bias of modern criticism "is possibly due to the desire to find wisdom in poems where the obvious meaning has ceased to appear wise". An aesthetic-empirical breakdown occurs when a lack of confidence in the work belittles its innate credentials. To salvage the situation, the critic supplies a new and different story which can fill the aesthetic gaps and stimulate the reader's flagging interest. If the obvious content of a work is "theological rubbish" the critic finds it necessary to convince himself that the mythical form encases some profound wisdom of quite a different kind, "some 'real subject' which no generation till our own ever suspected". One cannot ignore the parallel with Bultmann. For if God's incarnate coming in the flesh of Jesus, his miracles and healings which reveal his authority, the powerful disclosure of God's kingdom in Jesus, his atoning and vicarious death for our sins, the empty tomb and Christ's bodily resurrection, his real and concrete appearances to the disciples and their empowering, all seem like embarrassing mythology mixed into the true kerygma, then the only way to restore importance to the texts is to suppose that the authors are revealing their personal experience of the 'Christ event' in their own hearts through the mythical language of their day.

In other words, the reader supplements the object with his own bounty: himself. Lack of, or incomplete confidence in
the object means a half-hearted surrender to it and a ready and active replenishing of its seeming limitations with one's own reservoirs of self-experience and autobiography. Is it any real surprise, any real originality, creativity or radical breakthrough that the remedy the modern reader offers is none other than himself as the hero who will rescue this work from disappointment?

In art, science and theology, the self becomes enlarged and changed by the object in each field. But this paradoxically occurs when the self contracts and dies. And in emptying itself, the self opens up in order that new knowledge and relationship may enter from without.247 But in the subject-centred approach, the artistic experience, whose whole purpose is to release the self, "to heal the wound without undermining the privilege of individuality", is absorbed by anthropological activity. For the reader and critic, enlargement of being has ceased and is replaced by a retrenchment and reassertion of the boundless subject.

Art is endangered whenever the reader's inattentiveness or self-preoccupation renders possible only a small imaginative participation in the inherent qualities of the work. Curiously, in such encounters the sheer excitement of the work may be quite large.248 The narrative sequence, the tune, may be keenly felt. But arrangement, chronology, rhythm and process of plot, so captivate us that we fail to attend to and enjoy the innate qualities which give meaning to these unique events.

Often, the narrative's sheer excitement may lead us greedily to attend to our emotional response to the point where the quality of the events is simply missed, unattended to and ignored. But participatory indwelling in the object binds us to art itself. Where the object is excessively ignored, the work is used by the reader for emotional exhilaration, but not received for itself.

The emphasis on the self's use and pleasure is the artistic equivalent of technology. Pornography is always bad art, for its purpose is the sheer arousal of appetite. The quality of the object has no value or worth except as it stimulates the reader's senses. Art suffers as does theology or science when
the knower's experiences, taste, feelings and reasons are emphasized to the neglect of the subject-matter. Using Alexander's terms, the knower's experiences are contemplated, not enjoyed, and the object is ignored. The referential and objective link with reality is severed. The attenuation of experience and rationality descends as the self retreats to its own secure and autonomous prison of phantasms, emotions and reasons, apparently having found the implacable otherness of external reality too demanding to taste in its own uniqueness.

G. Christianity and Art: Field Relationship

Science has an intimate relationship with theology, according to Torrance. Man the creature is the priest of creation. The interaction between knowledge of God and the knowledge of nature takes place within the same cosmological and epistemological structures in which real man exists. But how should we understand the way art interacts in its field with theology?

Lewis sought to do battle with the tendency to replace religion with art. In an idolatrous environment, he rejoinders that art has the same relationship to Christianity as has carpentry or plumbing.\(^{249}\) He fumes that literary criticism is today a cult with priests and persecutors, with great intolerance and even traffic in relics.\(^{250}\) Literature has become a sacred text, and like all sacred writings, is exposed to the most wretched exegesis. The enjoyment of art has become a profitable industry with the D. Phil. degree bearing witness to the marketing of criticism by the universities!\(^{251}\)

But in addition to Lewis' withering word of judgement upon modern criticism and his needed differentiation between the province of theology and art; is there a positive statement of their relationship beyond art's common handicraft with carpentry or plumbing? Nonetheless, it is important to note that Lewis' fundamental impulse is to create a diastasis between art and religion in a climate too eager to wed them and which often de facto replaces Christianity with art and worships the creativity of the poet.\(^{252}\) Lewis' concern here bears a striking resemblance to Karl Barth's fundamental burden when surrounded by the culture-Christianity of his day. Barth unceremoniously
denounced the idolatrous marriage of religion, the queen of Western European culture, and the Word of God. Nonetheless, once this lesson is learned (unfortunately it is seemingly a lesson ever in danger of being forgotten), we must attempt a positive understanding of the relationship between heaven and earth, natural and theological science, Word of God and word of man, art and Christian faith. Barth began to do this in his Church Dogmatics. Torrance with refined scientific rigour has pursued this task in regards to modern science. Here I will briefly draw together some scattered hints about the arthetheology relationship, as a beginning into the exploration of their field relationship.

1. Aesthetic Rationality

We have observed how art seeks the qualitative and participatory experience of the particulars in the world, real and imagined, whereas science's comprehensive gaze tends to organize and generalize knowledge which is amenable to quantification (number rationality). Science apprehends the thought forms (largely numeric, and less so word and organismic) which inhere in reality. Art apprehends cognitively and emotionally the 'emotion forms' which inhere in the object. Art is concerned with aesthetic rationality. An enlargement of being results from this opening of the self to the mystery and glory of the other and external, the gnarled oak, the newborn calf, the freckled girl, or even the elf and the troll. True art apprehends and sensuously feels by way of the imagination the qualities of its object: good or evil, real or imagined.

Negatively, factual and historical truth and falsity are not artistic categories. But positively, art is concerned with good and bad representations of the experiential qualities, both rational and emotional which are embedded within the object. Moreover, art is concerned with true and false relationships towards objects, and with the issue of faithfulness in representation of the object experienced and described.

Art, like theology, is vitally concerned with the subject-object relationship within epistemology which Kierkegaard describes as a true relation to the truth. We might more precisely describe this as an authentic and accurate understanding
of error and evil. But poetry as the "impassioned expression which is in the countenance of all science", particularly expresses emotional truth.253

Kierkegaard once told a parable about two men, one who worshipped the false God with passionate inwardness and one who worshipped the true God with indifference.254 Kierkegaard's sympathies lie with the passionate man. Similarly, Lewis suspects "men have sometimes derived more spiritual sustenance from myths they did not believe than from the religion they professed".255 They can feed on the story, receive it, not use it and be more spiritually alive than the orthodox assenter who does not bother much, or the user who does not participate in the reality. Torrance also sees early myth (e.g., Plato) as an evidence within its limited conceptual framework of a passion and love for the truth for its own sake.256

When we call Jesus the Son and God the Father, we are in the realm of poetic rationality. This conveys a quality of relationship otherwise unknowable to us. The scientifically precise and analogical language, (whether analogia relationis or entis) brings clarity, "but there is some death in it".257 Torrance sees theological statements as translating Biblical statements (often poetic) into a "deeper level", namely, "in the necessary and coherent thinking of the Apostles".258 The problem is how to record or present emotional or aesthetic rationality. The answer is that the aesthetic rationality of the image (Son and Father) best preserves the inherently appropriate emotional response. Theological terms such as homoousion are not the natural language of the Bible. There, emotional rationality is not an elective or optional practicum, but the heart and very language with which God "stutters" to us in Scripture. For instruction and clarification of cognitive thought forms or controversy we may change the creed's "I believe in God the Father", to homoousion, Trinity or "I believe in an incorporeal entity, personal in the sense that it can be the subject and object of love, on which all other entities are unilaterally dependent".259 But the poetic (Father-Son) invites us to imagine and therefore to feel the personal and relational nature of God. Lewis reminds us that poetic language
does not discharge or arrange our emotions, but invites us to taste and see, to feel and sense. It does not prescribe emotional response, but creates the semantic conditions by its sensuous-empirical appeal through which an emotional response follows naturally and organically. We might say that where science is concerned with actual truth in empirical, external space and time and the contingencies of the space-time universe, art seeks true representations and images of the real, the beautiful and the good, which the imagination represents, reconstructs and revivifies. Science prescribes; art describes.

Perhaps the primary relational truth which art shares with theology is its method of escape from the self by way of radical openness and object-centredness. In receiving a work of art, as in love, ethics and the pursuit of science, we "go out of the self,...correct its provincialism and heal its loneliness". To do this, we must triumph over man's primary impulse, "to maintain and aggrandize himself". "Here, as in worship, in love, in moral action and in knowing, I transcend myself; and am never more myself than when I do."261

2. Imagination and Belief

We should briefly discuss the relationship between the faith of the artist, "the semblance of truth sufficient to procure that willing suspension of disbelief for the moment, which constitutes poetic faith",262 and the faith of the theologian.

Coleridge rightly describes his dictum as "a negative faith...a mere poetic analogon of faith".263 And yet, here is a way of openness which permits entry into the multifarious world of art. Art creates a secondary world and demands secondary belief, says Tolkien.264 But science (and theological science) discovers the primary world of reality and demands primary belief.265 Aesthetic belief allowed Lewis to enjoy (e.g.,) Chesterton and his Christianity without the aesthetic disability of having to agree with him. Lewis notes how he especially enjoyed the goodness of Chesterton, yet this paradoxically had nothing to do with his attempting to be good. "I felt the 'charm' of goodness as a man feels the charm of a woman he has no intention of marrying."266
If this seems a very miserable enjoyment compared with that of the disciple, Lewis argues that the 'poetic analogon of faith' momentarily frees one from the subject-centredness of calculating the personal consequences or of the call to act which brings attention back upon the self. Fairie communicates the quality of Christ beyond the subjective barriers which inhibit our participation.

This is Lewis' apologia for the fairy tale as a proper form for communicating the Gospel. He thinks that Christian culture's stained glass and Sunday school associations obscure the real potency of the Christian message. Lewis recalls that as a child and adolescent he could never enjoy the Gospel because he was always told he ought to feel a certain way about Christ's death. Therefore he never could. Only much later, through returning to Christianity by way of mythology, could he slip past the watchful dragons of self-centredness in its many guises.

Of course there is a great difference between surrendering one's intellect and feelings in order to enjoy an hour's reading and surrendering one's total self to Christ. This is the great roadblock to aesthetic enjoyment of the Bible. As Lewis and Auerbach point out, by its "remorseless and continually sacred approach" the Bible does not invite but excludes or repels the merely aesthetic approach. We are not called to respond on the plane of imagination at all, but are called to respond with our will and affections. It is a travesty to respond to a living person merely with the imagination, "that impartial, unhelping, uninterfering, acquiescent contemplation" which we offer a piece of art. If we stay at the imaginative level, we turn a person into a spectacle, a thing. This ethical shallowness constitutes a major and recurring temptation of the artist. The Bible demands incessantly to be taken on its own terms: it will not continue to give literary delight for very long except to those who go to it for something quite different.

The Biblical God is a concretely real, personal being and the proper way to enjoy a personality is to love it.
3. Man the Poet and Priest of Creation

Lewis sees a choice between two views in regards to the appeal of fairy tales. The view of the psychologist Carl Jung says fairy liberates archetypes which dwell in the collective unconscious. In other words, in a good fairy tale, we are knowing ourselves.273 The other view is Tolkien's: that in fairy tales more than in all other literary arts, man most fully exercises his function as sub-creator.274 Lewis adds that the presence in a story of beings besides humans serves as a hieroglyphic which conveys psychological truth more briefly than is permitted in a novel.

In the Andrew Lang Lecture at the University of St. Andrews, Tolkien expounded his views on fantasy literature and its theological implications. We might say that Lewis and Tolkien are suggesting that man's priesthood over creation entails his being the poet of creation. Like Sidney before them, they ground man's right to make poetry as an honour given to man when God "set him beyond and over all the works of that second nature".275

In Torrance, man the priest is obliged to discover and to give audible expression to creation's rationality. In Lewis, (and Tolkien) man is creation's poet and is obliged to effoliate and festoon creation to invent new forms of beauty for man's joy and pleasure by reassembling or re-presenting its God-given qualities and earthly splendours.276 In so doing, man plays before God, and thus glorifies and enjoys him.277 The weaving of tales is as natural and God-given a human activity as natural science. And well done, it glorifies God.

Is fantasy abrogated by the coming of the Gospel? Tolkien sees it as both abrogated and fulfilled. "Redeemed man is still man...In God's kingdom, the presence of the greatest does not depress the small."278 Story and fantasy still go on and should go on. Rather than destroying legends, "the Gospel hallows them, "especially the happy ending". In an Athanasian manner, Tolkien argues that a Christian believes that all his faculties, including the imagination "have a purpose which can be redeemed".279

So great is the bounty with which he has been treated that he may now perhaps, fairly dare to guess that in Fantasy he may actually assist in the effoliation and multiple enrichment of creation.280
Fantasy, in fact, may aid us to see and taste reality afresh when it rearranges and evokes natural qualities, thereby recovering for us their beauty and meaning.\(^{281}\) Christianity baptizes play and reconstructs art, for as Lewis perceived, in the incarnation, beauty and joyous desire are no longer far away, taking us out of this world, but are brought back into this world. In the Gospel sublimity is mixed with the everyday and transcendence with the flesh and blood of Jesus.

4. Myth and History

A further aspect of the field relationship between theology and art is the relationship between myth and Christianity, especially the historical revelation to which Christianity is committed. First we must discuss Lewis' understanding of myth in order to appreciate the positive role he assigns it in marked contrast to Torrance (and Bultmann).

We have noted that Lewis prefers to describe myth by certain characteristics rather than to define it. For its value lies in its effect on us while we are reading.\(^{282}\) Fundamentally, myth is not an abstract truth, nor a description of experience, nor a cosmology, but a story. Lewis discusses particularly six qualities of myth: its extra-literary quality, (words are unessential; it may be good or bad prose), its pleasure is not dependent on surprise or suspense, but points to a "permanent object of contemplation", its lack of human identification and sympathy (no self-projection into characters; myth cannot endure subject-centred reading), its dealing with the supernatural, its gravity, sadness, and joyfulness (never merely comic), and its awe inspiring and numinous quality.\(^{283}\)

For Lewis, myth is the highest form of the imagination because in true myth, we experience concretely a truth about reality which is normally experienced only as an abstraction.\(^{284}\) It is a cognitive-feeling unity of experience. Its meaning is almost completely bound up with the story itself, as an incarnation of the meaning. There can be no meaning apart from the sequence of events.\(^{285}\) Unlike mere fantasy, which tends towards the baroque and frivolous, true myth presents itself with compelling authority.\(^{286}\) For example, the mythopoeia of Earthmother and Sky-father "forces itself upon the imagination".\(^{287}\)
Torrance starkly contrasts mythological thinking with theological thinking. Whereas theology begins with an objective centre in the givenness of God, mythology begins with man and projects ideas and patterns into God and accepts only what fits our prior understanding. For Torrance, the incarnation is the exact antithesis of mythology, for it is the reverse of man’s projecting; it is God’s projecting himself into humanity. Torrance further believes that mythological thinking presupposes a radical dualism of God and the world, and therefore all our thoughts of God are inevitably grounded in this-worldly knowledge and projected beyond. Mythological thinking, therefore, rejects the incarnation and interprets it mythologically, that is, as presenting in a dramatic symbol the timeless truth about God.

Torrance proceeds to allege that it is mythological thinking which leads Bultmann to reject the incarnation as an event with space-time, empirical correlates. Bultmann’s deistic assumption that God does not interact with a closed universe of cause and effect and his Kantian dualism between noumenal and phenomenal led him to discount as mythological all objective and empirical references in the New Testament and to find their meaning "solely within the souls of their authors... as objectified forms of their self-expression".

Bultmann himself explicitly maintains that in Jesus there takes place "an act of God...a decisive eschatological event". He holds that Jesus is "the agent of God’s presence and activity...a real figure of history", and yet, he refuses to tie this Jesus to a miraculous, supernatural event. Thus Torrance correctly argues that in the end, Bultmann has an act of God with no empirical referent because of his Kantian and deistic assumptions.

Bultmann, like Torrance, seeks to oppose mythological thinking (as he understands it) but he sees mythology not in terms of the deist/Kantian dualism which Torrance describes, but like Lewis, he sees mythology as intrinsically bound up with a supernatural, miraculous involvement in nature, which he designates as interference. But unlike Lewis, he heartily repudiates this characteristic of mythology and therefore seeks
to expunge it as irrelevant to the meaning of the New Testament. By removing the myth, one can preserve the meaning which exists behind the mythological packaging. The solution lies in uncovering the packaged meaning through an existential interpretation of the New Testament.

By stripping away God's actual empirical involvement, which has space-time referents (miracles, bodily resurrection), Bultmann unveils the true inchoate task of myth, (fortunately discovered in our century), namely, "to express man's understanding of himself in the world in which he lives". The value of New Testament imagery "lies not in its imagery but in the understanding of existence which it enshrines". That is, ironically, the value of mythology is not mythology, but an existential interpretation of mythology. To put it bluntly, Bultmann does not enjoy myth. He wants to get rid of it. He is like the unliterary reader Lewis describes who "won't accept admitted impossibles and pre-eternaturals". Lewis would argue that even when the Gospel images are translated, and the imagery removed, 'he ascended into heaven' still means something just as supernatural or shocking.

Here let us recall that there are two kinds of imagining and hence two ways of viewing mythology. One way is the daydream of wish-fulfillment, where I pretend I am the hero. The other kind has nothing to do with me; it is all about other things, delightful and fantastic in their own right, the "unpredictable ecstasy, otherness and externality of the disinterested imagination". If we surrender half-heartedly to a myth, we can turn it into a story about ourselves, but such wish-fulfillment or subject-centred imagination has an incessant realism attached to it. This realism does not enjoy things that cannot possibly be about ourselves (e.g., miraculous, supernatural events). This 'slave imagination' only enjoys myth or story as a guise for talking about oneself. But the 'free imagination' escapes from self-concern to enjoy those fantastic and improbable events which permit little or no human identification and no self-projection into the characters. Clearly, from Lewis' point of view, Bultmann's is the slave imagination. If he cannot project himself into a myth, he cannot enjoy it.
Supernatural events do not permit self-projection. That is, the Gospel for Lewis really is about the story of God's conquest of evil, God's intervention in the affairs of man and triumph over sin and death. It is only indirectly about our understanding of life and its meaning. It is primarily God's story of rescuing us. It is myth, in that sense, but as we shall see, with a remarkable difference.

Curiously, Bultmann retains one important element of myth which Lewis never discusses, but which, for example, Frankfurt emphasizes. That is, myth is not so much a recounting of a story, but a re-enactment and a dramatization which desires to bring about the truth it proclaims. Myth thus becomes a form of action.305 In this sense, (not in Lewis'), for Bultmann, the 'event' of Jesus is "re-enacted in the word of proclamation".306 This calls to mind the Roman Catholic interpretation of the eucharist, as the priest re-enacts the sacrifice of Christ. Bultmann puts down the Roman priest and exalts the Protestant preacher, exchanging a re-enacted sacrifice of Christ for a re-enacted 'event of Jesus'. Bultmann thus reconstructs the incarnation into an eschatological event and radically distinguishes it from a datable, historical event. For as he reminds us, this event "is continually being re-enacted in the event of proclamation".307 Inevitably, Bultmann concludes with another Roman Catholic utterance: "the Word of God and the Church are inseparable".308

If Christianity for Lewis is mythology with a difference, what is that difference? "The heart of Christianity is a myth which is also a fact."309 That is, the ancient myth of the dying and rising God, without ceasing to be myth, ("that's the miracle"), becomes an historical event. A Christian is one who receives (not uses) the myth and assents to the fact.310

Whereas Torrance lays all the weight on the difference between the resurrection of Christ from all previous myths, its rejection of all naturalistic ideas (corn gods) and cyclic processes, and the particularity and singularity of the incarnation,311 Lewis sees all these shadowy resurrections (for example, the finger of Osirus), as desires to escape death. This grand but misdirected theme of the imagination is fulfilled.
and judged in the empirical, historical reality of Jesus of Nazareth.

Immediately following his conversion, Lewis tried to describe his pilgrimage to Greeves. He interprets his old longings (Sehnsucht) as fulfilled now in Christ in a way he could not have anticipated. Tolkien helped convince Lewis that he should receive the story of Christ as he received sacrifice in Pagan stories, that is, not asking how and arguing out the mechanism of it, but receiving and enjoying it.312 One must enjoy the story whose meaning is irreducible apart from the narrative itself. These are riches one can never get from abstract truth.313 "The Gospels contain a fairy story...containing many marvels, beautiful and moving. Among the marvels is the greatest and most complete conceivable eucatastrophe."314 The difference with the story of Christ: "It really happened". This is God's myth.315 Hence Lewis would find Torrance's desire to move from image to inner logic, mythos to logos, prescientific to scientific thinking,316 as a loss of concreteness and dynamism in return for a gain of precision and clarity.

For Lewis, concepts and ideas (doctrines of atonement, etc.,) are less true than the event. They are our translation into concepts and ideas of what God has expressed in the language of his own activity: in incarnation, crucifixion and resurrection.317 Yet this is not unlike Torrance, who values Nicea and the homoousion formula because it states in technical, scientific language that "Jesus Christ is the linchpin", that his life and activity "has a place of unique and controlling finality in our knowledge of God".318

The change from myth to fact is much more stark for moderns than for Medievals, who did not distinguish between history and fiction like we do.319 As a result of this Medieval influence, when Lewis interprets Scripture, he is less likely to differentiate myth from history.320 His character, Ransom, even suggests that "the distinction between history and mythology might be itself meaningless outside the earth".321

In explicating the Genesis account of the Fall, Lewis happily calls it a myth, but distinctly rejects Reinhold Niebuhr's meaning, namely, "a symbolical representation of the
non-historical". He prefers the more flexible, "an account of what may have been the historical fact".\textsuperscript{322} The student of myth, Joseph Campbell, confirms that creation and fall stories are found in every quarter of the earth.\textsuperscript{323} The radical difference of the Bible is its insistent historical claim. Thus, whereas Aristotle praises poetry (myth) as a "higher thing" and more philosophical than history, "for poetry tends to express the universal, history the particular",\textsuperscript{324} Lewis reverses Aristotle's priorities and argues that the Gospel (particular) guarantees the value of the (universal) myth. A mere desire of the imaginative world has become the central and concrete reality in the Primary world of space, time and history. That is, for Lewis, the empirical truth of Jesus Christ justifies and redeems Romantic mythology, baptizes the imagination and gives it a depth of meaning otherwise unattainable.\textsuperscript{325}

Lewis' Christological reconstruction of the value of myth is neither a superficial baptism nor a sop to cultured despisers. Lewis recalls when reading the Gospels that he was too experienced as a literary critic to regard them as mere myth or legend. Lacking the mythical taste, the matter was "set down in their artless, historical fashion...".\textsuperscript{326} And yet "those narrow, unattractive Jews...blind to the mythological wealth of the Pagan world" had set down "precisely the matter of the great myths". And yet it was different. It was myth and history. The central character in the Gospels is depicted as authentically as Plato's Socrates or Boswell's Johnson, "yet also numinous".\textsuperscript{327} Lewis suggests that the reason the analogy between Christ and the Pagan myths of dying and rising gods is not mentioned in the New Testament is because "here is the real of which others are shadows...when the real comes, shadows flee".\textsuperscript{328} The dimness of pagan myth, symbols in their disfigured way, exist at all because they are first in God.\textsuperscript{329}

As myth moves from imagination's beauty to the concrete and historical, it undergoes a humiliation.\textsuperscript{330} Aslan has more imaginative appeal than Jesus and the New Testament, in the same way that a dream of a published book is more splendid than the fact.\textsuperscript{331} The "utter romance" is baptized with Roman wood and crude iron nails. Unlike a story, the living Christ demands
a response of our will and affections, for he is personal, not imaginary. He addresses himself to the "child, savage, and poet as well as to the conscience and the intellect". He is the Lord who breaks down dividing walls. 332

In Lewis, we see a struggle to baptize mythology in the waters of Christology, similar to the battle of Kierkegaard (or Athanasius before him) to reconstruct philosophy under the impress of Christianity. 333 Parts of his integration may be unacceptable. Admittedly, his mythological interpretation of the Old Testament is tentative, "liable to any amount of correction". 334 He sees the Old Testament as the factual preparation for the incarnation. But alongside the documentary side, Pagan mythology also prepares us imaginatively for Christ. Pagan myths are not misunderstood history, diabolical illusion (Church Fathers) or priestly lies (Enlightenment), but at their best they are "gleams of celestial strength and beauty falling on a jungle of filth and imbecility at an almost unbelievable distance from its base". 335 The metaphor of divine light falling on pagan imaginations is indeed "liable to any amount of correction". However, two things are clear. Lewis' purpose is undoubtedly to reinterpret mythology and his experience of joy christologically. He sees the expression 'myth became fact' as a helpful way of communicating the truth of Christianity, almost as its proper literary genre, much as Torrance finds 'theological science' a helpful description for the understanding the task of Christian theology. In Jesus Christ, we see the healing of myth and fact, meaning and truth: a unity of form and being. From the vantage point of Christ, we see all myth and all history as the preparation which He focuses, explains, judges and redeems.

Secondly, Lewis sees the Christ–myth relationship as containing both continuity and discontinuity. He attempts to appreciate both, and to see both as vital in judgement and redemption. He rejects any notion of a material or organic transformation of myth through its inherent qualities. By analogy, Torrance emphasizes the radical breakthrough of Einstein's physics over Newtonian mechanism. However, Einstein himself consistently paid tribute to the preparatory work of Newton. More appropriately, the analogy between Greek science
and modern science shows a radical discontinuity which Michael Foster and others have shown to be due to God's volitional and contingent creation as the only grounds upon which empirical science could be based. But the Greek mathematical tools and urge for rational comprehension were not discarded but baptized into a new empirical, realist centre. If Lewis' christological reinterpretation of myth errs, it errs by stressing the continuity between myth and its transformation by Christ. But it would be an error as well to despise the mythical (which Bultmann does). For man the dreamer, the weaver of tales, has his dreams redeemed as well as his intellect: Man's play before God becomes a celebration of his redemption. God is glorified by his creature's efflorescent praises of story and song. Hence the poet joyfully and gravely reassembles the splendours of an earth not given up to perish, but redeemed in Jesus.

5. Christian Realism:
The Western Representation of Reality

Not only are there parallels in epistemological approach but there has been a fundamental influence of Christianity upon Western man's literature. This is one argument of Eric Auerbach's work, Mimesis: The Representation of Reality in Western Literature, a work which Lewis considered fundamental for modern literary criticism. Auerbach argues that Western art's realist tradition extends through Medieval to modern French, and includes contemporary multiple-consciousness representationalism and Russian realism. These realist variations are all part of a breakthrough from classical constraints into a freer consciousness which originated in the Hebrew-Christian realism of the Bible.

Formerly, in Greek culture, realism was severely limited by classicism's unbending rules. For example, Homer's representation of reality consists of fully externalized description, uninterpreted connections, events completely in the foreground, with no historical development and no psychological perspective. Greek realism imitates everyday life and its social milieu. But it can only treat the comic element of life, never the tragic. It is thin and narrow. With striking contrast, Biblical realism consists of many different layers of thought and feeling,
a great development of persons, deep historical development and character, and finally, tragedy and comedy are set upon a cosmic stage of importance before unknown.  

As realism developed in the Medieval mystery plays, great truths were depicted in contemporary action, in conversations between man and wife or discussion by workers on the Tower of Babel. Here emerged the realist union of concrete historical activity and theological content. This did not mark the beginning of secular drama; but the concrete, practical imitation of spiritual reality so epitomized by the non-mystical contemplation of St. Francis, who preached by re-enacting the Nativity scene with live animals and proclaimed God's unconditional love by kissing lepers.  

In Medieval Christian realism, an event on earth signifies both itself and another, namely, one of eternal significance "without prejudice to the power of its concrete reality here and now". They were united by a oneness of the divine plan. As realism develops in the genius of the Elizabethan period, Shakespeare has no separation of the sublime from the realm of everyday realities, whereas humanism from Senaca to French classicism, keeps them separate. In the realist intellectual attitudes of the Medieval-Renaissance world, we see "a grasp of life which comprehends the spiritual and the sensual simultaneously...". Because for the Christian, the sublime and the everyday have been indissolubly united in Christ, Lewis views the modern exaltation of poet and poetry (the means to psychological adjustment), with its implicit disparagement of common things and the common man, as most un-Christian.  

Classical realism always associates sublime content with an elevated style. Thus whereas Russian realism always treats the everyday in a serious vein, classicism excludes the literary category of the low from serious treatment. An enlightened and active bourgeoisie scarcely existed in Russia, and yet the achievement of Russian literature towers over modern culture. What was the cause of this baptism of the sublime and everyday, comic and tragic?  

We cannot escape the observation that it is based on a Christian and traditionally patriarchal concept of the created dignity of every human individual.
regardless of social rank and position and hence that it is fundamentally related rather to the old-Christian than to modern occidental realism. 

More generally, what connects all these forms of realism and the rejection of classical values? "It was the story of Christ with its ruthless mixture of everyday reality and the highest and most sublime tragedy, which had conquered the classical rule of styles." Only Christianity merges the sublime with the everyday in the incarnation, "which realizes and combines sublimitas and humilitas in overwhelming measure".

We must recurringy remind ourselves that the incarnation was a huge scandal to the educated pagans who were horrified at its low-brow style. Some (e.g., Carius) tried to re-interpret it according to the Greek dualism of spirit and matter, God and man. But those who had eyes to see and ears to hear sensed that a new kind of sublimity had arisen, which included the low and everyday. In Christ, our flesh and our manhood have been baptized and taken up into the divine.

In Western civilization, Christianity reconstructed classical realism and its notions of aesthetic form. This parallels the Christian reconstruction of ancient science, in which a more profound grasp of the empirical world's reality, goodness and rationality enabled modern science to develop. Of course, the lengthy overlay of Aristotelian rationalism and divinization lingered until the Reformation reconstruction of theology when the radically contingent dependence of creation on God's gracious personal will freed the empirical world of final causes (telos) as well as inherent and eternal patterns tied to God's mind.

Similarly, ancient myth was stagnant and had reached a deadlock in the imagination. The sublime and philosophical was unconnected to the historical and empirical. This is Lewis' understanding of how Christianity resolves the problem of myth. Christianity is the marriage of heaven and earth. Art, like science, has been baptized by the incarnation, where God himself brings together things previously disparate: God and man, form and being, comic, low and everyday with tragic, sublime and supernatural. Tolkien notes that the hallmark of the best
of fantasy is the eucatastrophe, the Great Escape from death. But within the realm of art, it remains an imaginative dream that cries out for completion in reality, the primary world. The story of Christ is the realization and enactment in history, space and time of this primordial longing. Lewis describes this marriage by using the analogy of the hypostatic union:

perfect myth and perfect fact: claiming not only our love and our obedience, but also our wonder and delight, addressed to the Savage, the child, and the poet in each one of us no less than to the moralist, the scholar and the philosopher.

Here then, we have an a posteriori theological aesthetics, which seeks to make a positive statement about art and its field relationship to Christianity.

In the light of the incarnation, myth, without losing its sublimity, has been transformed from the sublimity of imagination to the mundane and everyday, to the dust, pain and sweat of a Bethlehem barn and a Roman gibbet. Such a 'christological natural theology' is a precarious kind of prolegomena in that unlike Greek rationalism, it contains no necessary logical-inferential road to fulfillment, but only an eschatological resolution of grace alone which breaks out from God's own eternal circle of love into history itself.

Realism's ongoing development from modern French to multiple consciousness realism is a simple but profound one. From the mid-sixteenth century, there is evidence that life was not seen in terms of the drama of Christ. The ancient models reappear; "the road has been opened for an autonomously human tragedy..." and human drama finds its order within itself. In Medieval realism, our tragedy is contained in the tragedy of Christ. But in the modern secular realism, Christ is left out; the integrating centre is omitted and a new experience of personal, individual tragedy stands out in Promethian isolation. We also see in modern realism a closing of the unlimited, multi-dimensional representation of the histories of all countries, legends, novels, fairy tales into the historical probabilities of a closed, mechanistic universe. In modern theology, the centre of gravity has seen a similar shift from Christ to either pietism's emphasis on personal, individualized appropriation of
salvation or existentialism's individualized crisis of decision. But in art and theology, "creatural realism", that is, the serious treatment of the everyday and sensuous remains. 356

This change in realism is also reflected in the multiple subjectivism of the twentieth century novel (Virginia Wolf, James Joyce, etc.). 357 As late as the nineteenth century, most writers still had a clearly formulable and recognizable community and criteria at hand by which to organize their representation of reality. Earlier realism interpreted actions, situations and people with an objective assurance. But evolving from the nineteenth century's extremely subjective and individualistic novel with its unipersonal subjective method, the twentieth century has branched out to approach objective reality by means of numerous and/or random subjective impressions, in a multi-personal subjectivism. 358 In this latter phase, the author submits in a new way to the seeming randomness of contingent phenomena. 359 Thus in James Joyce, we see a multiple reflection of consciousness and multiple time strata used as a means to discover the essence of external events which are no longer integrated by any external (realist) historical meaning. No narrative, no chain of events cohere objectively together. Individuals and events are fragments, loosely joined in a disintegration of external realities. 360 Not surprisingly, modern realism represents a recurrent atmosphere of universal doom (Ulysses). Blatant cynicism and uninterpretable symbolism leave reader and audience with an impression of hopelessness, vague sadness and even a nihilistic loss of any will to live. Auerbach admits that here indeed are many symptoms of confusion and helplessness. But strengths, too, are maintained from the realist past, for example, a realistic depth in every individual occurrence and the realization that we all share together in life's rich randomness. 361

From the ashes, there are signs that a new cultural synthesis has arisen, to which this thesis seeks to call attention. Both Einstein and Planck have renewed and deepened the realist ground of science. In theology, the early twentieth century crisis which discredited liberalism was precipitated by the struggle of many theologians, including Barth and Bultmann (and
prophets such as Kierkegaard). Barth's radical object-centred realism rejected more decisively the subjectivism of the nineteenth century as he grasped with new power the realist grounding of transcendence in the physical and lowly incarnation of God in Jesus. Torrance has penetrated further into the realist basis of Christian theology, elucidating more rigorously (though less aesthetically) than Barth, theology's integral relationship with the realist basis of modern science.

And what of art? Auerbach's massive analysis of the Western aesthetic experience of reality (only briefly touched upon here) has shown it to be grounded in the creaturely realism brought to Western man by the incarnation. Though the current state of realism has evolved to include and be heavily influenced by multiple-consciousness realism and subjective individualism, Lewis and others provide some dramatic exceptions. Though clearly a minority opinion, Lewis' own literary critical works have made a significant impact on the modern study of literature. And nearly twenty years after his death he remains the most widely read religious writer in the English speaking world.362

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1 Theology in Reconstruction, p. 278.
2 cf. Torrance's ongoing references to Kahler, e.g.
   Theology in Reconciliation, p. 279.
3 cf. especially The Allegory of Love, The Discarded Image, and An Experiment in Criticism.
4 Letters of C. S. Lewis, p. 275.
5 Ibid.
6 We can see the truth of Hooper's statement that Lewis' ability to communicate the Gospel is due to his skills as a literary critic. God in the Dock, p. 10. But we can see as well (as does Hooper) that his conversion influenced his whole understanding of art and criticism.
8 Taliesin Through Logres, pp. 374-375.
9 An Experiment in Criticism, pp. 132f.
   Lett. c. 2207/2, CSL, p. 184.
11 Kahler, p. 6. cf. A Preface to Paradise Lost, p. 3. where Lewis says we must understand both form and content or misunderstand both. cf. also Surprised by Joy, p. 92, and Screwtape Proposes a Toast, p. 9f.


13 Selected Literary Essays, p. 95.

14 An Experiment in Criticism, p. 80.

15 Selected Literary Essays, p. 98. This emphasis points to the realist side of Lewis that concrete things are prior to our patterns and theories about them.

16 Bodleian Library, ms. facs. letter to Barfield, Jan. 24, 1926, p. 78.

17 The Personal Heresy, p. 118.

18 Screwtape Proposes a Toast, p. 118.

19 They Stand Together, p. 112. (1916). This is the early Lewis, later modified by the importance of logos.

20 Ibid.

21 Auerbach, p. 332.

22 Ibid. This is a remarkable parallel between Medieval scientific form and Protestant scientific form.


24 Of Other Worlds, p. 36.

25 Ibid., p. 23.

26 Surprised by Joy, p. 12.

27 Kahler, p. 104.


29 Kahler, p. 104.

30 Reason and Emotion, p. 49.

31 This is remarkably similar to Torrance's goal for science:
to discover the physical concepts, the theoretical-empirical unity which inheres in reality and bring it to articulation.

32 An Experiment in Criticism, p. 130.
33 Bevan, p. 283.
34 Bodleian Library, Martlets Manuscript Top Oxon, d. 95/5 1931, pp. 19-20.
35 Ibid.
36 C. S. Lewis, Is Literature an Art? A paper read to the Oxford Martlet Society, quoted by Walter Hooper, To the Martlets, C. S. Lewis, Speaker and Teacher, p. 72.
37 The Personal Heresy, p. 120. cf. Kathleen Raine, From a Poet, Light on C. S. Lewis, p. 105.
38 An Experiment in Criticism, p. 135.
39 Ibid., p. 140.
41 Bodleian Library, Martlets Society Minutes, Ms. Top Oxon d. 95/4.
42 Selected Literary Essays, p. 305.
43 An Experiment in Criticism, p. 137.
44 Macmurray notes that science, with its tendency to generalize and classify, often fails to achieve contact with reality. Reason and Emotion, p. 154.
46 Bevan, p. 30. Even the word 'Brahman' derives from a word which connotes height. cf. also The Allegory of Love, p. 44, where Lewis affirms certain "married pairs of sensibles and insensibles".
47 Bevan, p. 142.
48 The Abolition of Man, p. 2.
49 Ibid., pp. 3-6.
51 The Allegory of Love, p. 313.
52 A Preface to Paradise Lost, p. 56.
Christian Reflections, pp. 24-25. Barfield's criticism of Lewis' remarks to Tillyard as 'pastiche' should be seen in this light. cf. Barfield, Introduction, Light on C. S. Lewis, p. xi. That is, Barfield claims Lewis checked his real response for a moral one. Lewis would reply that Barfield confuses an organized response (a kiss) and a pretence (unreal, posturing). A Preface to Paradise Lost, p. 55.

A Preface to Paradise Lost, p. 55.

Ibid. p. 24.

A Preface to Paradise Lost, p. 56.

Ibid.

Ibid., p. 55.

Theology in Reconciliation, p. 279.

The Screwtape Letters, pp. 154f. Here is further evidence that Lewis believes that rationality inheres in being and is not imposed. Lewis here affirms that value and beauty inhere in being. So too do cognitive forms.

A Preface to Paradise Lost, pp. 135-136.

Ibid., p. 136. Besides, once we express our unfocused imagery, it has ceased to be unfocused, and has acquired a kind of form, but one which is artificially dismembered from its natural form and beauty.

English Literature in the 16th Century, p. 123.


Auerbach, p. 56.

Biographia Literaria, p. 269.

The same could be said of good and bad preaching; legal or evangelical preaching. Good dogmatic theology may be poor preaching.

Screwtape Proposes a Toast, p. 94.

Surprised by Joy, p. 44.

Ibid., p. 145.

Ibid.

Of Other Worlds, p. 17.
The parallels with preaching as an art are most illuminating.

Christian Reflections, p. 3.

Selected Literary Essays, p. 122.

Studies in Words, p. 55.

The Discarded Image, p. 204.

Ibid.

Ibid., p. 211.

Ibid., p. 204.


Letters of C. S. Lewis, p. 152.

Christian Reflections, p. 9. One wonders if this is too Platonist, i.e., no consideration of contingent beauty developed by re-assembling nature. Here Lewis has no discussion about the possibility of an artist creating his own contingent or secondary world (Tolkien) which is internally beautiful, but not necessarily a reflection of eternal beauty. Tolkien does speak thus, but he too sees an ultimate connection between the truth of the secondary world and the primary world of Création, if the secondary world has been genuinely true and beautiful. Tolkien, p. 72.

Ibid., p. 40.

Ibid.

Ibid., p. 76.

Ibid., pp. 41-49.

Ibid., p. 78. Historically, Kahler traces this movement to 1) the 18th century interest in "irrational forces of the psyche, the unconscious, which led to a focus on the act of artistic creation", and 2) a loss of faith in natural coherence and a new confidence in the Freudian psychological model which mapped the union of consciousness and unconscious, replacing external form with internal, self-made form. This parallels Kant's philosophical denial of objective rational form in favour of self-creation of rational form from within and then imposed to form our world of phenomena.


92 Christian Reflections, p. 9.

93 Tolkien, p. 70.


95 Ibid., p. 163.

96 quoted in Hooper, To the Martlets, p. 64.

97 Wordsworth, Poetry and Poetic Diction, p. 18.

98 Of Other Worlds, p. 88.

99 Ibid.

100 Ibid., p. 33.

101 Ibid.


103 Of Other Worlds, p. 29. cf. also Scott Oury, The Thing Itself—C. S. Lewis and the Value of Something Other, The Longing for a Form, p. 29.

104 Studies in Words, 306.

105 The Problem of Pain, p. 134.

106 An Experiment in Criticism, p. 1.

107 Ibid., p. 113.

108 Joerg O. Fichte, The Reception of C. S. Lewis' Scholarly Works in Germany, Man's 'Natural Powers', p. 75. The parallel with Barth's rejection of anthropocentrism for a theocentrism is quite significant.

109 An Experiment in Criticism, p. 82.

110 Ibid., p. 1. At times the sheer similarity of expression with Torrance is noteworthy.

111 Busch, pp. 349, 466.

112 Holmer, p. 20.

113 Theological Science, p. 333.

443
A Preface to Paradise Lost, p. 133.

An Experiment in Criticism, p. 104.

quoted in Hooper, To the Martlets, p. 64.

An Experiment in Criticism, p. 65. This is Leavis' great omission. The parallels in good reading and in Christian worship are of special importance.


The Four Loves, p. 16.

Studies in Words, p. 94.

C. S. Lewis, review of The Death of Tragedy by George Steiner, Encounter, 18, (2), Feb. 1962, pp. 97-101.

A Preface to Paradise Lost, p. 1.

Auerbach, p. 354. One of the things which most troubled Barth about Bultmann's hermeneutic was that he seemed so confident that he had understood the kerygma. The understanding had not been a struggle, but rather all his energy lay in communicating it to modern man. Barth, Rudolf Bultmann--An Attempt to Understand Him, p. 88.

Studies in Words, p. 326.

Ibid.

Ibid., p. 24.

Taliessin Through Logres, p. 371.

A Preface to Paradise Lost, p. 1.

God in the Dock, p. 158.

Ibid.

Lewis notes that until the 19th century, and the rise of the realistic novel, most stories were about the unusual, odd and incredible, "just as all except bores relate in conversation not what is normal but what is exceptional". An Experiment in Criticism, p. 63.

An Experiment in Criticism, pp. 19-21.

Of Other Worlds, p. 96.

Adey, p. 121. Lewis' Rehabilitations, (1939, later most essays reprinted in Selected Literary Essays), is a direct response to Leavis' Revaluations (1936). cf. I. A. Richards, who finds therapeutic power in the "correct reading of poetry". An Experiment in Criticism, p. 10.

An Experiment in Criticism, p. 83.

Ibid., p. 10.

Surprised by Joy, p. 69.

An Experiment in Criticism, p. 12.

Ibid., p. 85.

Raine, From a Poet, p. 103.

Walter Hooper, Past Watchful Dragons, A Guide to C. S. Lewis' Chronicles of Narnia, London: Collins Fontana, 1980, p. 9. The same problem emerges when one is told how one ought to think about the Gospel; we prescribe proper thought forms, making Christian faith equivalent to holding the correct conceptual formulas. Hence the inherent danger of dogmatic theology.

An Experiment in Criticism, p. 85.

Ibid., p. 105.

English Literature in the 16th Century, p. 328.

Christian Reflections, p. 12.

Auerbach, p. 504.

Christian Reflections, p. 12.

Ibid. This reasserts the ethical or moral function of art, (unlike Croce) but seen as a means of salvation gives a soteriological and hence ultimate value to art.

Christian Reflections, p. 10.

Letters of C. S. Lewis, p. 182.


The Personal Heresy, p. 104.

Studies in Medieval and Renaissance Literature, p. 38.
The Personal Heresy, p. 25.

Ibid.

Mill, Thoughts on Poetry and its Varieties, p. 346.

The Personal Heresy, p. 59.

Letters of C. S. Lewis, p. 181. The first question is not therefore, what is my view of the Bible. The Bible, says Lewis, is not in any way the basis of Christianity. Miracles, p. 148.


Carpenter, p. 59.

cf. Bede Griffiths who thought Tillyard was correct and that Lewis underestimated the "unconscious" wherein poet and mankind are linked. For Griffiths, a book is not as important (e.g., Phantastes) as the point in one's development. Griffiths, The Adventure of Faith, pp. 14, 16. Griffiths' subject-centred orientation is evident in his positive theological assessment of Hinduism and its identification of the true inner Self with God. cf. Griffiths, Return to the Centre, p. 48.


Of Other Worlds, p. 46.

Christian Reflections, p. 166.

Ibid., p. 29.

God in the Dock, p. 159.

The Allegory of Love, p. 31.

English Literature in the 16th Century, pp. 19, 22, 26.

Miracles, p. 103. Similarly, people often disbelieve in the Gospel miracles because they assume they already know what the plot is about—economics, politics, self-realization, etc.
Therefore miracles are irrelevant.


175 Ibid., p. 121.


177 Spenser's Images of Life, p. 113.

178 Ibid.

179 God in the Dock, p. 159.

180 Letters of C. S. Lewis, p. 233. Regarding Luke 24, Lewis argues that the resurrection of a physical body is being taught. All Jews except Saducees believed in a spiritual revival. There was nothing novel about that.

181 Studies in Medieval and Renaissance Literature, p. 142.

182 Studies in Words, p. 312.

183 e.g., An Experiment in Criticism, p. 5.

184 A Preface to Paradise Lost, p. 116. This is Barth's question to Bultmann: "Is it possible to understand any text, be it ancient or modern, if we approach it with preconceived notions about the extent and the limit to which it can be understood? Is it not preferable to come to it with an open mind, and patiently follow what it has to say?" Barth, Rudolf Bultmann: An Attempt to Understand Him, p. 108.

185 A Preface to Paradise Lost, p. 129. cf. Studies in Medieval and Renaissance Literature, p. 133, where Lewis lists three deterrents to enjoying Spenser and then tries to show the peculiar logic and appropriateness of these prima facie oddities. This takes as its strategy a problem-centred or didactic approach, not unlike many of his theological works.

186 An Experiment in Criticism, p. 123.


188 Nevill Coghill, Love and 'Foul Delight': Some Contrasted Attitudes, Patterns of Love and Courtesy, p. 141. cf. Carpenter, p. 149, where he accuses Lewis of naivete.

189 Of Other Worlds, p. 60.


191 Of Other Worlds, p. 60.

192 quoted in Of Other Worlds, p. 60.
Christian Reflections, p. 82.
A Preface to Paradise Lost, p. v.
The Abolition of Man, p. 8. Lewis records that I. A. Richards failed here.
Bodleian Library, ms. facs. c. 53, Letter to Barfield, p. 87.
The Abolition of Man, p. 8.


Theology in Reconstruction, p. 141.
Ibid.

Studies in Medieval and Renaissance Literature, p. 4.

English Literature in the 16th Century, p. 32.

The Allegory of Love, p. 163.
An Experiment in Criticism, p. 85.

Letters of C. S. Lewis, p. 155.

The Allegory of Love, p. 112.

Adey, p. 21.

The Discarded Image, p. 112.

An Experiment in Criticism, p. 45.

Ibid., p. 113.

This is the problem with abstract theological concepts and definitions.

Studies in Medieval and Renaissance Literature, p. 2.

Ibid., p. 3.

Bultmann, New Testament and Mythology, p. 11. "Hence the importance of the New Testament mythology lies not in its imagery but in the understanding of existence which it enshrines."
This is a kind of natural theology for the literary critic!
Often Lewis' favourite sub-genre within myth—fantasy, has been criticized for being escapist (when not misread and used). It sends us back to the real world unsettled and discontented.

Quite to the contrary, Lewis argues it is the realistic novel which does that. Fairie serves paradoxically to strengthen our relish for real life. It shows in a new light the happiness and joy of simple, homely pleasures like food, sleep, exercise, friendship, nature and religion. Of Other Worlds, pp. 14-15.

cf. Jesus and the Christian, p. 10, where Torrance pays homage to Manson for rejecting the form critic's a priori that the New Testament portrayal of Christ is the product of the early Church's own life and thought rather than a record of the original events and sources.

Taliessin Through Logres, p. 374. Lewis also calls this the root of syncretism in all ages.

Ibid.

An Experiment in Criticism, p. 138.

Of Other Worlds, p. 93.


The power struggles over Lewis' own literary remains by his friends and followers bear perverse witness to his own analysis.

Of Other Worlds, p. 93.


Wordsworth, Poetry and Poetic Diction, p. 16.

Concluding Unscientific Postscript, pp. 179-180.

God in the Dock, p. 67.

T. F. Torrance, personal interview.

Christian Reflections, p. 137.

Theology in Reconstruction, p. 40.

Christian Reflections, p. 135.

An Experiment in Criticism, p. 138.

Ibid., p. 141. Lewis perceives a primary parallel between art and life, namely, the tension between plot and theme. Poor art often gets carried away with the plot, (a succession of events) in which the theme or quality is never embodied.
The goal of art is to embody the theme in the series of events. So in a Christian's life, he seeks to so participate in the Father's love for the Son and the Son's love for the Father, that his daily series of activities embody that quality of love. *Of Other Worlds*, pp. 20-21.

262 *Biographia Literaria*, p. 169.
264 "Suspension of disbelief" is a weak substitute for the enchanted state of secondary belief which a secondary world evokes. Tolkien, p. 37.
265 Tolkien, p. 52.
266 *Surprised by Joy*, p. 154.
267 *Of Other Worlds*, p. 37.
270 *Ibid*. The context here is Lewis' attack upon the notion that reading a poem is about contact with the poet. Lewis argues that it is an insult to respond to a person (poet) only with the imagination.
271 *Selected Literary Essays*, p. 144.
273 *Of Other Worlds*, p. 27.
274 *Ibid*.
276 Tolkien, p. 22.
279 Tolkien, p. 73.
280 *Ibid*.
282 *An Experiment in Criticism*, p. 45. As a young man, Lewis had attempted to define myth. "A myth is the description of a state, an event, or a series of events, involving
superhuman personages, possessing unity, not truly implying a particular time or place and dependent for its contents not on motives developed in the course of the action but on the immutable relations of the personages. (e.g., Balder, Osiris, Orpheus.) Past Watchful Dragons, p. 28. This is similar to Bodleian Library, ms. facs. c. 54, The Great War, p. 28, with the change "not save accidentally connected to space and time whereas a legend is necessarily connected to space and time".

283 An Experiment in Criticism, pp. 43ff. These latter reasons suggest why Bultmann seeks to demythologize.

284 God in the Dock, p. 66.


286 Frankfort, ed., p. 15.

287 The Discarded Image, p. 37.

288 God and Rationality, p. 46. cf. The Hermeneutics of St. Athanasius, p. 453.


290 Christian Theology and Scientific Culture, p. 128. cf. Theology in Reconstruction, p. 70.

291 Theology in Reconstruction, p. 48. cf. Theology in Reconciliation, p. 240.

292 Theology in Reconciliation, p. 30.

293 Space, Time and Incarnation, p. 49. Rudolf Bultmann, Bultmann Replies to His Critics, Kerygma and Myth, A Theological Debate, pp. 197, 199.

294 Theological Science, p. 329.


296 Ibid., p. 44.

297 Ibid.

298 "What a primitive mythology it is that a divine being should become incarnate and atone for the sins of man through his own blood." Bultmann, New Testament and Mythology, p. 7.


300 Ibid., p. 11.

301 An Experiment in Criticism, p. 49.

Selected Literary Essays, pp. 287-289.

Ibid., p. 290. An Experiment in Criticism, pp. 43f.

Frankfort ed., p. 16.

Bultmann, Bultmann Replies to His Critics, p. 209.

Ibid.

Ibid.

God in the Dock, p. 66.

Ibid., p. 67.

Space, Time and Resurrection, p. 27.

cf. the similarity to the how/who debate in Bonhoeffer's Christ the Center, pp. 30ff.

Carpenter, p. 44. That is, by indwelling, not by logical analysis.

Tolkien, p. 71.

They Stand Together, p. 427.

The Ground and Grammar of Theology, p. 117.

They Stand Together, p. 427. This is the realist side of Lewis' thought. Torrance would see concepts as the imageless mortar holding the concrete bricks of incarnation and resurrection together.

The Ground and Grammar of Theology, pp. 39-40.

The Discarded Image, pp. 179, 182.

Letters of C. S. Lewis, p. 247.

Out of the Silent Planet, p. 144.

The Problem of Pain, p. 77.

324 quoted in *Biographia Literaria*, p. 251. (Poetics IX 3)


326 *Surprised by Joy*, p. 188.

327 Ibid. Ironically, Lewis records that an atheist first suggested to him that the myth about the dying and rising god from Sir James Frazer's *The Golden Bough*, seemed to have occurred historically in Christ. (p. 179).

328 *God in the Dock*, p. 84.

329 Ibid.


331 *They Stand Together*, p. 238.

332 Ibid.


334 *Miracles*, p. 137.


336 Frei, p. 16. Frei lauds Auerbach (p. vii.) saying, "no student of the Bible has ever denied the power and aptness of the analysis of Biblical passages and early Christian biblical interpretation in the first chapters of *Mimesis*". In his rather bellicose essay on modern biblical criticism, Lewis suggests that Bultmann should read Auerbach. It might have kept him from misreading the Bible. *Christian Reflections*, p. 155. Ironically, Bultmann had read his Auerbach and lauds him. cf. *History and Eschatology*, pp. 105ff.

337 Auerbach, p. 322.

338 Ibid., p. 23.

339 Ibid., p. 30.

340 Ibid., pp. 11-18, 23.

341 Ibid., p. 159.

342 Ibid., p. 162.

343 Ibid., p. 555.

344 This notion, however, contains a great deal of Aristotelian, rationalistic *mimesis*. It lacks a significant appreciation of grace and its obverse, the contingency of the historical and natural which had to wait for the Reformation.
The causes of multiple consciousness realism are many: violent upheavals and wars in Modern Europe, the spread of publicity, the fragmentation of socialism, growth of factionalism (whereby one entrusts a poet, a theologian, a philosopher who syncretizes life within a single formula), so that e.g., fascism "hardly had to employ force to dominate and absorb smaller sects". Auerbach, p. 536.

CHAPTER VII

THE SCIENCE - THEOLOGY FIELD RELATIONSHIP

A. The Necessity of Dialogue

Science without religion is lame, religion without science is blind.

--Einstein

For Einstein, the ground of science is "the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason". In Einstein, this faith belongs to "the sphere of religion". The clear implication is that science, rather than dictating a priori the grounds for theology, is in fact grounded in theology. As we have noted, with the help and in the company of other philosophers of science, historians of science and scientists themselves, Torrance has developed Einstein's insights and argues that the original foundation of modern science was laid by Christian theology. For Torrance, only the Christian doctrine of contingent creation ex nihilo accounts for both the singularity of the universe and its intelligibility.

Torrance sees natural science as one way in which man fulfills his unique status in creation as the element "whereby the universe produces understanding of itself". In his scientific activity man is the 'priest of creation' who brings to articulation the inherent regularities and harmonies of the universe. The priest's office is to interpret the books of nature, and in doing so, fulfill creation's end as the theatre of glory in which the Creator is worshipped by his creation. Without man, nature's rationality is dumb. But through man, creation is given voice by which the whole universe praises the glory and
majesty of God.

It is important to consider just how Torrance's dialogue with science differs first from Lewis and also from his own mentor, Karl Barth. Lewis' statements concerning theology and science are admittedly tentative, exploratory inquiries. Typically, Lewis' dialogue with science arises in the context of 'hindering hindrances' to the understanding of Christian faith. Since he writes for the educated layman, he often uses science in its popular sense to mean the study of the observable regularities in nature. This notion of science excludes history as well as theology and enables Lewis to make the apologetic point that 'science' has nothing to say in regards to questions of transcendence since by definition it lies outside science's province. Such a science cannot be relevant for many important questions. Lewis thus silences the popular prejudice that 'modern science' has made Christianity obsolete or irrelevant. He suggests rather that Christianity stands to science not as an alternative, but in an architectonic relation of depth. The sciences are footnotes on the text of reality. Christianity is the poem which gives meaning and coherence to the whole. Lewis envisions a relationship of hierarchical coherence between science and religion, where natural science occupies a limited but essential role.

However, Lewis offers another model of the science-theology relationship which is even less of a dialogue. He likens Christianity to mathematics by describing it as an inner logic system which by its very nature can never be outmoded by any scientific advance. It "can be applied to any new theory of the mathematical universe and outmoded by none". This, of course, protects Christianity from the vulnerability of certain scientific attacks. But the mathematical analogy seems a bit dated in the light of Einstein's four-dimensional geometry and the Gödelian theorems, for both reveal a far deeper inter-connection between theoretical mathematics and physical-temporal reality than was previously realized. As Imre Lakatos notes, modern science now sees the essential unity of mathematics and scientific methodology. Even Euclid's axioms are viewed as hypotheses to be tested, not self-evident truths.
Therefore, the interpretation of mathematics or Christianity as an independent conceptual system without scientific and cosmological implications is no longer a helpful theological or scientific proposal.

Lewis was well aware that scientific opinion had changed dramatically within the last hundred years and though he strongly felt that Christians should be aware of the latest developments, he advised caution against "snatching at any scientific theory which (for the moment) seems in our favour". He feared that if theology is based on certain theologically positive scientific developments, science may change its mind and pull the rug from under theology by abandoning the theory currently used as a foundation. For Lewis, science qua science cannot speak of the theological implications of modern physics, but only as lay philosophy. Here Lewis returns to the notion that 'science' is based solely on observation and sees neither the beginning nor the end.

Thus we see that when advantageous, Lewis limits himself to an observationalist notion of science in order to distinguish and divorce it from theology. Nonetheless, Lewis also believes in and appreciates the importance of an ultimate structural coherence between science and theology. They both live or die by their rationality. To further illustrate this, we should note that Lewis correctly surmised that the implied randomness in the physical world (by Bohr and Born) was a dangerous warning signal for the future of science and contrary to the nature of both science and theology. Similarly, he was glad to see that the materialism which argued for the self-existence and (hence) eternity of matter had come under increasing doubt in the wake of further sound wave experiments. This change lends scientific weight to the belief that the universe is not eternal and thus self-explanatory but demands we ask the question of transcendence.

Lewis also perceived that the second law of thermodynamics, entropy (a winding down), implies creation (a winding up). But Lewis was continually reticent to lean heavily on any of these contemporary scientific defeats for pantheism. He knew that scientific trends and preferences are often as fleeting as
competing literary-critical schools.

In the light of Lewis' counsel of caution we should clarify that Torrance does not endorse Einsteinian physics because of some current popularity and hence temporary apologetic appeal. Until recently, in regards to the developments in quantum physics, Einstein has all but lost the support of the scientific community to the Göttingen/Copenhagen school. Torrance defends Einstein over Bohr for epistemological reasons. With Einstein, Torrance believes that creative science could not function without belief in the world's rationality. Thus Bohr's Kantian hint of an ultimate randomness and irrationality, is the tired sigh of unbelief that despairs of objective truth.

Lewis' inclination to curtail any specific theology-science dialogue is clearly contrary to Torrance's interaction with modern physics. But it is quite similar to the strategy of Karl Barth, as Torrance himself records. In his introduction to Theology and Church, Torrance expounds without criticism Barth's notions that theology as a science neither operates with a world view nor necessarily develops a cosmology. For "neither theological nor empirical science can properly lead to or result in cosmological constructions or speculative ontologies of the universe." Similarly for Lewis, the purpose of revelation is "purely practical...for the relief of his [sic] urgent necessities..." Operating with the same chasm, the early Torrance once remarked that "the knowledge that we gain in faith is not something that can be made scientific". At that time, Torrance saw science as the activity of man's fallen and autonomous reason which seeks only deistic and logical-causal answers. Later he rejected this negative valuation and instead came to call upon science to be true to its proper legacy. Throughout the last two decades, Torrance has increasingly devoted his attention to working out the profound epistemological and methodological links between science and theology.

Torrance is convinced that "there must be a deeper connection between the basic concepts of theological science and natural science" than Barth allowed. He calls this linkage a "natural connection" and challenges not only theology but also
natural
science.,
to develop a natural
theology which is "natural
to both theological
scienc·e and to natural
science". 24 Torrance
believes
theology must be concerned not mer~ly with the God-man
relationship
in aostracto,
bu~ with the God-man-world field
relationship.
Without empi~ical
correlates
in the space-time
history
of the real world, theological
concepts~
ultimately
empty fil!_d l.. rre 1evan t .•25
In 'thinking
together'
the cosmological
and epistemological
implications
of Christianity
with
the modern. scientific
under.
. Standin$ of the cosmos, Torrance believes
tpe Christian
doctrines
of creation
and redemption
are.incompatible
with any scientific
world view that portrays
the universe
in the Kantian-Newt9nian
framework of a c_Losed continuum of· cause and effect
or which
unde~~t~~ds ,randomness _and irrationality
to be at the core of
.
26
the physical
universe.
Though .Lewis, Barth and many others have expounded the
'doctrine
of redemption
and taken firm stands on Chris.tianity'
s
historical
truth claims,
where Torrance breaks new ground is
by· drawing ou~ the cosmological
impli~ations
of these truth
·cLaims, criticizing
those cosmological
views which are antithetical
to Christian
faith and proceeding
positively
to correlate
the new d~velopments
in relat~vity
and field
physics·
within a positive-exposition
of Christian
reve'tati,on.
It seems
inevitable
that ,one who believes
in the .rationality
of the
material
•creat~on and the redemption
of. that creation
in Jesus
Christ,
would desLre to correlate
this relationship
in dialogue
with modern science.
Of specia\
significance
in Tor~ance's
new approach is that
he refuses
the strategy
of defending
Christianity
by saying it
fits within its own framework and sci~n~~ within another.
This
was both L~wis.' .and Ba~th' s tendency.
But if the iricarn.ation
is an event within the space-time
st:ructures
of the universe,
(Gnosticism
ancient
and modern notwithstanding),
it cannot stand
in sple.ndid isola~ion,
for that would belittle
its rationality
and importance.
Rather,
faith
that seeks understanding
must
correlate
and understand
its beliefs
in terms of the structures
of r~ality
withiq which the incarnation
has occurr_es!,, namely,
27
the empirical
field of the space-timeruniverse.
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The remarkable advantage Torrance finds in today's science-theology dialogue is that in Einstein we have for the first time in scientific thought a non-dualist cosmology which has broken down the barriers between empirical and theoretical, tangible and intangible, and has begun to think within a continuous and indivisible field unity between form and substance. Hence post-Einsteinian science no longer implicitly denies the possibility of a continuous dynamic interaction between God and the universe. This profoundly agrees with Biblical realism and the Christian understanding of the incarnation, where form and content are bound together in an indivisible union of intelligibility and ontology. Only a cosmology in which the chasm between the sensible and intelligible, form and content, has been healed, can there be any real coherence with a theology which believes that the incarnation of God in space and time announces the death of all ancient dualisms, the redemption of the whole creation, material and mental, and a startling new way to understand man and the world.

For Torrance, this in effect voids the pseudo-scientific objections of post-Enlightenment theology which inspired an exodus from Christian orthodoxy into neologies and idealist theologies. These alternatives flourished in the European cultural polarities of, on the one hand, a mechanistic, materialist objectivity, and on the other, a Romantic subjectivity. Torrance's theology is a clarion call to all modern theologies with eyes to see and ears to hear that with the Enlightenment's dualist framework outmoded, it is time for all forms of liberal and conservative theology to re-examine their theological structures.

No theology more clearly epitomizes the dependence on cosmological assumptions of the Newtonian closed and mechanistic universe than the demythologization programme of Rudolf Bultmann. It abandons the incarnation as an objectively real, empirical event within space and time. Lewis distrusted the yoking of theology to any cosmological model for fear of such a diminishing of Christian faith. He viewed the 'modern' cosmology as a highly selective backdrop for art and science which is intelligible to the layman and appeals to his imagination and emotions.
He saw the modern model to be deeply influenced by Freud but very little by Einstein. When Bultmann tells us we have radios and electricity, hence the incarnation cannot be about God's empirical activity in creation, he reflects the imaginative influence of a prevalent cultural model which has little or no connection to post-Einsteinian science, but instead appeals to the unscientific prejudices of a technological society. In the wake of the overthrow of the Newtonian schema, the continued reliance upon this obsolete model by the Enlightenment tradition, only intensifies Torrance's plea for theology to maintain an ongoing dialogue with science in order that it cease travelling down obsolete epistemological avenues long abandoned by science. This also illustrates the concern of both Torrance and Lewis that theology must build on its own foundation and be interpreted out of its own rationality, not constructed to harmonize with current scientific thinking. For the Kantian-Newtonian cosmos once considered so ultimate that modern theology felt compelled to take its eye off its own ultimate datum, is now merely an interesting piece of scientific history. With its epistemological foundations now rejected by the scientific community who first endorsed it, the Bultmannian tradition stands as a towering monument to the cultural impact of nineteenth century philosophy and science upon twentieth century theology. Its continued popularity in many theological schools constitutes at once a living anachronism within the modern university and a tribute to the importance of the issues Bultmann boldly tackled.

In the theology of Torrance, cosmology is taken up into the heart of a theology of God's redemptive and creative activity in space and time. In the service of its own subject-matter, a theology concerned with empirical facts and concrete knowledge within the space-time universe is intrinsically interested in scientific activity and in the development of its tools and methods. Theology may legitimately seek to learn from science and engage in dialogue. Torrance does not mean by this that modern physics dictates its thought forms to theology. Any scientific tools and concepts which theology borrows are not to be used prescriptively, but should be worked out in reciprocal dialogue and seek to allow their material content to be derived

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It would be a great misunderstanding to think that Torrance tries in this dialogue to de-scandalize Christian theology any more than does Lewis in his imaginative effort to communicate theology. With Lewis and Barth, Torrance abhors any accommodation of Christianity to the latest scientific thinking. A defense of Christianity by appeal to foreign criteria would implicitly presuppose science's final authority. Rather, Torrance wishes to 'think together' the truth of Christian revelation with the genuine insights of modern science into the structures of creation.

Torrance calls this "an exercise in conjoint thinking where theological science and natural science have common ground within the rationalities and objectivities of the created order but where they each pursue a different objective". An essential part of taking the incarnation seriously as the decisive act of God in space-time reality is for theology to dialogue with science's understanding of the "determinate intelligibilities and objectivities of the created order". Torrance is convinced that it is the modern theologians' ignorance of contemporary science and the doing of theology in isolation, in vacuo, that has encouraged the highly subjective and idiosyncratic nature of much contemporary theology.

Thus we see that Torrance has stepped out of the narrow observationalist definition of science. He sees a profound unity between the two fields which both natural and theological science ignore to the loss of their own search for rationality. And because both operate within the space-time structures of the created world, for science not to interact with theology (and vice-versa) is to ignore vital epistemological issues in both fields.

The consequences of ignoring the hierarchical coherence of science and theology could not be more serious. We have already observed the diminishing returns of post-Enlightenment or Cartesian theology for the Church. But for society at large, the risks are no less serious. As Polanyi notes, the society which ignores or denies science's true basis runs a three pronged risk of 1) the disfiguring and collapse of true science through
technological preoccupation, 2) which in turn engenders the violent exploitation of our carefully balanced ecological system, 3) which culminates in society's own self-destruction. 38

By allowing the rationality of Christianity to reveal itself through open dialogue with the best scientific study of the natural world, the two fields mutually enrich each other and thus confirm the rationality and goodness of the space-time reality which both inhabit. 39 On the basis of the material content of theology, God coming in the flesh of Jesus Christ, the dialogue of theology with physics and modern cosmological theory is a natural aspect of faith seeking understanding.

B. The Epistemological Structures of Natural and Theological Science

Simply speaking, the fundamental structure which theology shares with science is the ordered world of space and time. 40 Without space and time nature would be indeterminate and unintelligible because it would lack any sequence, pattern or series of coherence. Thus space and time serve as the invisible and regulative structures for all events in the contingent universe. 41 If space and time are "bearers of all rational order within the universe", it follows that natural and theological science "both work within the same space-time structures and under the limits of their boundary conditions". 42 This points to a mutual relationship where natural science depends upon theological foundations, but also serves and helps clarify theology's own content and its empirical correlations.

A major problem of the demythologization campaign is its attempt to "strip away chronological spatial categories". 43 This leads to an objective irrationality and meaninglessness which is remedied by remythologizing by reference to the interior world of the self. Here Bultmann directly faces a very difficult problem, namely, that the Newtonian cosmology of static and absolute space and time leads to objectivist, rigid and closed theological concepts. Bultmann seeks to avoid such a conceptual sterility by speaking of God in complete detachment from creaturely and this-worldly content. For Bultmann, God's acts in incarnation and in the present, touch our existence only in the present for me here and now detached from all historical,
space and time referents. 44

We have seen that Bultmann's massive reinterpretation labours under the constraints of nineteenth century Kantian-Newtonian epistemological and cosmological notions. As Einstein describes it, prior to J. C. Maxwell, reality was seen to consist of events in nature made up of material points and capable of mechanical description by partial differential equations. After Maxwell, reality is represented by continuous fields not mechanically explicable. 45 The world is now seen as a continuous and integrated manifold of fields of force in which relations between bodies are as real as material points. This replaces the old extrinsic, absolute, causal framework with an immanent and relational framework worked out in precise interaction with the empirical structures of space and time. Within the older cosmological view, it is understandable that theologians sought to receive and expound Christian faith without quarrelling with the scientific orthodoxy of the objectifying and mechanical framework of Newtonian cosmology. It encouraged theology to interpret God's involvement within a parallel rigid deistic framework akin to the static and absolute structures of classical physics. God acts only in the supernatural realm; the natural proceeds as usual. 46 But today, the correlation of four-dimensional geometry and physical processes teaches science that theory and material processes are inherently connected in an irreversible, a posteriori manner. Further, the new objectivity of modern physics discloses that space-time is an objective structural framework inseparable from the intrinsic relatedness of the universe. 47

This means that theology must interpret the incarnation not by avoiding chronological and spatial referents, but in a co-ordinated explanation which respects the space-time framework of the world God has made and redeemed. The incarnation affirms that the physical world is real in its very contingency even for God. 48 Theology must respect the contingent universe or else it fails to respect the Word of God himself, for God has adapted and bound himself to the specific creaturely objectivity of Jesus. 49 A theology without empirical correlates has no application or meaning to man's real creaturely existence in
space-time. For Torrance, therefore, a theology indifferent to historical factuality (for example, a resurrection without an empty tomb) can only be accurately described as fantasy or mythology.\(^5\)

1. Space and Time Structures in Theology

One of Torrance's concerns has been to develop a distinctly theological understanding of space which is nonetheless in dialogue with modern physics. He recalls that the Nicene theologians rejected Plato's notion of receptacle space (in a metaphorical sense), Aristotle's notion of space as a quantitative container (hence necessarily limited and finite) and finally the Stoic view of space as God's body and God as its rationality and soul. Instead, Athanasius sought to understand space with open concepts, defined not by Aristotle, etc., but in accordance with God's interaction with man and therefore as a co-ordinate system consisting of two horizontal dimensions (space and time) and one vertical (God).\(^5\) The incarnation means that God makes room for himself in our own physical existence, but is not contained or confined in place as in a vessel. Nicea's theological understanding of space sees it as a seat of relations, a place of meeting.\(^5\)

Within a post-Einsteinian universe, we now appreciate that time is integrally bound to space. The history of matter is an essential part of its content. This new understanding is seen particularly in the extension of thermo-dynamic theory to non-equilibrium or open systems, which in effect introduces the historical element even into the physico-chemical description of processes in the universe.\(^5\) Because the ingredient of time must now be taken into account even in our description of matter, science can no longer exclude questions about ultimate origins and ends, but must see them as "rationally continuous and consistent with its own questions".\(^5\)

This notion of space-time radically differs from the Aristotelian receptacle space which so influenced Medieval eucharistic theologies to understand God's presence spatially apart from time.\(^5\) Also, this is markedly different from Bultmann's conception of the Christ event apart from his earthly, ontological being in time and also from his existentialist
stress on a timeless, immediate eschatological encounter. The refusal to accept time as a serious equation in theological thinking has made it unimportant to differentiate Christ's presence on the cross, in the eucharist, the last day or in the event of preaching. The result is to make the historical foundation of faith irrelevant. \[56\]

But for Torrance, the Church is "forever bound to the historical Jesus", for the truth and life of God have become historical fact in Jesus. \[57\] Christ's ascension reinforces the central importance of the historical Jesus as well as the importance of our personal, historical response.

By withdrawing Himself from the visible succession of history and by refusing to abrogate our existence in time by sheer immediacy, Jesus Christ gives us time, enables us to take time with the historical Jesus and the historical Word communicated by and from Jesus. \[58\]

Because in the incarnation, God affirms and takes with utmost seriousness our spatio-temporal existence to the point of becoming participant in it, theology can only retreat into spacelessness and timelessness at the cost or irrationality. \[59\]

Above all else, Torrance sees the contingent structure of the universe to be the correlative of its utter dependence on God's grace. Theologically, this is the obverse of the universe's contingent rationality. \[60\] Contingence tells us God is not bound to man in a necessary relation of being or as cause. He is bound freely in grace. \[61\]

By grace alone creation possesses its own contingent rationality and relation to God. \[62\] The coherent singularity of a finite universe tells us the universe is finite in time as well as matter and space, that it has an absolute beginning and is not self-originating. That is, it does not have an intrinsic necessity or self-explanation for its existence. Modern science rejects the notion of an infinite universe (oscillating or steady-state) with its implicit cyclical notion of an eternal cosmos. For Torrance, the theological doctrine of creation ex nihilo and natural science's modern wave radiation converge in declaring that the universe is an "utterly specific and unique event". \[63\]
2. Theology and History

Because of the strong attacks upon Christianity by modern scientism and positivism, modern theology has often been anxious to protect itself from their criticisms by abandoning the claim that God has acted in the empirical-historical events of space and time. This has led to the re-interpretation of the incarnation by a method of historical science dominated by the demand for observation and control. Some have argued that theology's connection to history is better seen in terms of Geschichte (man's interpretation of history, and what he personally accepts for himself) rather than Historie, with its implicit positivistic demand for observation and control. The weakness of a retreat from the historical factuality of Christian faith is the neo-Romantic implication that the real point of historical investigation is not to discover what actually took place, but for man to understand and know himself.

The philosophers of history, Collingwood and Dilthey, have both encouraged the notion that history's significance lies in what goes on 'inside' events. To get inside requires a 're-enactment of the past' within our minds today. Both find the reduction of history to the cold factuality of positivistic science unable to grasp history's real meaning.

Though Torrance also affirms the importance of participation, he abhors any indifference to the question of factual truthfulness. The concern for objective, historical truth must not be abandoned. For, as Pannenbring notes, if God's revelation is not genuinely historical, then theological truth is not known in the same way that reality as a whole has always been experienced, i.e., historically.

Therefore, as Torrance puts it, "wherever theology has to do with acts of God in space and time, it is no less interested than historical science in the truthfulness of historical facts". But Torrance thinks that the events of history are truly participated in and dramatized before us, not by reference to the self's interior world, but as we penetrate to the inner logic of events in their intelligible and coherent whole. And as with all scientific inquiry, we must interpret the documents in accordance with their own canon and not by some positivist
assumption of what may or may not occur. 70 Certainly the factuality of the incarnation is such that it has no historical parallels and cannot be judged according to any probability canons. 71 Presuppositions are peculiarly damaging in historical investigation. 72

C. Natural Theology in Reconstruction

1. Levels of Rationality

This brings us to Torrance's integration of scientific and theological rationality in terms of a hierarchical model of explanation. He has constructed this paradigm in dialogue with Einstein, Polanyi and Gödel, as well as with ancient and modern theologians.

Torrance records how prior to Gödel, mathematics sought to reduce its deductive systems to self-sufficient consistency by omitting any ontological reference and by being completely formalizable (every proposition expressible within the system deducible from its axioms). This approach was given classic expression in Russell and Whitehead's Principia. 73 What Gödel shows is that all proofs are not formalized in the Principia, by demonstrating mathematically that in any formal system there must be certain propositions which cannot be decided (capable of proof) within that system.

Several important implications result. If it cannot be decided solely within a formal mathematical system whether its axioms are consistent, then all systems contain true propositions that cannot be derived from that system. Gödel concludes that there is no formalized system which is not incomplete in principle. 74 It is impossible to produce a formalized system of thought which is both consistent and complete at the same time. 75

Gödel shows that consistent, formal systems are not shut off from reality (as a tautologous or inner logic system), but are necessarily indeterminate or open. This reveals in a new way that it is essential for mathematics to have empirical referents in order for its system to be meaningful. That is, the truth of mathematical notions cannot be established apart from their co-ordination to empirical reality. 76 This reinforces Einstein's work which showed that physical geometry can no longer be an isolated self-contained science like the
geometry of Euclid. With Polanyi, Torrance takes this to suggest that when we correlate systems of rational explanation, there are boundary conditions where each system is co-ordinated within a higher system. Thus, e.g., Newtonian physics is not discarded but validated within a limited area by relativity physics.

Torrance further appeals to Polanyi’s multi-levelled paradigm which avers that each science has three distinct levels: physical, theoretical and meta-theoretical. Each level is open upwards to a higher level but not reducible downwards. Where nature seems at one level incomprehensible, considered at another level we discover an intelligible pattern. Where levels converge, as they do if Gödel is correct, (for no system is at once consistent and complete), boundary conditions exist where correlation with a higher level is essential for rational explanation.

Though each science is governed by its own laws as it leaves its boundary conditions, boundary conditions themselves operate with marginal control from a higher level. These higher levels of order are neither derived nor explicable in terms of operational principles of the lower level. The higher levels rely on lower laws without infringing upon them for fulfilling its own operations. Yet they are not themselves explainable in terms of the lower level laws. For example, an analysis of the physical and chemical elements which make up a machine describes only the elements which comprise the machine. Beyond this we need an engineering analysis to tell us the machine’s function and its purpose. And so it is everywhere within nature. All systems function by correlating boundary conditions and consist of formal and non-formal factors. It would be meaningless to reduce all to a one-dimensional level.

The integration of a hierarchical model of explanation with boundary conditions points to the limits of formalization if we are to maintain the meaning of each system. Polanyi uses Gödel to reinforce both his stress on the limits of formal logic and his structural proposal of a multiple-levelled structure of knowing.

Torrance uses this hierarchical model to interpret the
field relationship of theology and science. He affirms at once the independence of science from theology, with its methodological secularism (which he grounds theologically in the Protestant emphasis on creation out of nothing with its own contingent natural laws), and he rejects the dogmatic secularism which arises from the dualist and deistic detachment of God from the world. 86

Conflicts arise between science and theology when science illegitimately unifies and extends its knowledge of contingent processes beyond the contingent universe and claims to be the way of knowing and testing all reality at all levels. 87 Natural science must not illegitimately use its cultural ascendancy to intrude upon theology as theology did for so long to science. As Bernard Lovell notes, it is a delusion to suggest that natural science is the only avenue to a true understanding of the universe. 88 Polanyi argues that science which eliminates its transcendent grounds destroys itself, for its own explanations neither are, nor can be, complete and self-sufficient. 90 In Torrance's words, numeric rationality is given its full meaning only within a logos or word rationality of a higher level.

Numeric order reveals creation's rationality in its "impersonal, determinate and immanent form". But in word (logos) we are dealing with rationality in its personal form. 91 It is through interaction with word that the mathematical order of nature is at once seen to be incomplete, but capable of co-ordination in wider and richer orderly connections with higher levels. 92

Out of all creation, it is in man himself that word and number rationality, though different, come together and are correlated. When the determinate, numeric form of nature is co-ordinated with empirical reality, mathematics avoids an empty formalism. 93 Apart from a knowledge of theology and transcendent explanation, the natural sciences are ultimately without meaning. 94 That is, Torrance alleges that the contingency of nature (it is unnecessary and incomplete in itself) is taken most seriously only when we see its ultimate dependence on factors beyond it. 95

It is from within the context of architectonic levels of
explanation, which move relentlessly to ultimate theological issues, that Torrance finds the Copenhagen-Göttingen notion of indeterminacy so inadequate. It both implies an ultimate irrationality in the universe and fails to reckon with the contingent relation of nature to any transcendent ground. Instead, it unwarrantedly infers an ultimate randomness and incoherence. Einstein has reminded us that if science assumed this at the beginning, it would throttle all scientific progress.

What Torrance is proposing is "something like a Godelian theory of the universe".96 While theology does not concern itself with the world's contingency away from God (the natural science level), it does seek to correlate this level at its boundary conditions to the world's contingency on God.97 In this way

the stratified or hierarchical structure of levels of order and coherence revealed by scientific inquiry...is set within a semantic focus toward God the Creator and Redeemer which gives the scientific levels of order and coherence a significance beyond what they are capable of in themselves, but which completes what they are in themselves...98

Revelation encounters natural science when we believe that science is taken seriously only when we hold that God is the transcendent integrating factor of all life.99 Torrance views the incarnation as the place and person where the invisible structures of God's interaction intersect the invisible structures of space-time. Jesus Christ is the boundary condition of reality through whom the created universe's ultimate meaning is discerned.100

From this positive ground of the unity of creation and redemption in Christ, Torrance challenges science to consider its own essential, ontological and dogmatic postulates, and to recognize the epistemological harmony which exists within the theological-scientific field relation. Torrance is asking the scientific community to take the responsible step of discussing the meta-scientific questions for which science itself cries out. Though only theology seeks to penetrate (by grace) to the transcendent level, all the sciences, if they are honest, must be aware of it.101 Torrance insists that science, to be true to its own search for the rationality of the universe, must deal
with meta-scientific questions and raise the question of ultimate origins. As an essential ingredient of man's response to his Creator, science cannot isolate itself from theology. Though natural science inquires into the patterns of contingent nature and theology into their transcendent source, the two fields cannot be artificially divorced from each other.

In this context we should notice how Torrance reinterprets Leibnitz's notion of the principle of sufficient reason. Though science offers a rational account of the order and harmony of the universe even as a whole, it must still ask over and above all that what the sufficient reason for this rational state of affairs is, for it is aware that the rationality inherent in the universe with which it has made contact reaches far beyond the range of its competence.

Torrance believes that transcendence "presses" science, that science's investigations "rouse" questions about the ultimate intelligible ground of the universe. Because modern science has faced the question of the universe's origin in a new way, it "cries out" for a doctrine of creation. Thus the intelligibility of the universe "demands" a justification of a meta-scientific and transcendent kind, lest it point to an ultimate meaninglessness.

Torrance refuses to construe this pressure upon science into a formal logical argument from the contingent universe to a non-contingent and necessary ground in God. At this boundary level of rationality, Torrance unlike Leibnitz, leaves his argument at the semantic or informal level. The reason he refuses to formalize it into logical syllogism is that the correlation of contingency with logical necessity necessitates down the line every connection leading to it and thus resolves contingency itself into necessity. This, Torrance calls "the fallacy of Greek and all rationalizing science." The inherent rationality of nature cries aloud for God because it is not self-explanatory. But transcendent rationality is ultimate and cannot be deduced from lower grounds. It can only be known out of itself, intuitively through the shining of God's own uncreated light.

This intuitive connection is the kind of informal
connection which modern science has shown to be fundamental to all scientific procedure and discovery. Philosophers of science err when they conclude that because science does not logically demand an ultimate rational source, it is therefore arbitrarily independent of any transcendent rationality. This betrays the unwarranted assumption that the link between thought and being can exist only by way of abstract logic. Torrance argues that the more fluid, empirically open category of a sufficient reason, within a hierarchical structure of explanation, leads us to abandon any thought of an ultimate randomness. Indeterminacy is incoherent not in an abstract, logical sense, but on the grounds that the contingent rationality of the universe cries out for explanation within a hierarchical matrix to give meaning and purpose at each level and which opens itself up to an ultimate and transcendent coherence.

As we turn to Lewis and see how his thinking correlates with Torrance's hierarchical approach, we find a surprising harmony, both in the multiple-levels approach to rationality and also in hints of Lewis' own movement away from a formal and logical argument for transcendence to an intuitive sufficient reason.

As early as Miracles (1948), Lewis probes for a comprehensive, rational co-ordination of science and theology, and suggests a multiple-level approach to reality. He notes that at the present time most moderns are quite biased against the notion of a reality beyond the five senses ("I think Kant is at the root of it."). But Lewis seeks to show how natural such an approach becomes when seen from its own point of view. While one cannot prove the higher from the lower, nonetheless only the higher (tree, emotion) adequately explains the lower (painting, sensation).

Lewis envisages a natural cohesion between levels. He roundly rejects any notion of a tension between natural and supernatural, for the natural itself (and natural law) demands subordination. Nature's beauty is most piercing when we keep it subordinate. We may of course, make beauty absolute by striving for an art for art's sake, with no higher referent. But when art is not used in harness to teach or adore, it
de~troys itself. 115

Every preference of a small good to a great, or a partial good to a total good, involves the loss of the small or partial good for which the sacrifice was made. Apparently the world is made that way. 116

Second things are always corrupted when put first. 117 This is the perversity of the natural life lived as a self-contained, autonomous existence. In Till We Have Faces, Orual lives out a self-contained and natural human affection which is not transposed by transcendence. It becomes "in the long run tyrannically possessive and ready to turn to hatred when the beloved ceases to be its possession". 118

The same hierarchical coherence informs Lewis' thinking in The Four Loves. There he evocatively describes the glories and darkness of each natural love. His point is that all natural loves naturally need grace to be fruitful. "The natural loves are not self-sufficient...Since the Fall, no organization or way of life whatever has a natural tendency to go right." 119 All the joys and experiences of the natural life: music, wine, or philosophy may become the servants of the higher, spiritual life, but none are automatically so. 120 As they are redeemed, the natural loves change. Lewis never seeks to belittle, but to affirm the natural and to point to where its real glory lies.

Lewis describes the natural or moral law (Tao) in a similarly hierarchical manner. The moral law inheres in the universe and at one level we may discern it "without any special religious commitment". 121 But as in Torrance, science needs theology, so in Lewis, morality needs theology. 122 Although the lower never logically compels the higher, law is perverted when it is viewed as self-sufficient or has precedence to grace. Duty (tuning our instruments) exists for the delight (symphony). The law is very important for unbelievers (and believers). Though a bad tree cannot make good fruit, obeying the moral laws one grasps is essential until one "recognizes its ultimate futility and despairs" and is made a new (spiritual) man. 123

Edwyn Bevan, an admitted influence on Lewis, presents a similar way of sufficient reason. Like Torrance, he distinguishes value and meaning (word) from pattern and mathematical
order (number), or as he calls it, meaning from truth. He admits "you cannot with any logical cogency infer that the universe is rational in the latter sense from its being rational in the former sense". But one can say if it has an ultimate purpose, then it must give us intellectual and moral satisfaction. 

Atheists may reject this position without fear of logical inconsistency. Bevan admits that the standard arguments for God give rational comfort only to those who believe already. "All belief that the world is rational in the sense of being directed to realise value, must be an act of faith..." Nonetheless, we desire and yearn for this kind of ultimate coherence and believe that it gives man his greatest satisfaction in contemplating the universe. Besides, to deny that there exists an ultimate pattern, we must adopt another "unproved hypothesis". If no rational inference leads us from the order of the world to a transcendent harmony outside it, we are left with "asserting an apprehension of God so personal and direct that the question of proof cannot even be raised".

These words coincide with Torrance's view that the reality and truth of God is grasped in a rational-intuitive manner, and not through logical-inferential means. Where he differs from Bevan is that with the aid of Polanyi and others, Torrance has boldly torn down the rigid dichotomy between truth and meaning, moral, practical reason and cognitive, intellectual truths. Value and rationality, though distinguishable for some analyses, cannot be separated. They are organically woven together.

In the latter chapters of Miracles, Lewis grapples with the question of the criterion we use to justify certain convictions we cherish but which are not simply justifiable with a syllogism. Lewis reasons that "we are influenced, by some innate sense of the fitness of things". Lewis resembles Torrance when he proceeds to assert that this sense of fitness which cries out for God is the same sense that leads us to anticipate that the universe would be orderly. Lewis concludes, therefore, that the scientists too "logically require a metaphysics of this sort". That is, the source of our rationality is grounded transcendentally. To trust this "innate
sense of fitness" in regard to God's rationality is no more problematic than our confidence in the rationality of nature.

There does persist here an ambiguity in Lewis, for he translates the intuitive grasp of sufficient reason by the phrase "logically requires". But in the wake of Anscombe's criticism, Lewis' next reference to a comprehensive rational structure of the universe appears ten years later. Though this time the argument is shorn of its dependence on logical inference, it retains the commitment to a multi-dimensional rationality. He even readily acknowledges that one can never logically compel belief in God. If proof is not the answer, what is needed is an intuitive sense of fitness, "a certain insight; getting the focus right".133 "Those who can see only the lower...[level] will always be plausible."134

One who contended that a poem was nothing but black marks on white paper would be unanswerable if he addressed an audience who could not read. Look at it through microscopes, analyse the printer's ink and the paper, study it (in that way) as long as you like; you will never find something over and above all the products of analysis whereof you can say "this is a poem". Those who read, however, will continue to say the poem exists.135

(Here we see how Lewis uses an analogy to communicate a higher reality in terms of a lower with which we are familiar. This is the same procedure Torrance describes in Athanasius.)136

This approach to rationality described by Lewis and explicitly prescribed by Torrance, points to a new approach to the old relationship between traditional natural theology and natural science. Formerly, conflicts arose between science and theology when natural theology illegitimately mixed the lower level with transcendent explanation and thereby ignored or avoided the arduous empirical investigation into physical processes.137 Natural science properly questions all natural theology which seeks to inferentially extract transcendent explanations from contingent processes.138

That is, by seeking ultimate truths within nature, natural theology divorced theoretic understanding from experimental contact with nature and hence stagnated the progress of science. This also divorced theology's epistemological framework from
empirical contact with God's self-disclosure. What Torrance prescribes for theology is a shift upwards from causal connections abstracted from observation to another level of thought which has its own intrinsic, non-logical-causal conceptual framework.

If God is not to be defended or proved on the level of natural knowledge, we must learn to think on different levels at the same time and develop a consistent, coherent understanding of boundary situations. As multi-dimensional structures exist in mathematics, language (poetry-black dots) and art, so too they exist in natural and theological science. Torrance finds Polanyi's work crucial in this process because he has pioneered a paradigm of the universe with a built-in allowance for transcendence and a framework of knowing which leaves the mind open to boundary conditions of a reality altogether transcendent to it. Such a framework opens the way to a proper integration of science with the humanities and a rational transition from knowing laws of nature to knowing the person of God.

If Torrance is persistently critical of the idealist and Thomist traditions, he is also (more irenically) critical of Barth for failing to bring to light the connection between the rationality of grace and transcendence and the rationality of natural science. Instead, Barth left a gap (or a gaping hole!) between natural science and natural knowledge and the knowledge of the Word of God which he expounded with such force and beauty. James Brown is probably correct that in fields of knowledge other than theology, Barth displays a remnant of the Kantian legacy, namely, the object of knowing is at man's disposal.

Therefore Torrance puts these critical questions to Barth: did he in the end make theological statements at the expense of physical, empirical statements? And therefore did he really overcome the long-standing dualisms between sensible-intelligible, nature-grace and phenomenal-noumenal? With Torrance's concerns in mind, we can appreciate why Lewis had no sympathy for what he precipitously described as "Barthianism: a flattening out of all things into common insignificance before the inscrutable
Creator". 147 If God's grace does not consume nature but rescues it, there is a genuine healing and integration as well as a judgement, where man becomes true man, his yearnings are fulfilled and purified and creation's rationality is restored and viewed aright when seen in the light of the Creator's redeeming activity. The crucial event in redemption does not empty creaturely gifts and experiences of their importance but hallows and redeems them. If theology, science (and I would argue, aesthetics), share certain basic epistemological structures natural to all three,

that common basis surely must be the proper ground for a natural theology. But if these ideas have a definitely Christian source and are grounded ultimately on divine revelation, in what sense do we speak of natural theology? 148

Torrance wishes to go beyond Barth in taking more seriously the relation between creation and redemption. For in Jesus Christ, the Word of God became a physical event in space-time and we must seek to understand it within the co-ordinate levels of created rationality. 149 This means we must establish a closer and even intimate relation between natural and revealed theology, but with a difference. Barth was right on methodological grounds to attack a natural theology which functions as a prior, independent conceptual system, for no genuine science can permit itself to be controlled by an independent logical structure which claims to constitute an indispensable precondition or precomprehension. 150 Traditional natural theology creates a damaging dualism between prior epistemological structures and the actual empirical content of theological knowledge.

When Thomist theology developed the rationality of nature into a movement from the world to God, it created an epistemological structure detached from all actual relations with God in Christ and became the framework which interpreted revealed theology. This meant it exercised conceptual control over all theological concepts. 151 A similar dualism appears in non-Thomist arguments, such as Kant's moral argument, for God still ends up last in the order of knowing. That is, though Kant's argument is not an inference from empirical data to God, it is an inference from moral data to God. 152

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This procedure led to a split in theological knowledge between an apparently autonomous rational structure in nature and the active self-disclosure of God in special revelation. This creates a dichotomy of a natural knowledge of the one God and a revealed knowledge of the trinitarian God, which "is scientifically as well as theologically intolerable". Here Torrance offers a critique of the whole Western theological tradition, which, following Augustine and in contrast to Athanasius, speaks of God's being apart from his acts, and which makes distinctions in God that question his unity. Torrance has in mind such Western emphases as God's impassibility and immutability. As with Aristotle's unmoved mover, (and process theology's inversion of Aristotle, the moved unmover) and Newton's impassible God who inertially contains the universe, this approach portrays a relation of God to the universe in terms of an inertial system, and not God's active self-disclosure. It implies God can be known in his mute being behind the back of his own speech and acts. But for Torrance, God's word and being interpenetrate each other and are inseparable. Similarly, we do not separate man's knowing from his being, for man's knowing is bound to the whole man who is called in question by Christ, judged and redeemed. Justification by Christ means the whole of man, including all his natural knowledge, has been judged and redeemed, for Christ died for the whole man. For this reason, Barth saw natural theology as natural man's last hope and comfort, and therefore the last bastion of his opposition to God's own initiating and self-giving in the grace of Christ. Torrance notes that for Calvin, man's good gifts remain (for example, a knowledge of good and evil), but ultimately "minister to our confusion and come under the total judgement of grace". Elsewhere, Torrance cautions that though there is a "sense of God's presence" which permeates creation, it cannot be worked up into a clear, convincing theology.

The cumulative tendency to identify the imago dei with some natural endowment of man which prepares him for God, etc., climaxed in the nineteenth century cultural religion of Western
Europe. A grand cultural synthesis in effect amalgamated Christianity with an immanent idealism which saw man or the human spirit as a portion of God, "a little pool of the one Divine ocean" endowed with a divine spark. Inevitably, this posits an ultimate identity between God and man. Torrance also sees in the background of this kind of natural theology an ignoring of the *filioque* which led to a depersonalization of the Spirit from the incarnation and into immanent principles within the creaturely processes. Bevan argues that Barth was quite right to denounce this approach, for it "surely shows an indiscriminating wooliness of thought which blurs the real alternatives in religion". Barth saw clearly that any natural bridge from the lower to the higher level of rationality, detracts from the transcendence of God and the sheer creatureliness and contingency of man. As Bevan testifies, the incarnation is significant only against the background of the Hebrew presupposition of God's total otherness and transcendence. Only from the vantage point of an infinite qualitative distinction between God and man can one fully adore and understand that in the incarnation God has ceased to be God only, but has taken up human nature into himself.

In contrast to the dichotomy between a revealed trinitarian theology and a natural, unitarian theology, Torrance thinks theology can learn from natural science how the empirical and theoretical can be brought together in a more genuinely empirical and realist way. This is the lesson: in modern physics, geometry is no longer pursued independently of empirical science, as an independent and deductive system which is detached and antecedent. But with the rise of four-dimensional geometry, it has become indissolubly bound up with physics. Geometrical structures are now studied as they arise in and within the actual knowledge of physical events. Here is a mathematics not of ideal possibilities, but one which profoundly correlates abstract conceptual systems and physical processes. This means our space-time world is an organic, continuous and diversified, but unitary field of dynamic structures. In this development, the character of geometry has been changed, making it, as Einstein puts it, a form of natural science.
Torrance argues that theology today can no more operate with a separation between natural theology and revealed theology than science can separate geometry from physics. This means, of course, that natural theology "suffers a dimensional change" and is made natural to the inherent intelligibility and nature of God as he has actually and positively revealed himself in his words and acts. Properly understood, therefore, "natural theology is included within revealed theology". Torrance has sought to construct for theology its own four-dimensional geometry which is no longer extrinsic, but intrinsic to a theology of the actual knowledge of God in Christ. Such a renewed natural theology does not detract from the concrete singularity of the incarnation, but reinforces its unique and exclusive character. This a posteriori procedure remedies the inbuilt tendency of natural theology to impose mental patterns arbitrarily upon the subject matter and enables theology to investigate and develop the inner coherence and unitary structure of its knowledge in and through Christ. Of course, theology, too, will change as it becomes more aware of natural science's understanding of creation's space-time structures. In summary, Torrance has moved beyond Barth by working towards a cognitive understanding and description of the rationality of theology and the rationality of natural science. What Torrance has done with the help of Gödel, Polanyi, Einstein and others, is to propose a cognitive and structural connection between theological and natural science which is an open, intelligible system, hierarchically ordered in multiple levels and infinitely open to God.

2. Credo ut Intelligam: The Rationality of an Objective Universe

For Torrance, the objective reality of the external world and the belief in its rationality are a living unity. The unity between the belief in the rationality of the universe and its external objectivity is seen in the way Albert Einstein, a committed believer in the rationality and reality of the universe, grappled with empirical difficulties. Rather than leading him to doubt his belief in the world's rationality, quite the contrary, they only strengthened his faith. "All scientific
progress shows a recognition of the ever-firm belief in the harmony of our world, ever strengthened by the increasing obstacles to comprehension." 176 At the times when discrepancies between our theory and the real world are keenest, it is then that our belief in the world's rationality frees us to explore further and ask even more "iconoclastic questions for we presume that form and order are endemic to nature". 177 Because we boldly presume the universe's rationality, "obstacles to comprehension" only confirm our belief that the reality we probe is not mental putty we mould, but a live and awesome ontological otherness. By the wonder of a living rational correspondence between man and the external world we may come to apprehension and understanding. In a sense, the rationality of the external universe is displayed when empirical problems force themselves upon us. The difficulty must be tackled. To ignore it by a retreat to idealism shortcircuits the discovery of a rational and real explanation.

That the universe is objectively real and open to rational apprehension, "would not be the case if there were conflicting rationalities or patterns of order embedded in it". 178 Torrance adds that this is a corollary of the object's priority for our knowledge of it. In other words, scientific rationality depends upon the prior reality and rationality of an external and objective reality. The ontic precedes and enables the noetic. 179

Within a scientific world still dominated by instrumentalist Kantian thought forms, it has taken a scientist of Einstein's insight and boldness to reassert the propriety of ontological affirmations within creative science. In opposition at once to idealism and positivism, Einstein's relativity theory asserts that science can only function adequately with the belief that the universe is externally real and rational. Let Einstein speak for himself on the explicit implications he draws.

I have never found a better expression than the expression "religion" for this trust in the rational nature of reality and of its peculiar accessibility to the human mind. Where this trust is lacking, science degenerates into an uninspired procedure. 180

In a letter to Maurice Solovine, Einstein pursues his
notion that the scientific comprehensibility of the world is a "miracle, an eternal mystery", for "surely a priori, one should expect the world to be chaotic, not to be grasped by thought in any way". Yet the success of Newton's gravity theory supposes in the world a high degree of order we are not entitled to expect a priori. Here is the weak point of atheists and positivists who feel happy because they have pre-empted the world of the divine...and miraculous.181

In 1930 Einstein wrote Moritz Schlick of the Vienna Circle to tell him that his presentation was "too positivistic" and described himself as a metaphysicist.182 Of course, post-Kantian instrumentalists, who attempt to have physics without ontology or science without objective truth, do not welcome such assertions. Earlier, when Max Planck concluded that physics was concerned with a real, external reality (and not merely one's sense impressions), his views were anathematized by Ernst Mach as tantamount to going to Church.183 But as F. S. C. Northrup has borne witness, "the return to verified scientific theory as definitive of ontological existence presents no epistemological difficulties" for modern science.184 Why? Because Einsteinian physics has torn down Kant's a priori edifice of an epistemological gap between knower and known; phenomenal and noumenal. Rather, modern science "assigns the subjective conditions of the knower to an empirical, physiological knower (not a transcendental a priori ego) who is continuous with and within ontologically existent nature".185 Though obviously not without its alternative in Kantian-instrumentalism, Einsteinian physics has made a strong case for a critical realism, that is, a real, external world. As Einstein puts it, "the belief in an external world independent of the perceiving subject is the basis of all natural science."186

Lewis wrote a foreword to D. E. Harding's The Hierarchy of Heaven and Earth, because it was an attempt by a scientist to reassert the reality of an external world.187 Lewis notes the same subjective internalization process which led man the subject to devour the object (world, God, values, beauty) and place these qualities within the self (and which the self
projects into the world), has now been used to empty the subject of its meaning as well as the object. Subjectivity devours the objective world and ends by devouring itself. At the point of belief in an external and rational world, we reach a point of fundamental unity between science and theology. It is simply that the basis of science as the belief in one harmonious and rational unity of the cosmos is a correlate of Judaeo-Christian monotheism. 188

Einstein ended his self-confessed affirmation of an external reality and its rationality by abruptly raising a veil. "Curiously, we have to be resigned to recognizing the miracle [of man's grasp of reality] without having any legitimate way of getting any further." 189 But where Einstein is silent, Torrance cannot be. If God is God, the Creator of all and the source of rational order, Torrance finds it absurd to think he "does not actively reveal himself, but is aloof, leaving us groping in the dark for clues". 190 And so from the empirical search of natural science we turn to the real, self-disclosing One of the Bible who in the fulness of time, for us men and our salvation, became man and dwelt among us.

D. Sehnsucht: An A Posteriori Natural Theology

Let me seek Thee in Longing.

—Anselm 191

Though it has equal affinities with the art-theology field relationship, I shall discuss Lewis' experience of Sehnsucht or joy in the context of an a posteriori natural theology. Lewis describes Sehnsucht as an unsatisfied longing which is never a possession, but always a desire. 192 It makes nonsense of the usual distinction between having and wanting and epitomizes our life as pilgrims journeying to truth. 193 Lewis sees the essence of religion as consisting in this thirst, "the self's desire for and acquiesence in, and self-rejection in favour of, an object wholly good and wholly good for it". 194

The great mystery surrounding joy is its true object. 195 By experience, Lewis learned that joy was aroused but never satisfied by earthly pleasures: sex, nostalgia, magic, eros, natural beauty, etc. He concludes that "each supposed object of desire is inadequate to it" and only increases longing. 196
Lewis eventually interprets the experience of joy as "only a reminder". To desire the experience was futile, an attempt to "contemplate the enjoyed".\(^{197}\)

Lewis contrasts his approach to joy with William Morris. Morris' experience is "chemically pure" paganism, in that he considers the question of transcendence by the sheer force of his experience of joy, "by mere obedience to desire".\(^{198}\) Morris simply presents the question which joy evokes in man, without seeking to justify it as would a Christian.\(^{199}\) In contrast, Lewis is a Christian and seeks to give a rational and Christian interpretation of his experience of joy. The implications for natural theology are seen in his discussion of Virgil's story about a child sent down from heaven by a virgin, or of Plato's portrait of righteousness stripped of all rewards, impaled and scourged. "At this passage a Christian reader starts and rubs his eyes. What is happening?"\(^{200}\) Lewis takes these stories as neither chance nor direct prophecy. He wants to consider with the reader how to regard such data "in the light of fuller knowledge than their authors possessed".\(^{201}\) This exemplifies an a posteriori approach. Lewis seeks to understand his experience of desire in the light of Christian faith. He seeks therefore to describe how his Christian faith saves the appearances, that is, explains the phenomena of his life. A Christian natural theology which thinks in the wake of Christ seeks to unfold naturally from its vantage point the way Christ redeems and judges creation.

There is no question here of man's desire initiating or naturally merging into a knowledge of God. Lewis notes that the grammar of being demands that God is the initiator of love and man primarily the respondent.\(^{202}\) He feels this does not rule out that at a certain level we can speak with Augustine of the soul's desire for God.\(^{203}\) For Calvin too, God is the ultimate desire of man, though fallen man cannot see this.\(^{204}\) Ultimately, even our desire for God comes from God and is only an appearance of God's search for us. For Lewis, this is in sharp distinction from the pagan theism of Aristotle in which God is the unmoving lover.\(^{205}\)
From the moment of his conversion, Lewis saw it as his responsibility to give an account of his journey to faith. And for him this meant a detailed examination of rationalism and romanticism, which he believed God had used to 'lead him home'. As he explains in *Mere Christianity*, God uses all kinds of things, peoples, books and experiences to help us. And it is "mad" not to recognize the Giver behind the gift. "At first it is natural for a baby to take its mother's milk without knowing its mother", and it is natural to see a man who helps us without seeing Christ behind him. "But we must not remain babies." Lewis concludes that only his Christian faith enabled him to value the truths implicit in paganism and idealism. He professed therefore no ingratitude or contempt for hostleries along the way. If God uses this trail for some, we should not disparage it, but give thanks. Lewis would have been dishonest not to describe the journey he actually took.

Lewis remained grateful to the pagan gods for teaching him many truths. "It was through almost believing in the gods that I came to believe in God." His love for pagan Northernness taught him that the meaning of adoration was a "quite disinterested self-abandonment" to an object. Long before his conversion he thereby implicitly rejected Melancthon's dictum that "to know Christ is to know his benefits". "We're to give thanks to God for his glory...as if we owe him more thanks for necessarily being what he is than for any particular benefit he confers on us." His pagan days taught him that the implicit subjectivity of his search for joy ruined experience. Aesthetic adoration and enjoyment are inherently object-centred. Through the renaissance of his imagination, he learned the true nature of objectivity and enjoyment. Lewis was largely free, therefore, from the anthropocentrism of modern theology. He muses that he was sent back to false gods to acquire some capacity for worship against the day the true God should recall him to Himself.

For Lewis, Christian faith became the poetry which revealed the meaning of his experiences, including joy. In this sense, revelation functions as the poetry which remakes our
experience by revealing its true purpose. For in Lewis' words, "To find out what our experience has, all along, been really like, is to remake experience." Similarly, a natural theology which is a posteriori allows us to see experience in its proper light and hence remake or renew it. Redemption gives the focus by which one can truly understand and enjoy creation. That is why for a Christian Platonist like Edmund Spenser, "these formless longings would logically appear as among the sanest and most fruitful experiences we have; for their object really exists and really draws us to itself". To adapt Charles Williams' words, when we look at the world as beloved by God it is loaded with a beauty not at all apparent from another viewpoint, which is at once joyous and heart-breaking. It is by no means merely a subjective lens but the truest participation in things.

This fulfilled enjoyment is evident in Barth's love for Mozart. Mozart's music is not didactic nor does it communicate Mozart's self-understanding. It simply enjoys God's creation. Such enjoyment is the most eloquent praise of the Creator. "Nothing is so godly in creation as the grateful enjoyment of all that God has made and nothing is so ungodly in the Church as slander upon the creaturely works of God's hand." This natural, cheerful and spontaneous enjoyment of creation and desire for her Creator is the living centre of Judaism. The Psalms are full of this desire, says Lewis, "which is fully God-centred, asking of God no gift more urgently than his presence". Lewis calls this Hebraic love for God an appetite rather than a love, for love connotes something too spiritual, as if such a desire were meritorious or pious. Torrance acknowledges that this natural desire for truth, beauty and goodness is of primary importance in Einstein's quest. For Einstein, "the most beautiful emotion we experience is the strongest and noblest thing behind scientific research which is derived from it".

In both religion and science, we are provoked by awe and the 'longing to understand' as we stand on the brink of rationality and long to discover its source. Lewis' romantic-religious longing, with all its impurities, cried out to be
satisfied. Einstein's mystical feeling: that "to know that what is impenetrable to us really exists", which "is the centre of true religiousness", freed his scientific desire to journey on to fresh discoveries.  

Lewis' radical object-centredness distinguishes his Platonic-Augustinian emphasis on the soul's desire for God and saves it from subjectivism. Further, Lewis is self-critically aware that his fallenness implies a radical discontinuity between his desires and God's being and will. Therefore, his dialectic of desire is a "lived" ontological argument, not an intellectual or imaginative necessity. Lewis artfully describes an empirical, intuitive, a posteriori apprehension of God.

There emerges here a critical question. Lewis asks in Pilgrim's Regress: what if the Landlord (God) will not let us have the desire for beauty and truth which we have acquired? Is there a proof that our desire leads to God and that he satisfies it? Another way of posing the problem is to ask how to reconcile the upward thrust of our Platonic eros religion with the downward agape plunge of God's coming sankrecht von oben? Lewis' answer to John is "You've lived the proof". Every other object he desired proved itself a failure empirically. "This desire is the perilous siege in which only I can sit."

After meeting Christ, John rewalks his conversion path. When he sees the islands which earlier evoked desire, "the pain and longing were changed and all unlike what they had been of old". Pride and glamour had been purged from his vision, "and it began to seem well to him that the Island should be different from his desires, and so different, that, if he had known it, he would not have sought it". Here then is how Lewis reconciles the upward thrust of eros religion with the downward plunge of agape. The thrust of eros is like a rocket which must eventually splutter and fall. Agape takes this doomed rocket, turns it into a star and sets it in orbit.

Here is no suggestion that nature perfects itself or is immanently perfected by grace. The seed must fall in the ground and die before it can rise. This reminds us of the need for radical intellectual and emotional repentance in all
a priori desires as well as a priori criteria of rationality. In *Perelandra*, the Lady learns that it is dangerous to look for a fruit with the thought of a certain taste, because when another is found, it will not be enjoyed as long as the other taste is still in the mind. "You could refuse the real good" by thinking of the other. The true object transforms the pleasure we originally desired as we open ourselves to it. Had we held rigidly to the original desire, it could never have been satisfied, for it too was fallen, imprecise and needed redemption. Had we held relentlessly to the original desire, we would be making it our ultimate point of reference and value and using God as one more object to serve and satisfy it. Lewis thinks the original desire is given by God "to lure us" but it must be replaced and renewed, not idolized. Once desires lead us a certain way, "they have done their work and lead on to better things".

Our natural desires need purification and renovation. In his "Weight of Glory" sermon, Lewis says, "If we are made for heaven, the desire for our proper place will be already in us, but not yet attached to the true object, and will even appear as the rival of that object". For a time, the lure of the secrecy and power of the occult was bound up with Lewis' desire for God. He came to experience that this was a dead end. Similarly, Lewis' old desire for Northernness, or a world in which the fairies of Irish mythology really existed, had to be transformed in order that he might truly enjoy God and his contingent creation.

Lewis records that he had no assurance that his joy was connected with God. He feared even the opposite. With great horror, Lewis discovered that he did not like "goodness" as much as he supposed. When one finally meets goodness and is rescued from evil by it, those who are honest must admit a certain reticence. "This is a very terrible experience." This approach-avoidance fear is the irony of *Sehnsucht* in fallen man. At such moments of realization, one must allow oneself to be renovated and renewed to the depths.

Lewis records that following his conversion, the quest for joy lost "nearly all interest to me". The stab of desire
occurred as often as before, but in the wake of Christ, he saw that "that experience, considered as a state of my own mind, had never the kind of importance I once gave it." His quest for joy and his failure to secure it taught him a great spiritual-epistemological lesson, namely, that joy is a desire which by its very nature is concerned not so much with itself as with its object. Lewis came to believe he was wrong to desire not only lesser objects than God (e.g., the garden of Hesperides), but also wrong to desire joy itself. Joy is a mere mental and bodily event which when pursued for itself, leads to a destructive emotional or rational subjectivism. Therefore properly understood, the mental-bodily event of joy points not to itself, but to something else which gives joy as a by-product of its own glory.

In the wake of Jesus, joy is seen to be a valuable signpost to God. Joy encourages us and we are grateful for the authority which sets it up, but we do not linger too long for "we would be at Jerusalem". Thus we see Lewis had no illusion about the inherent value of Sehnsucht. God's using of it made it valuable. In the light of the fall, he acknowledged that we "inherit a whole system of desires which do not necessarily contradict God's will, but which after centuries of usurped autonomy, steadfastly ignore it". Our desires do not necessarily lead us to God. They constitute no golden thread to eternity. "All that is given to a creature with free will must be two-edged..." Pain or joy may lead us to God. Neither do necessarily. Both are part of God's great risk in creation and redemption.

Nonetheless, Lewis' desires cried out for fulfillment. But like sexual love or the contemplation of nature, they are "sub-Christian values" which are "all two-edged...for some souls romantic love also has proved a schoolmaster". Any road into Jerusalem may also be a road out of it. The very power and nobility which makes Sehnsucht so valuable makes the danger of ultimate allegiance to it "greater and more subtle" than other natural loves and gifts.

Lewis' descriptive a posteriori natural theology reconstructs and thus remakes our experience. It is not the
foundation of theology, but the implicit outworking of Christ upon our experience, past and present. Lewis offers no proof, but shows how Christianity interprets and describes the experience of desire. He believes it explains the facts better than any other explanation. Torrance reminds us that Thomas himself once commented that only the baptized reason can properly engage in natural theology.

E. Theology: Realist or Idealist?

Throughout the history of theology, an unresolved controversy lingers on, as D. M. MacKinnon puts it, between idealism and realism. We must explore how Lewis and Torrance relate to this tension. Perhaps the main difference between them is that Lewis begins with the idealist focus on the process of knowing, while Torrance begins with the realist focus on the object known and from there works out theology's knowing process. Clearly Torrance's sympathy lies with Barth's "basically realist" theology. Nonetheless Barth opposed the realism of Roman Catholic theology as well as the idealism of modern Protestantism.

Until recently the history of modern thought has been dominated by idealism. It has rightly seen the role of the subject in ascertaining knowledge and has championed the coherence criterion of truth, bringing all things into a coherent explanation. Idealism is exemplified in its starting point of the self-consciousness and the process of knowing, not the object known. That is, idealism begins, not with the object known, but with the knowing of it. Thus, Lewis begins with the experience of joy and pursues its true object. But the danger of idealism, as illustrated by Radhakrishnan, is to reduce or absorb the physical and natural universe into space-time relations, physics to mathematics and mathematics to thought.

Kant, another idealist, made certain categories of the human spirit the a priori structure by which we apprehend the real. This leads Torrance to conclude that idealism equates the world with what the mind conceives and fashions. Hence, for an idealist, science creates rather than discovers reality. Because Hegel identified thinking with being, he
argued that only mind has true existence. Therefore, he did not respect the stubborn otherness of the contingent facts of history and nature. Not surprisingly, Hegel rejected Newton's physics as mere mechanics, and argued that nature must conform to reason if science is to succeed. In Hegel, the mind swallows up existence and reduces concrete experience to abstract thought. This was Kierkegaard's great objection to idealism. He retorts that Hegel did not really incorporate existence into his system, but only the idea of existence.

Science could never have developed in India where nature was considered unreal. Where reincarnation and the belief in eternal cycles and eternal recurrence grows, science inevitably diminishes. The value of linking mathematics to experiments is devalued. If man is seen as the centre of the universe, then the necessity of knowing the physical world by empirical inquiry into its own properties is replaced by knowing nature immediately out of man himself. As Radhakrishnan puts it, there is no doctrine of creation in idealism. Time is not ultimately real. Hindu idealism boasts that its relational thinking and intuition grasps the interior of things unlike Western logical-causal thinking which is external and superficial. But, as Torrance points out, Hindu relational thinking, because of its a priori denial of the material world, "is not correlated with the empirical realities of nature, and indeed cannot be".

Lewis describes idealism's increasing ascendancy as "the great movement of internalization and that consequent aggrandizement of man and dessication of the outer universe, in which the psychological history of the West has so largely consisted". For Medieval man, the centre of the universe was heaven; for modern man the centre has shifted from heaven (God) to earth (man). This process consists largely in the diminishment of the object and the enlargement of the subject "at the expense of the object". Internalization takes qualities of the objective world, its colours, smell, taste, and (finally) rationality and transfers them to the subjective side of the account. This process has been the subject of numerous books by Lewis' old friend and intellectual opponent, Owen Barfield.
Barfield's books describe this 'evolution of consciousness' which he believes has occurred in man. In rough outline, he asserts that whereas up to Medieval times, words described external realities, they now describe external realities only by reference to their effect on us, on our consciousness. 268 This change reflects a change in man's centre of gravity from God and the world "out there" to a centre of both in man himself. Man creates the phenomenal world and is now increasingly coming to realize that God is not transcendent but immanent in man himself as the ground of his own being. For Barfield, the incarnation is the event in history where the immaterial qualities of the universe contracted into a human centre, the inner world of man. 269 In Jesus, man discovered his true self; man's true spirit entered into his own flesh. The post-Hegelian Barfield concludes that had the incarnation not occurred, it would have had to be invented.

As the clue to Western man's intellectual history, Lewis sees this internalization as the interpretive key to the development of English literature. For example, internalization explains the change from Shakespeare to Donne's understanding of love. For the realist Shakespeare, love becomes a window to view the immensities of nature, life, eternity and death. But in Donne, all things: philosophy, angelology, law and institutions are drawn together, narrowed and focused to one particular point where a man is loving a particular woman. All these riches have no value or existence except as they render more conscious that one moment. In Donne's centripetal imaginative thinking, the whole world is foreshortened, transformed and sacrificed to one precise shade of passion. 270

Elsewhere, when Pope translates Medieval poetry, he freely alters passages to say that the poet, not his story, receives fame. 271 He has not, for example, preserved the fame of Troy. Lewis grumbles that poets such as Pope seem to be conscious of little besides themselves. 272 Finally, Lewis attributes the modern aversion to the phrase 'miserable offenders' in the prayer book to this same process. That is, we do not feel miserable, therefore we consider the words irrelevant for modern man. But the point of the words in the sixteenth century meant
that one was (from God's point of view) an object of pity, whether one felt pitiful or not. 273

Another aspect of the centripetal nature of idealism is seen in that when it offers a positive account of reality, it posits itself (the thinking self or the feeling self) as the criterion of reality, and in doing so, exalts itself over being. 274 As Bonhoeffer puts it, when man tries to explain life by thinking an explanation, he reveals the essential boundlessness of thinking as a closed system and in its egocentricity reflects man at the centre of his world. 275

Idealism's great difference from Christianity is illustrated in the priority it gives to thought and consciousness rather than to act and being. To the Anthroposophist who finds Christ a signal phase in the evolution of consciousness, Lewis is a theological dinosaur whose allegiance to Christ is a "negative and categorical postponement of knowledge". 276 In the end, idealism reduces all things and persons to consciousness and thinking. This, says Kierkegaard, can only be described as horrible. Actual life is reduced to a shadow...

One does not love, act, believe anymore, but one knows what love and faith are—-it only remains to determine their place in the system. 277

Macmurray characterizes idealism as immature; for true development to maturity is not a product of consciousness, but only occurs through living. 278

If we begin with thought, we cannot move from thought to being, but ultimately, idealism tries to do just this. Thus one might describe Lewis' Christianity as interrupted idealism or the monologue of thinking interfered with by being (God). His theology describes this interruption.

As the dry bones shook and came together in that dreadful valley of Ezekiel's, so now a philosophical theorem, cerebrally entertained, began to stir and heave and throw off its grave clothes, and stood upright and became a living presence. 279

Historically, the emergence of philosophical idealism was welcomed by Western Christendom for its strong attack on the advances of materialism, naturalism, determinism and scientific agnosticism. It appeared to help theology restore rationality, morality and belief in God and to keep a mechanistic
materialism from taking over the universe.  

But there was a high cost for such aid.

During the Enlightenment years, idealism's subjectivity took the twin forms of pietism and rationalism. Rationalism emphasized the individual, autonomous reason which judges, orders or creates reality by man's inherent, non-viable (and for some, God-given) thought forms.  

Pietism focused on the faith of the subject, his depths of soul. Its emphasis on religious immediacy led to interpreting the Reformation as the triumph of individual, spiritual inwardness.  

Pietism's focus on religious feelings inspired a psychological interpretation of theology. In its wake, theology from Schleiermacher to Bultmann agrees that theology's starting point is within man's being and his experience of knowing (e.g., his feelings of dependence, his self-understanding or his rational structures).

The price of the Enlightenment's philosophical buttressing of Christianity was subjectivity or immanentism and the loss of transcendence. Christianity was re-interpreted as a symbolic representation of the inner significance of man's religious life and no longer concerned with factual, historical statements about the objective events of incarnation and resurrection.

Not only Christianity, but the natural world of science was seen to be rational only in its unity with man. An identity emerged between God the Creator and man the Creator. One could say God creates through man's consciousness, or the philosopher's knowledge of God is God's knowledge of himself (Hegel). As Adey puts it, for Lewis the Christian, man's mind must conform itself to nature, for nature is perceived. But for his Anthropososophist friend Barfield, man creates his environment. If the spiritual world is within man, then nature and supernature are both built up out of man's inner unity with the spiritual realm.

As Radhakrishnan eloquently remarks:

The ultimate of all is spirit in us, the divine in man. Life is God, and the proof of it is life itself...We are not ourselves alone; we are God-men.

Lewis' pilgrimage to Christian faith by way of idealism is well-known. His correspondence with Arthur Greeves reveals
a young man interested in the spiritual behind the curtain of the material world. Lewis describes nature (matter) as wholly evil, and man's emergence into the spiritual consciousness as his triumph, believes his house has a spirit "for if anything is spiritual, everything is", sees himself as having a "chip of spirit in him of the Universal Spirit" and hopes so to focus on the world "that the representation 'me' fades away".

This first-hand expression of an eloquent young idealist reveals that for idealism distinctions belong to the phenomenal world of appearances and have no ultimate validity. 'I' is ambiguous. It is an old man who will die, and yet 'I' is also the eternal Mind which contains time and place. "I am the Imaginer: I am one of his imaginations." For Hegel, God created the world in order to be known. The Absolute knows itself in and through the human mind. For an idealist, Sehnsucht is the perfection which we possess as Spirit but vainly desire as mortal souls. Barfield once asked Lewis to concentrate or meditate on his thinking in order to see his thinking process "as a being who is also everyone else's thinking, though he remains individual and not universal".

Lewis' poem to Barfield summarises the implicit pantheism of idealism: "Therefore you neither need reply nor can; for while we seem two talking, thou art one forever, and I no dreamer, but thy dream".

The theological conclusion of idealism is the pantheist idea of an Absolute Being which transcends all concrete, particular historical appearances (Christ, Buddha, etc.). This way desires a unification of religions under the umbrella of the transcendent Being. Thus under the guise of openness and dialogue (objectivity), John Hick expresses this idealist perspective as the way to truth and the true way to interpret the historical events and particularities which specific religions stress.

In Karl Barth, Protestant theology set its face in utter protest against all 'Romantic idealism'. Barth complained that idealism's reinterpretation or bolstering of Christianity interpreted Christianity as the ascendancy of spirit over nature,
and its understanding of spirit as the 'insideness' of things led to the identification of the Spirit of God with the Spirit of man. Barth was convinced that idealism, Christianity's cultural ally, was her greatest foe.

Thinking of ourselves what can only be thought of God, we are unable to think of Him more highly than we think of ourselves. Being to ourselves what God ought to be to us, He is no more to us than we are to ourselves. This secret identification of ourselves with God carries with it an isolation from Him.

Torrance challenges the whole process of the identification of God, man and nature. He denies that the fallen mind is in harmony with God. Rather it is earth-bound and self-centred. The path of idolatry is that man first identifies God with something in nature (an animal), then with being (life) in general and eventually identifies the depths of his own being with God.

Similarly, rationalism secretly identifies its self-legislat ing thought-structures with the mind of God. When it subdues all that is unknown to its own autonomous categories, it presumes an ontic continuity between itself and God. Not surprisingly, Kant himself identified God or the divine Spirit with the rational self-consciousness of the human spirit.

Here then, is idealism's temptation—to absorb the empirical into the theoretical, external reality into consciousness, and the reality of God into our God-consciousness.

How far Lewis moved away from this view can be seen in Perelandra, where the villain scientist, Weston, is a Hegelian idealist, who defends his evil deeds on the grounds that the goal of man is "pure Spirit: the final vortex of self-thinking, self-originating activity". Weston accuses Ransom of an archaic dualism between self and object. "Idiot! There is no possible distinction in concrete thought between me and the universe...I am the universe." For the idealist Weston, evil is just another appearance of being. "Your devil and your God are both pictures of the same force."

In rejecting immanence, Lewis argues that the primary division of Christendom is between those who believe in a supernatural, active, personal God and those who do not.
also explicitly rejects Barfield's notion that our thinking is actually God's thinking through me for the "traditional doctrine" that "I am a creature to whom God has given reason". An aspect of Lewis' rejection of idealism is his denying the value of (Barfield's) historicism, a form of natural theology, which asserts that on the basis of the natural powers alone man can discover the inner meaning of the historical process. That is, he draws theological or metaphysical conclusions from historical premises. Lewis specifically repudiates Hegel's notion that history reveals the progressive self-manifestation of Absolute Spirit. Rudolf Steiner himself defined Anthroposophy in the classical terms of natural theology: "Anthroposophy is a path of knowing which leads from the spirit in man to the Spiritual in the universe." R. Tripp accuses Lewis of unbelief, for Lewis disbelieves in 'spirit' due to his positive belief in the incarnation of God in time and matter. Tripp defines true belief as self-assertion in which we must will to be ourselves.

The year before his death, Lewis told a correspondent that though Hegel considered himself a Christian philosopher, his "extreme immanentism vitiated the claim". For absolute idealism, Christianity is valuable solely for the unphilosophical mind. It conveys to them as much of the truth as they are capable of grasping. Christianity is a picture-writing and metaphor which helps untutored feelings and imagination approximate the truth which the intellect grasps as idealism. Taken literally, the belief in the incarnation is idolatry for the idealist. It is to regard a myth as factually or literally true, whereas it has only a contingent value as an aid for the imagination.

For idealism, what Jesus is in the Gospels "we all are in reality, namely, the eternal giving himself to death that we might live". In The Pilgrim's Regress, Lewis argues that idealism fails, not logically, but because it cannot be lived. That is, if the phenomenal 'I' prays to his noumenal 'I' for help, his transcendental 'I' becomes a Thou. In practice, we cannot have it both ways. If the help we receive in prayer is more than a metaphor, so too, are the commands. Our underlying
ontic identity breaks down. 319

Lewis was well aware that "the heresies that men leave are hated-most" (Donne). 320 Like Barth's Der Romerbrief, Lewis' first book is his most critical attack on idealism. On the other hand, if the heresies men leave are the most hated, they also have a lingering impact on us that we may never shake off. For all of Barth's criticism of nineteenth century subjectivism, his own works give the impression to many that he retreated from a dialogue with modern culture into a subjectivist citadel of revelation. 321 This is the concern behind Torrance's question, did Barth make his theological statements at the expense of empirical statements. Fortunately, Torrance's reassertion of dialogue and reconstruction of natural theology has begun to correct this impression and point to a renewed dialogue with culture.

In this light, it is not surprising that Lewis' thought also bears the lasting influence of idealism. His intellectual journey reveals a struggle between the common sense realism of his youth, the idealism of his university days, the impact of Alexander's metaphysical realism and his later Christian confidence in a real and external creation. Austin Farrer points out that Lewis was raised in the idealist philosophical tradition "which hoped to establish the reality of the mental subject independently of and prior to, that of the bodily world." 322 As we have seen, Lewis never completely worked out the implications of the radical contingency of mind and body implicit in the Christian doctrine of creation ex nihilo. As Farrer puts it, though Lewis moved a good deal away from idealism, "he was still able to overlook the full involvement of the reasonable soul in a random and perishable system." 323

The lingering influence of idealism is seen in his statement that man is "continuous with the unknown depth" in a way matter is not. 324 His argument in Miracles asserts the need of a link between God's mind and man and likewise, in Surprised by Joy, the universe and mind are seen as ultimately mental. 325

The anthroposophist Tripp details for us Lewis' similarities with Steiner and Barfield. He refers particularly to Lewis' commitment to the 'pristine validity of thought', and thus the
link to God and transcendence provided by thought. "Nature is broken into with every thought." 

Even Lewis' final book retains this ambiguous relationship of both the rejection and lingering influence of idealism. He uses idealist language to refer to "me" and "God" as appearances into which we rarely penetrate deeply. He writes that God works in us daily uniting and embracing matter and our being "in the daily miracle of finite consciousness". In context, Lewis is denying any deistic detachment of God from his world, but in doing so, he seems to rely on Barfield's analysis. Earlier, he sounds very like Berkeley when he says "I presume that only God's attention keeps me (or anybody else) in existence at all". He is seeking to understand God as one who is transcendent yet broods in creation as the ground of our being. "Our reality is so much from his reality as He, moment by moment, projects into us." He also speaks of the "ontological continuity" between creature and Creator as a given of their relationship and distinguishes it from a union of wills which comes by grace in sanctification. Such pages were penned under the recent impact and influence of Barfield's Saving the Appearances, which Lewis had read and responded to by letter.

Yet Lewis was strongly committed to the importance of a creation doctrine and its uniqueness for Christianity. The universe is not eternal, not an emanation, but is radically distinct from God. The sheer objective otherness of creation points to that which is "not just jello we mould". At times his later works clearly reject any suggestion of a unity between God's mind and his creatures. In his review of Dorothy Sayers' The Mind of the Maker, he writes,

I must therefore disagree with Miss Sayers very profoundly when she says that 'between the mind of the maker and the mind of his Maker' there is a difference, not of category, but only of quality and degree. Lewis asserts rather that a yawning, unbridgeable gulf exists between the human artistry of recombining elements from a pre-existing world and the divine activity of first inventing. The difference is "simply heterogenous to any that we can conceive". In a letter to Griffiths, Lewis complains that Hindus have
no clear doctrine of creation, but only a sort of emanation. He also remarks that he finds philosophical pantheism further from Christian faith than semi-barbarous paganism. His quarrel with Anthroposophism is similarly summarized in a letter to A. C. H. and Daphne Harwood. He tells his friends they are "more rationalist than I".

I think the real difference between us is on a more general topic...I don't think the conception of creatureliness is part of your philosophy at all, and your system is anthropocentric. That's the real 'great divide'.

Lewis notes in his preface to The Pilgrim's Regress, that there are many rooms in the Romantic house, some he always abhorred and some he always loved. He never rejected the "exalted awareness of the external world" in which Romantic poetry revelled. In his quest for joy he sought to find the secret of this awareness. With Samuel Alexander's help and his fledgling Christian faith, he found this side of Romanticism fulfilled in object-centred participation. This also enabled him to escape from the rationalist reduction of life to conceptual truth, and helped him to integrate beauty and holiness into his epistemology. In the end, he believed that Christian faith gave him the only proper basis for his 'Romantic' love for nature which the pantheistic conclusion of Romanticism could not. Christian man may safely allow himself the same feelings for he alone knows the real reason for nature's beauty: "nature unstintingly obeys her Creator; hence its beauty".

Torrance describes idealism as an inverted deism which identified the creative and redemptive activity of God with the artistry and achievement of man. An idealist Christianity becomes a way to speak of the immanent processes which the world manifests under the masterful control of scientific, modern man. To the Romantic or existential individualist, the Reformation marks a fresh development in that process wherein the human spirit broke free from external authority and a new sovereignty of inward religious experience was asserted. From Strauss to Bultmann, Christianity is seen as a product of the human spirit. In effect, the internalization processes of idealism leaves behind the concrete Jesus of the New Testament
for a process of our own consciousness. As Torrance puts it, idealism understands Christianity essentially as a process. Theology's function is to examine the structure of religious consciousness. 342

Of course realism has its problems. Prior to his debate with Barfield, Lewis had been a common sense realist, that is, he accepted as rock bottom reality the universe revealed by the senses. 343 Yet even this view involves inward experience and the use of abstract thinking to organize sense impressions. Thus the real world of a scientist is far removed from that of the senses. "Surely it is only in so far as experiences fit together into a growing wholeness that they make up what we call the real?" 345 Screwtape uses a naïve realism to tempt man to think that reality is "the bare physical facts" separated from the other elements in the experience we actually have. 346 Lewis was also aware that modern physics pointed to the reality of invisible relations which unite material points of the universe. 347

Barth opposed the realism of Thomism because he thought it was formulated through the notion of analogia entis in which man's participation in being enables him to read off a knowledge of God from our experience and distinguish objective reality from our subjective experience of it. We are related to God by the fact of our existence. 348 However, Barth was wrong to think that Aquinas himself taught that 'being' was a generic concept which includes God and men. Here he was too dependent on the Platonic analysis of Aquinas, as in Erich Przywara. 349

In contrast to this notion of realism, Barth argues that the Christian message contradicts man's being. 350 This is how we distinguish objectivity from our subjective state. 351 Thinking (idealism) cannot break out of itself to reality. The Christian message comes entirely from without as God comes to us in Jesus Christ. The Holy Spirit breaks into the circle of man, not as a new idea, but in concrete judgement and forgiveness in the God who reveals himself to man in Christ. 352

To the question "Which is more real, thought or being?", the Christian answers "Both". The doctrine of creation means that God created all things in heaven and in earth, visible and
Neither aspect of contingent creation is directly related to God "however highly idealistic philosophy may prize spirit or the opposing materialistic philosophy may prize nature. 354"

For Torrance, Christian theology seeks to learn from both realism and idealism. It may properly ask questions concerning knowing and being. But ultimately, it refuses the dualist disjunction which finds them to be irreconcilable alternatives. 355 A Christian critical realism transcends both idealism and realism. Nonetheless, both have questions and concerns theology must listen to and which mutually correct each other. Idealist philosophy may properly ask critical questions of realist theology about the adequacy of its thought forms and their reference to reality. 356 Idealism has taught us that the theoretical is more intimately connected to the empirical than common sense realism had recognized. There are no raw or uninterpreted facts. This leads us to a realist rational order where rational structures are not imposed but discovered; for the ontic reality always precedes and enables our noetic, rational formulations.

Torrance finds a profound correlation here with modern science. For in the wake of the new science spurred on by relativity theory, the real world is no longer identified with causal necessity and quantifiable relations abstracted from sense experience, nor with the world of mechanically connected phenomena (also derived by abstraction). Science is concerned with a reality in which intelligible structure and material content exist in mutual interaction and interdetermination [and where] relations between bodies are just as real as bodies for it is in their interrelations that things are found to be what they are. 357

Reality is a "continuous integrated manifold, where structure and substance, form and being are inseparably conjoined in the immanent relatedness of the universe." 358 Ultimately, reality judges our concepts and the secondary criteria of correspondence, congruence and coherence are limited and relativized. 359 Creation is seen to be an interconnected whole, with an intrinsic realist order and intelligibility, a view reinforced by modern science, especially Einstein. 360 However, this rationality
springs not from a natural or logical necessity, but solely from the grace of God in creation and redemption.

1Out of My Later Years, p. 26.
2Ibid.
3quoted in Christian Theology and Scientific Culture, p. 58.
5The Ground and Grammar of Theology, 102.
6Ibid., p. 139.
7Ibid., p. 5. We should note here the emphasis on interpretation and not enjoyment. I am arguing that man is poet as well as priest.
8God in the Dock, p. 73. For example, archaeology cannot prove or disprove the fall, because of its limited data. The Problem of Pain, p. 74. cf. God in the Dock, p. 184, where Lewis says miracles and history both exclude "lab treatment".
9Miracles, p. 135.
10God in the Dock, p. 47.
12God in the Dock, p. 92.
13This is a critical fault in Bultmann's unspoken assumption of the Newtonian-Kantian framework. It is now obsolete.
14Miracles, p. 156.
15Ibid., p. 110.
17Miracles, p. 156.
19Theology and Church, p. 41. For Barth, theological considerations about the cosmos are limited to the special place of man in the cosmos and God's dealings with him.
The Problem of Pain, p. 137. cf. God in the Dock, p. 43. This reflects a tendency in Lewis the apologist (when convenient in argument), to distinguish scientific rationality (logical-inferential) from the higher rationality of theology and ethics (intuitive). Scripture is primarily concerned with the latter.

Reason in Christian Theology, p. 28.

The Ground and Grammar of Theology, p. 94.

cf. God in the Dock, p. 43.

This reflects a tendency in Lewis the apologist (when convenient in argument), to distinguish scientific rationality (logical-inferential) from the higher rationality of theology and ethics (intuitive). Scripture is primarily concerned with the latter.

Reason in Christian Theology, p. 28.

The Ground and Grammar of Theology, p. 94.

Ibid.

Ibid., p. 45. Torrance traces this to Kant's severing of practical from pure reason, in order to shelter morality and theology from the kind of critical empirical questions which arise in science.

Space, Time and Resurrection, p. xi.


Theology in Reconciliation, pp. 137, 270.

Ibid. cf. The Ground and Grammar of Theology, p. 96.


cf. Northrup, Natural Science and the Critical Philosophy of Kant, pp. 45f.

Theological Science, p. 55.

God and Rationality, p. 10. cf. The Ground and Grammar of Theology, p. 96. Also Christian Theology and Scientific Culture, p. 7. Torrance says science helps purge religion of "the dross of anthropomorphism" (Einstein).

Christian Theology and Scientific Culture, p. 8.

Ibid., p. 109.

cf. Space, Time and Incarnation, p. 47.

39 Not dissimilarly, Jaki argues for "the existence of a single intellectual avenue forming the road of science and the ways to God". The Road of Science and the Ways to God, preface.

40 Belief in Science and in Christian Life, p. xvi.

41 The Integration of Form, p. 166.

42 The Ground and Grammar of Theology, p. 6.

43 Space, Time and Incarnation, p. 61.


45 The World as I See It, p. 160.

46 Space, Time and Incarnation, pp. 40-41.

47 The Integration of Form, p. 147.


49 Christian Theology and Scientific Culture, p. 122.

50 Space, Time and Incarnation, p. 89. Lewis writes that without space, history, environment, and the real manhood of Jesus, a "spiritual resurrection" undoes the incarnation. Miracles, p. 151.

51 Space, Time and Incarnation, pp. 7-18.

52 Ibid., p. 11. Lewis' overt references to space are few. He once refers to space as "apparently infinite". God in the Dock, p. 84.


54 Divine and Contingent Order, pp. 94-95. (in Peacocke, ed.)


56 Ibid., p. 35.

57 Conflict and Agreement, II, p. 23, and I, pp. 212f.

58 Ibid.

59 Space, Time and Incarnation, p. 61. Lewis devotes a chapter to 'Time and Beyond' in Mere Christianity, which he characterizes as a chapter not strictly necessary (p. 145). Elsewhere he uses Kantian language to describe the incarnation as the occurrence in the phenomenal world of that which is
eternally in the noumenal world. Letters of C. S. Lewis, p. 191. In Miracles, p. 181, he uses Kantian language: "Time is probably (like perspective) the mode of our perception". Hence God acts in the eternal now. In a letter he advises a reader who is interested in the nature of time to consult Kant's, "Critique of the Transcendental Aesthetic", Von Hügel's Eternal Life, and Eddington's The Nature of the Physical Universe.

Bodleian Library, Ms. Eng. Lett. c. 220/2, CSL.

60 Theological Science, p. 101.
61 God and Rationality, p. 139.
63 The Ground and Grammar of Theology, pp. 102, 105. cf. Surprised by Joy, p. 159, where in his journey to faith, Lewis approved of Bergson's refutation of Schopenhauer's pessimistic notion that the universe "might not have existed". Lewis came in his idealist stage to affirm the necessary existence of the universe. At the time, the alternative was arbitrariness. He called this a change to Stoical Monism and admits he was still not a Christian. Later, when Lewis examines Satan in A Preface to Paradise Lost, he perceives the root evil to be Satan's belief that he is self-existent which Lewis notes implies he is eternal, necessary and hence God. (p. 97).

64 Space, Time and Incarnation, p. 47.
65 Theology in Reconstruction, p. 21.
66 Theological Science, pp. 316, 318.
67 Pannenberg, p. 311.
68 Theological Science, p. 312.
69 Ibid., p. 318.
70 Ibid., pp. 321, 319.
71 Brown, p. 65.
72 Theological Science, p. 320. The rationality of historical events is not to be perceived as in natural science by means of mathematical representation, or number, but by a rationality of intention, or logos (p. 321).
73 The Place of Polanyi, p. 75.
74 Ibid., p. 76.
75 Space, Time and Resurrection, p. 189.
76 The Place of Polanyi, p. 77.
The World as I See It, p. 183.

Space, Time and Resurrection, p. 189.

The Integration of Form, p. 147. It is not to be kicked away after using it to reach a higher level, but constitutes a many layered structure of knowledge.

Space, Time and Resurrection, p. 188.

Ibid.

Space, Time and Incarnation, p. 86.

The Place of Polanyi, p. 81.

Ibid. cf. The Hermeneutics of St. Athanasius, p. 99, where Torrance describes Athanasius' use of multiple levels of explanation in his hermeneutics. The key is his use of paradigm which is never a comparison on the same level, but a reference from one level or medium to another which transcends it. Athanasius also sees that in Scripture, these paradigms or illustrations are not chosen by man, but images of human things laid hold of by God. That is, the higher level of rationality controls the lower.

The Place of Polanyi, pp. 78-79.

The Ground and Grammar of Theology, p. 104.

Theological Science, p. 283.

Ibid., p. 102.


Ibid.

Christian Theology and Scientific Culture, p. 106.

Ibid.

Ibid., p. 110.

Theological Science, p. 283.

The Integration of Form, p. 169.

Divine and Contingent Order, p. 60.

Ibid.

The Ground and Grammar of Theology, p. 144.

The Integration of Form, p. 169.
100 Ibid.
101 God and Rationality, p. 96
102 Divine and Contingent Order, p. 28.
103 Space, Time and Resurrection, pp. 179-180.
105 Ibid.
106 Israel: People of God--God, Destiny and Suffering, p. 5.
107 Divine and Contingent Order, p. 58. Some like Walter Pater who criticized Coleridge's early version of this hierarchical explanation, find it "too like the exploded doctrine of final causes". Pater, Coleridge's Writings, p. 447. And yet Coleridge explicitly rejects proofs or logical demonstration. Coleridge quotes Sir Thomas Brown's Religio Medici: "God hath not made a creature that can comprehend him. 'Tis a privilege of his own nature." cf. Aids to Reflection, p. 309.
108 Divine and Contingent Order, p. 58. As did Copleston in his debate with Bertrand Russell. cf. Bertrand Russell and F. C. Copleston, A Debate on the Existence of God, The Existence of God, ed. by John Hick, London: MacMillan Company, 1964, pp. 168ff. Jaki argues that philosophical arguments against proofs of God when rigorously followed become arguments against science's rationality. Hence attacks on natural theology become attacks on natural science. The Road of Science and the Ways to God, p. 5. Therefore Jaki sees natural theology as a necessary skeleton for theology but without worship and prayer, it becomes just dead bones (p. 331). Yet Torrance would suggest that the attacks on natural theology served positively to free science to find its true grounds and to find that its link to the empirical world is not logical-causal, which led to a pale, deistic, apologetical theology, but rather the link is an intuitive, fiduciary rationality which is at the root of both science and theology.
110 God and Rationality, p. 97. In accord with this and in light of a multiple levels rational explanation, Torrance sees the law of non-contradiction as a limited, lower level application of the principle of sufficient reason, much as classical mechanics is related to the larger operational principle of relativity theory. Divine and Contingent Order, p. 44.
111 The Integration of Form, p. 154.
112 Miracles, p. 158.
113 Screwtape Proposes a Toast, pp. 91-92. The context in
which Lewis uses this argument is to point out the weakness of any reductionist diminishment of love to sensations and hence making it indistinguishable from mere lust. This reduces the difference between marital sex and prostitution to the subjective inessentials of custom and personal taste. The reductionist argument is similarly used to reduce all religions to numinous or ecstatic experience and make their truth claim inessential.

114 cf. W. A. Whitehouse, Christian Faith and the Scientific Attitude, Edinburgh: Oliver and Boyd, 1952, p. 65, where Whitehouse has kind words for Lewis' Miracles, particularly his refutation of miracles as breaking no law of nature as such, but rather "overruled for a purpose".


117 Letters of C. S. Lewis, p. 268.

118 Ibid., p. 274.


120 Letters of C. S. Lewis, p. 268.

121 cf. Mere Christianity, p. 35. "We are trying to see what we can find out about this Somebody on our own steam... I am not yet within a hundred miles of the God of Christian theology."

122 So Tyndale writes that the Gospel conquers morality. English Literature in the 16th Century, p. 187.

123 Reflections on the Psalms, p. 82. cf. Screwtape Proposes a Toast, pp. 95ff.

124 Bodleian Library, ms. facs. c. 47, Letter to Griffiths, Nov. 13, 1950, p. 60. Luther, he tells Griffiths, intuited this truth. Unfortunately, the whole issue became embroiled in political and ecclesiological questions.

125 Bevan, pp. 366-367.

126 Ibid., p. 386.

127 Ibid., p. 369.

128 Ibid., p. 382.
Great wits sometimes may gloriously offend
And use to faults true critic dare not mend.
From vulgar bounds with brave disorder part,
And snatch a grace beyond the reach of art.
Which, without passing through the judgement
 gains the heart
And all its ends at once attains.

Pope, An Essay on Criticism, p. 212.

141 God and Rationality, p. 83. Pope's essay reveals that
the hierarchy of coherence principle has been known for some
time in aesthetics:

142 The Place of Polanyi, pp. 88-89.

143 Ibid.

144 Newton, Einstein and Scientific Theology, pp. 247-248.

145 Brown, p. 149.

146 Newton, Einstein and Scientific Theology, p. 248.

147 English Literature in the 16th Century, p. 449. So
Lewis analyses Hooker's Puritan opponent, Thomas Cartwright.

148 The Ground and Grammar of Theology, p. 76.

149 God and Rationality, p. 141.
The Problem of Natural Theology in the Thought of Karl Barth, p. 120.


Theology in Reconciliation, p. 236.

The Ground and Grammar of Theology, p. 147. Torrance also faults his own Reformed tradition's post-Reformation dichotomy between a covenant of works and a covenant of grace which in its peculiar way reinforces this division in its doctrine of God.

Ibid., p. 153.

Theology in Reconstruction, pp. 162-163.

The Problem of Natural Theology in the Thought of Karl Barth, p. 125.

Calvin's Doctrine of Man, p. 112. Calvin also sees the imago dei not as a possession, but that which hangs over man as God's ongoing intention for men, which must be understood as itself a gift of grace (p. 114).

Theological Science, p. 103.

Bevan, p. 73. Bevan notes that the mystical tradition in Christianity derived from the neo-Platonists through Augustine, has continually moved in this direction.

Theology in Reconstruction, p. 230.

Bevan, p. 75.

Ibid., p. 76.

The Problem of Natural Theology in the Thought of Karl Barth, p. 124. cf. Miracles, pp. 115f for Lewis' memorable description.

God and Rationality, p. 133.

Space, Time and Incarnation, p. 69.

quoted in The Problem of Natural Theology in the Thought of Karl Barth, p. 129.
Space, Time and Incarnation, p. 70.
The Ground and Grammar of Theology, p. 91.

The Problem of Natural Theology in the Thought of Karl Barth, p. 129. Torrance testifies to the later Barth's appreciation and endorsement of this development in Space, Time and Resurrection, pp. ix, x.


God and Rationality, p. 133.

Newton, Einstein and Scientific Theology, p. 249.


Einstein and Infeld, p. 296.

Theological Science, p. 264.

Divine and Contingent Order, p. 17. The rational order of the universe is one, yet manifold in character.

cf. Chapter III Theology and Rationality.


Ibid., p. 164.

quoted in The Road of Science and the Ways to God, p. 185.


Northrup, Natural Science and the Critical Philosophy of Kant, p. 62.

Ibid.

quoted in Christian Theology and Scientific Culture, p. 57. Also quoted in The Road of Science and the Ways to God, p. 185. cf. Physics and Philosophy, p. 82, where Heisenberg refers to Einstein as a "dogmatic realist". When Einstein proceeds to say that our notions of physical reality are never final, Jaki calls this a lapse back into Kantianism (p. 186). In contrast, Torrance would with Einstein be wary of any ultimate identification between our statements about reality and reality itself. He endorses Einstein's dictum, "If our statements are true, they are not final and if final they are not true". quoted in Divine and Contingent Order, p. 53.

Similarly, Jaki argues that the true metaphysical underpinnings of science are 1) the existence of a world intrinsically ordered in all its parts and consistent in all its interaction and 2) the existence of a human mind capable of understanding this world in an increasingly comprehensive manner. The Road of Science and the Ways to God, p. 247.


Space, Time and Resurrection, p. 1.

Anselm, Basic Writings, (Proslogium), p. 6.


God in the Dock, p. 131.


Surprised by Joy, p. 175.

Selected Literary Essays, p. 230. This aesthetic 'sufficient reason' is not unlike Torrance's contention that 'chemically pure' science qua science raises the question of transcendence.

Selected Literary Essays, p. 225.

Reflections on the Psalms, p. 87.

Ibid., p. 86.

The Problem of Pain, p. 50.

Bodleian Library, ms. facs. c. 47, Letters of C. S. Lewis, p. 12.


Bodleian Library, ms. facs. c. 47, Letters of C. S. Lewis, p. 12.
206 Carpenter, p. 48.
207 Mere Christianity, p. 157.
208 Bodleian Library, ms. facs. c. 47, Letter to Griffiths, p. 2.
209 The Pilgrim's Regress, p. 16.
211 Surprised by Joy, pp. 65, 185.
212 Ibid. This parallels Torrance's comment that if theologians would study and dialogue with modern science, they would be freed of many subjectivistic tendencies.
213 The Personal Heresy, p. 149. I would similarly interpret Lewis' analysis of Christianity in The Problem of Pain, pp. 16ff, where he speaks of the numinous, morality, union of the two, and incarnation. This is an a posteriori explanation of experience in the light of Christ.
214 English Literature in the 16th Century, p. 357.
215 Taliessin Through Logres, p. 286.
216 quoted in Karl Barth: An Introduction, p. 214. Busch records that Barth objected to Bach for his too artificial "desire to preach", but Mozart was free from such intentions and simply played. Busch, p. 363.
218 Ibid., p. 47. Here is another strikingly 'religionless' note in Lewis.
219 quoted in Christian Theology and Scientific Culture, p. 60. Einstein notes that he marvels at the "longing to understand" which spurred on Kepler and Newton.
220 Christian Theology and Scientific Culture, p. 60.
221 cf. English Literature in the 16th Century, p. 383.
222 The Pilgrim's Regress, p. 203.
223 Ibid.
224 Ibid., p. 218.
225 Ibid.
226 English Literature in the 16th Century, p. 383.
The road to heaven is not by attending to our desires, brooding and cherishing them, but "attend to your duties and then it will blaze".

A good fairy tale creates not a longing to be popular, (subject-centred desire), but a longing for "he knows not what". Of Other Worlds, p. 29.

This is similar to Barth's concern about religion.

But like Barth, he is very influenced by the idealist theologian, as Torrance calls him, Calvin. Theology and Church, pp. 15, 37. cf. Karl Barth: An Introduction, p. 176.
252 Radhakrishnan, p. 249.
253 Theology in Reconciliation, p. 71.
254 Theology in Reconstruction, p. 71.
255 The Road of Science and the Ways to God, p. 143.
257 Brown, p. 32. So F. H. Bradley.
258 Ibid., p. 41.
259 The Road of Science and the Ways to God, p. 16.
260 Ibid., p. 151.
261 Radhakrishnan, p. 249.
262 The Ground and Grammar of Theology, p. 175.
263 The Discarded Image, p. 42.
264 Ibid., p. 119.
265 Introduction to Harding, p. 9.
266 Ibid. But in recent times, the self and subjective consciousness too has become emptied, as post-idealist philosophy has questioned the existence of the soul, self, mind and 'consciousness' as severely in a rigorous new behaviourism and materialism. Idealism sought to preserve God, morality, etc., in man's soul, but philosophy now has questioned whether there is a soul (p. 10).
267 Barfield's work is commended by Thomas J. J. Altizer, review of World's Apart: A Dialogue of the 60's and Saving the Appearances, Journal of Bible and Religion, 32, 1964, pp. 384-385. Altizer refers to Barfield as "recently deceased". As of this writing, Barfield is alive and well.
269 Ibid.
270 English Literature in the 16th Century, p. 549.
271 The Discarded Image, p. 214.
272 Ibid.
273 God in the Dock, p. 120.
274 Theology and Church, p. 34.
275 No Rusty Swords, p. 370.
276 Tripp, Chiliastic Agnosticism and the Style of C. S. Lewis, p. 33.
277 quoted in Brown, p. 42.
278 Reason and Emotion, p. 234.
279 Surprised by Joy, p. 181.
280 Reardon, pp. 12, 312, 319.
281 Theological Science, p. 80.
282 Ibid., p. 81-82.
283 Reardon, p. 14.
284 Theological Science, pp. xvii, xviii.
285 quoted in The Road of Science and the Ways to God, p. 140.
286 Adey, p. 25.
287 Reardon, p. 308.
288 Radhakrishnan, p. 124.
289 They Stand Together, p. 405.
290 Ibid., pp. 230f.
291 Ibid., p. 398.
292 Ibid., p. 221.
293 Ibid., p. 384.
294 Reardon, p. 319.
295 The Pilgrim's Regress, p. 171.
296 Ibid.
297 Bodleian Library, ms. facs. c. 54, The Great War, p. 51.
298 Bodleian Library, ms. facs. c. 47, Letters of C. S. Lewis, p. 5.
299 The Open Secret, p. 188.

519
Theology and Church, p. 17. cf. Brown, p. 134.

quoted in Karl Barth: An Introduction, p. 50, from Barth's The Epistle to the Romans.

Reason in Christian Theology, p. 25.

Ibid., pp. 26-27.

Theological Science, p. 82.

Perelandra, pp. 92-96.

Ibid.

Ibid., p. 94.

Letters to Malcolm, p. 118.

Miracles, p. 33. Here Lewis gives a full defense of his rejection of idealism, and yet retains in a reduced way its influence when he writes "It seems much more likely that human thought is not God's but God-kindled".

Christian Reflections, p. 100.

Ibid., p. 101.


Tripp, Chiliastic Agnosticism and the Style of C. S. Lewis, p. 31. Tripp calls Christianity "an agnosticism of faith". p. 30.


Surprised by Joy, p. 172.

The Pilgrim's Regress, p. 182.

Adey, p. 55. Hence the sub-title of Barfield's Saving the Appearances is "A Study in Idolatry".

The Pilgrim's Regress, p. 171. We should recall that Lewis is not bitter toward Idealism but describes it and sees it as a road which may lead to Christian faith (as it did for him) or which leads away. The disturbing thing about Bultmann's demythologization campaign as with much of Protestant pietism, is its tendency to see the Gospel as primarily our story, our quest for self-understanding, and not the story of God's saving activity in history to redeem man.


321. So Pannenberg (pp. 273f.) and Peacocke (p. xi) in Peacocke, ed., *The Sciences and Theology in the 20th Century*.


323. Ibid.


328. Ibid., p. 20. cf. also pp. 68-69. Coleridge too has a definite idealist strain to his thought. He once writes that the "law of God and great principles of the Christian religion would have been the same had Christ never assumed humanity". quoted in Reardon, pp. 79-80. Barfield can legitimately claim to follow in Coleridge's tradition, or at least one strand. Coleridge also says space and time are subjectively true, a mode of perceiving, not things out there. *Aids to Reflection*, p. 123.


330. Ibid.

331. *God in the Dock*, p. 149.

332. *Screwtape Proposes a Toast*, p. 100.


335. Bodleian Library, ms. facs. c. 47, April 15, 1950, p. 76.

336. Harwood, C. S. Lewis and Anthroposophy, p. 52. Lewis further comments that because of its "inverted Arianism", Anthroposophy cannot say "I believe in God the Father Almighty", for it gives higher value to the Son than to the Father, for in the Son the evolution of consciousness takes him to a higher plane. cf. *Mere Christianity*, p. 134, where Lewis clearly distinguishes our sonship from Christ's eternal Sonship.

337. Lawlor, *The Tutor and the Scholar*, p. 82.
Barfield once asked himself, what did he really teach Lewis, since Lewis never followed Barfield on any major theological belief. Owen Barfield, C. S. Lewis and Historicism, New York C. S. Lewis Society Bulletin, 6, (10), Aug. 1975. My answer would be that Barfield taught Lewis the importance of participation, except Lewis redirected this to an object-centred emphasis. Similarly, Lewis redirects Barfield's historicism into a God-manward direction. This is the epistemological reversal of a Christian a posteriori natural theology which shows creation's rationality.

Theology in Reconstruction, p. 276.

Ibid., p. 277.

Theological Science, p. 83. Similarly, Adey finds Lewis' Christianity outmoded and prefers a Christianity which seeks to convey the mystical tradition of pseudo-Dionysius, Eckhart, Blake, Yeats, Hindus, Buddhists and Sufi Mysticism. Adey, p. 119.

Theology in Reconstruction, pp. 278-279.


Theology and Church, p. 32.

Ibid.

The Screwtape Letters, p. 154.

Ibid., p. 12.

Karl Barth: An Introduction, p. 152. cf. Theology and Church, p. 33.


Karl Barth: An Introduction, p. 156.

Theology and Church, p. 33. cf. Letters to Malcolm, p. 75, where Lewis realizes that God's presence is often unwelcome.

No Rusty Swords, p. 371.


Ibid.

Reason in Christian Theology, p. 30. The sacraments e.g., point to their healing.
356 Theology and Church, p. 34.
357 The Integration of Form, p. 150.
358 Ibid.
359 The Ground and Grammar of Theology, p. 98.
CHAPTER VIII

CONCLUSION: THEOLOGY AS ART AND SCIENCE

A. Theology as Science

It is my argument, on the basis of the work of Lewis and Torrance, that the unique object of theology is known in a manner which I call participatory knowing and which implies that theology should be described as both a science and an art. We must forego the temptation as critics to interpret either Lewis or Torrance as restatements of St. Thomas, Barth, or as a mere conservatism. Rather, because of their object-centredness, self-abandonment and openness in allowing the object to direct their epistemology, they have penetrated in new ways into the rationality and beauty of God. Their theology offers creative suggestions which hopefully others may pursue.

Speaking of theology as a science leads us to clarify in what sense theology differs from philosophy. It is important for theology to understand where its thinking overlaps with philosophy and where it differs. As for what they have in common, Torrance says both philosophy and theology inquire into the subject-object relationship in knowledge and use human thought as their main probing instrument. As already noted, their primary difference is the empirical, a posteriori nature of science and its attempt to relate its conceptual structures organically to its object. This latter point is so important because unlike philosophy, theology is bound to a concrete object.

In contrast to theology, philosophy is for Torrance "fundamentally a movement from man toward God" which implicitly but inevitably claims absolute authority. But theology as thinking
which is centred in its own unique object "comes from the very point in which philosophy hopes to reach". Here Torrance identifies philosophy with idealism and theology with realism. Theology presents a counter-claim to philosophy's starting point and asks if one begins (subject-centred) with man or his thought-forms, etc., can he ever really transcend them and speak of God? Or has philosophy merely set up an ideology in the place of theology? Torrance's question asks philosophy to recognize its own limits and to be renewed by allowing for the uniqueness of theology and therefore to function a posteriori within the reality of Christ. Because I have described Lewis' theology as interrupted idealism (or philosophy, in Torrance's language), I have interpreted his work as having a de facto Christological starting point which for aesthetic and didactic purposes, he describes rather than prescribes.

1. Epistemological Parallels in Science and Theology

Theology's difference from philosophy lies in its close link to its proper object. But herein also lies its great parallel with an exact science. Theology must disengage its thinking from philosophy in order to concentrate its thinking scientifically on its own subject-matter, lest its understanding be distorted by unconscious philosophical presuppositions. Thomas Langford sees here one of Torrance's unique contributions to the understanding of modern theology as a science. That is, Torrance rejects as pseudo-scientific the demand for public, demonstrable knowledge from some otherwise authenticated area which is then imposed on theology. Torrance insists on maintaining the uniqueness of the object of Christian knowledge with its own intrinsic structure of rationality and verification. In its approach of openness and wonder, theology acknowledges the objectivity and rationality of its object. Because like science, theology respects the sheer givenness and objectivity of the empirical facts, its submission to its object helps shed light on every science's struggle for objectivity. Though bound to empirical events within space and time, theology critically reflects upon these events. It brackets off speculative questions concerning the possibility of its knowledge in order to plunge into the actuality and
truth of its own object, God in his revelation. By this given knowledge, theology establishes the possibility and reality of theological thinking. Alastair McKinnon points out that the Christian claim to "absolute certainty" about the love of God which it grounds empirically in Christ is far from unscientific, for in fact, it closely resembles natural science's "absolute certainty" about order in the universe. Both are the bedrock from which each science proceeds.

Like a rigorous science, theology seeks a thoroughly a posteriori approach in order that its epistemological structures accord with its actual knowledge. No scientific method arises in abstraction from the material content of knowledge. Theological epistemology must be open to its object and therefore, open to change as it penetrates more deeply into its object, which it understands not as a problem, but as a living presence.

John McIntyre cautions us that methodological reflections are third-order events two steps removed from the centre of Christian faith. But he neglects the important control of empirical reality upon all theological reflection. This is because he anthropologically asserts that the centre of faith is "the actual practise of Christian faith", the whole gamut of Christian living, not God and man united in Christ. This interpretation of the centre overburdens the subjective recipient, who cannot bear the load of responsibility. Theological method must be controlled by a posteriori epistemological considerations whose legitimacy depends on their correspondence to the actual knowledge of God.

As an independent science, theology yields its own appropriate rational forms. All preconceived metaphysical suppositions and thought forms stand open to change before the objectivity of the object. Within this context we can best understand the Reformed doctrine of predestination, which emphasizes God's unique initiative and primacy for our knowledge of God. Our love and knowledge of God are grounded upon his desire and willingness to reveal himself and to love. Similarly the Reformed emphasis on justification by grace alone means that true righteousness is not a possession of the believer, but is
a reality we experience only as we participate in Christ. The intention of this doctrine is to throw us utterly upon our object, God, for our knowledge and righteousness, and not upon our own efforts.  

Theological epistemology, like theology itself, has no ending, but is a perpetual, prayerful inquiry. The goal of epistemological studies is not to discover a method by which to magisterially subdue all doctrine into a rigid pattern. Always for Torrance, the truth of theology resides not in its thought structures about the truth, but in its object. Torrance's epistemological reflections seek an ever closer connection between our rational forms and our object.

Torrance applauds Einstein in science and Athanasius in theology for seeking a unified understanding of the empirical and theoretical. Independent conceptual schemes that are not grounded in the object studied, but in a prior metaphysical or logical framework, are cumbersome baggage on a journey to objective knowledge. Theology seeks to streamline and adapt its knowing structures in openness to the empirical givenness of the object itself. Hence all pre- or post-Kantian epistemologies developed in abstracto from the actual knowledge field are rejected.

Science has taught us that its methods must be free to develop appropriately within a specific field of inquiry, not by uprooting the older foundations, but by reconstructing them more securely upon the old foundations. Relativity physics does not destroy classical physics, but it logically reconstructs classical physics and establishes it more solidly on its own foundation. Similarly, theology does not uproot the basic creeds of Christendom, but seeks to establish them more securely upon their object (God incarnate) by a logical reordering of doctrine and method in order that theology may more appropriately reflect the true nature of its object.

Theology as science calls neither for a subjective existentialism on one hand, nor on the other hand for a depersonalized and objectivistic form. Bultmann's opposition to the objectivisms and abstractive generalizing of other sciences is a concern theological science can and must take seriously.
James Brown rightly pointed out that within theology as within natural science, the subject's involvement with the object can yield insights relevant to the ultimate nature of things. "Existentialism has got hold of the truth of the determinative significance of the subject for the object...". Indeed, what justifies the identification of truth with indifference to human concerns? But this insight must be based on the priority of the object to teach us the true nature of the subject's involvement.

Lewis would oppose neither the term theological science nor the task it implies. He would agree that theology must be thoroughly empirical. To understand Christian theology, one must realize that "you are tied to your data, just as the scientist is tied by the results of the experiments...". Above all, Lewis affirms the critical realist position that "theology is about objective fact...not to be constructed a priori and not to be dissolved into maxims, ideals, values and the like".

Lewis and Torrance agree that it is within the difficult, awkward data that new truths are hidden.

It is just the same here as in science. The phenomenon which is troublesome, which does not fit with current scientific theories, is the phenomenon which compels reconsideration and thus leads to new knowledge.

This is how Lewis and Torrance treat the problem of evil. Lewis argues that Christianity, far from being a system into which we must fit the awkward fact of pain "is itself one of the awkward facts which has to be fitted into any system we make". For Torrance, evil is not the final word in theology even as bewilderment is not the final word in science.

If and when these facts create conceptual difficulties, the scientist-theologian does not falsify or try to simplify the oddities and uniquenesses, but redoubles his effort to discover the rationality within them. With Einstein, Lewis perceives that problems increase our confidence that the reality we explore is no mere jelly we mould, but has objective depth into which we may penetrate. Science progresses because scientists do not run from the troubling phenomenon or hush them...
up, but constantly seek them out. Progress in theology occurs in the same way, that is, "only as we accept the challenge of the difficult or repellent doctrine". 27 When the liberal tradition freely alters or abandons the objective content of faith whenever it encounters the perplexing or difficult, it evades all obligation and commitment to objectivity. Such a procedure "must be completely stagnant. Progress is made only into a resisting material". 28 Science, like theology, proceeds with a profound faith in the existence and accessibility of its object to rational inquiry. 29 Here is the bedrock of rationality in natural science and theology.

2. Differences: Theology and Science

In discussing the differences between science and theology, we must first address an apparent difference. It could be argued that theology intrinsically lacks scientific precision, for the fact is that false methods plague it century after century. One faculty of theology differs markedly from another. By way of contrast, in natural science, false methods are abandoned by the consensus of the community, as concluded by experimentation and quantitative proof. But if there is one true way of knowing based on the one true self-disclosure of God in Christ, one ought to be able to interpret the books of God like science does the books of nature. When then does theology lack a consensus about this object-centred, a posteriori epistemology? Is epistemological pluralism the great difference between theology and science?

The only answer is that natural science lacks this consensus as well. What we mistake for the whole of science is actually one thin stream which grew from one particular cultural matrix. In the wake of the Western world's overt success in achieving power through knowledge (a corollary to true knowledge unfortunately exalted as the ultimate purpose of science), its science has dwarfed the other cultures' efforts to comprehend and understand the universe.

Jaki has scrutinized the multitude of methodological dead-ends in science, asking why they failed again and again, except in the West. Even within the West, the dualism between mind and matter, the eternal universe postulate, etc. recur continually. At this present moment the material
benefits of scientific technology have blinded many scientists into interpreting science merely as knowledge for power. Hopes of epistemological unanimity within the Western scientific community are dashed by the radical disagreement between instrumentalism and critical realism. Though in our century a great advance in science occurred through the creative breakthroughs of Einstein, it was achieved despite a propaganda campaign from Mach and other instrumentalists. Instrumentalism has not been rejected. Knowledge for the sake of power has not been abandoned. Opposing camps vilify one another and explain away the other school. Epistemological agreement is no nearer in science than in theology.

Meanwhile arduous empirical-theoretical experimentation actively continues. So too continues the worship of the Christian community, God's laboratory. While some churches languish in the sterility of outmoded thought forms and rigid traditions, others experience creative breakthroughs in their knowledge of God. Let us admit that rigid categories and structures have infected the Church's worship and study, reaping the barren harvest of man who insipidly celebrates himself, his relationships and his thoughts: Many alien axioms linger on and make it difficult for an ecumenical consensus on the basic thought forms which are derived from theology's Lord. But where an offering of openness (mingled with wonder) and belief are lifted up to the good and wise Lord who continually gives himself to man in Christ, there the quality of theological knowledge is not strained.

Leaving aside the problem of consensus, we must fully reckon with the genuine differences between theology and science. Basically they spring from their different objects of inquiry. Natural science deals with creaturely realities; theology deals with the creative source of all being. If objectivity differs even within the sciences (as in classical physics vis-a-vis relativity physics) so objectivity in theology varies from any other scientific field.

In theology, we inquire into what is utterly concrete and final and which cannot be fully comprehended in our forms of thought. Whereas natural science refers facts to other more
comprehensive facts beyond in an endless correlation, theology comes up against the ultimate which has a final term of reference. Natural science remains content with knowledge as it stands in its contingent existence; theology relates the contingent and phenomenological to the ontological reality of God. In the incarnation this ultimate (primary) objectivity is clothed in proximate (secondary) objectivity in a conjunction of ultimate and contingent objectivity nowhere else known in science.

Theological objectivity demands the absolute Lordship of its object. Whereas natural objects are known naturally in their contingency, in theology, God is Lord of the knowing event in a unique way. He is known only by grace. Man-made controls or demonstrations are inappropriate. Torrance calls this the epistemological inversion in the order of knowing. God is 'indissolubly subject'. Ultimate epistemological control passes from the knower to the known. God presents himself to us as the Lordly object whom we can know only in service and love.

This makes a great difference in the subject's rational response. Not only (as with all science) does our knowledge have personal co-efficients, but theology's object demands unique openness to its qualitative dimension and personal nature, in which theology must hold together our understanding of God as personal and as the ultimate intelligible ground of the universe. In theological science, we enter into a dialogical relation with the object. Apart from the personal dialogue of prayer, theology is merely a monologue of reason with itself. In theology, the precision tools of syllogistic thought are severely qualified. Analysis has only a relative status because its generalizing form inevitably misrepresents the concrete presence of theology's object. God is known only in his personal, concrete particularity.

Here theology challenges science to reconsider the limitations of its generalizing method of knowledge even for natural objects. Science's lack of concern for particularity and concreteness is a glaring weakness in its claim to be knowledge of reality and not merely the economic co-ordination of ideas.
Macmurray has shown how fragmentary a scientific knowledge can be which limits knowledge by abstracting the material from creation's living unity as material and spiritual. We have also noted Torrance's concern that natural science should not limit itself to a flat numerical level of connections in its quest for rational knowledge. It is no surprise, therefore, that theology as science must continually guard against an intellectualistic orientation which seeks conceptual-theoretical apprehension and coherence but not the affectional enjoyment of the living presence of the Lord.

However, this qualitative dimension is by no means lacking in natural science. Einstein recognized that the uniqueness of science vis-a-vis theology was not its lack of qualitative concern, but its concern for quantitative knowledge as well. Hence the importance of mathematics as a precise instrument in science is noted. A theology grounded in the empirical fact of Jesus Christ, must surely concern itself with the question of truth, falsity and historical accuracy. But a qualitative precision of response is not only as important in theology as is factual and quantitative precision; it is transfigured by its unique object.

A further difference with science lies in the nature of theology's thought forms. The cognitive practices of philosophy and other sciences must all subordinate themselves to theology's own standards. Concretely, this means that theological thought forms obedient to their object require a thinking which is practical as well as intellectual, "in which our being and action are involved and not just our minds or our thoughts". Theological thinking is totally demanding because we owe our ultimate obligation to God. Theological thinking is "thinking in responsibility in which we must give account of our lives, thoughts and actions to God".

Significantly, Lewis notes another difference between theology and science, which again stems from the uniqueness of theology's object. Though both fields inhabit the real empirical world, science and theology have a very real difference of atmosphere, tone and style. A theology concerned to present properly its object to its hearers must be conscious that
theological inquirers (who are not necessarily academically trained theologians) detect a great conflict of atmosphere between theology and science which is created partly by their different kinds of language and partly by the hostility or indifference of certain scientists to religion.

The Bible uses metaphor and the language of personal relationship. It says God has a son who descended from heaven, then ascended into the sky after visiting the dead and took a seat to the right of the Father's throne. This often sounds so pre-scientific to modern man that he has built against it massive intellectual prejudices. Usually when modern man speaks about empirical knowledge of reality, he is conditioned by technological language and natural science's verification techniques, not poetic language.

Though the relationship today between science and theology has brought on new areas of correlation, a conflicting tone and atmosphere is still very much alive for the average undergraduate, let alone the common man. The purity of Einstein's science is atmospherically light years away from the technological society of Western man. Torrance has not concerned himself at any length with this cultural communication gap because his passionate concern as a scientist is with his object, not the audience. Macmurray suggests that the relationship between science and religion has undergone a role reversal. Whereas science began as a child under the authority of a great religious movement, the two have undergone a reversal of authority roles. If religion was once proud, science is now just as much so. The anti-religion prejudice of many working scientists is well known. Macmurray concludes that if pride plus prejudice equals superstition, then science today is very superstitious. Such is the mental-emotional cultural matrix within which Christianity must be communicated.

To overcome this gap, science must perceive more clearly its own methodological correlates with theological science. But theology, too, must seek to communicate its message with a proper sensitivity to these a priori barriers and an appropriate understanding of the relation between qualitative (poetic) language and quantitative (scientific) language. Of course,
theology does not for a moment wish to deny, but to explore and communicate the fact that Christian theology is all about "something quite unambiguously supernatural" (Lewis): the intervention of transcendent being into our own space-time structures (Torrance).\textsuperscript{46} To pursue this question further, we must consider theology's aesthetic obligations.

B. The Art of Theology

We have seen that for Lewis, art, like theology and science, lives or dies by its objectivity. This objectivity consists in its object-centred participation. A portrait which is true to nature is true because the artist "keeps his eye on the object".\textsuperscript{47} Objective criticism consists in the use of the natural criteria appropriate and intrinsic to the particular genre and era. Thus Medieval poetry must be judged by its own canon, not by those of the nineteenth century psychological novel.

Art is diseased when the subject diminishes the object. Richards' and Leavis' taste-centred criticism parallels the subject-centred theological tradition. This tradition focuses not on God in Christ, but on one's rational judgement, decision, response or crisis, that is, on anthropology.\textsuperscript{48} By observation, we can see that the two objects of faith differ, much as the delight one receives from reading Dante differs from the delight one receives from reading about one's self. Theology, like art, has a fundamental choice: to focus its attention on the encounter with God, (not God by himself in abstracto, even as not literature in abstracto, apart from the reading of it) or to focus on man's attitudes, presuppositions and feelings about God.

Art that values creativity, spontaneity and freedom and derides imitation, structure and convention, has the odious legacy of attenuating and terminating man's art upon himself. Art demands that our quality of response to our object be appropriate to the qualities that inhere in the object. This means that the only criticism worth our reading time is participatory criticism. Dislike, detachment or doubt are inappropriate. As Lewis puts it, we do not want to hear a particular claret abused by a fanatical teetotaler.

To Lewis, the taste-centred criticism in art is as
fruitless as subject-centred measurements are for Torrance in science and theology. Both presume to diagnose an object's rationality by prearranged criteria. Lewis and Torrance both plead that rationality (beauty, value) be taught us by the object itself. Their epistemology radically qualifies any prescriptive criteria apart from the object itself. The creative scientist penetrates into the object and intuitively draws out the inherent rational form. The creative artist evokes the natural qualities of the object and lets the reader experience them.

The starting point of Lewis' object-centred literary criticism is not a prescribed list of good literature or a priori canons of criticism without empirical connection to each genre. Rather it begins with the active experience of reading. Similarly, theology cannot begin her quest with definitions, or rationalistic, existential or dogmatic a prioris. Rather, theology dares to begin with worship of its object—God come in the flesh of Jesus Christ. That is, theology begins with empirical involvement with its object. Object-centred natural science, theology, and literary criticism embark from a mutual point of departure.

We shall now probe further into Lewis' understanding of theology and see what light it throws on the notion of theology as art. In studying Lewis' theology, we should distinguish but not separate three things: his theological treatises (which he referred to as his 'Cathedrals'), his children's stories and novels (his 'side chapels'), and his literary criticism with his intriguing insights in this, his primary field and centre of his most rigorous thinking.

In an essay, Lewis states that Christianity at its core means that

what is beyond all space and time, what is uncreated, eternal, came into nature, into human nature, descended into his own universe, and rose again, bringing nature up with him.

If this is taken away, there is nothing specifically Christian left. If this did not really happen in space, time and history, Christianity is not true, be it good or valuable for utilitarian purposes.

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Elsewhere Lewis defines theology as the "systematic series of statements about God and about man's relation to him which the believer of a religion makes". Theology most clearly and accurately expresses a believer's ideas about God. They are statements about certain facts.

How does Lewis relate God's reality and activity to the clear and accurate ideas of theology? In Mere Christianity, Lewis, recalling the lesson he learned from Samuel Alexander, carefully distinguishes experiencing God directly from thinking about him. He likens it to the difference between walking on a beach and reading a map of a coastline. When we turn from the experience of God to Christian theology, there is an important sense in which we turn from something real to something less real, just as a man who sees the ocean from the beach and then goes home and looks at a map of the ocean turns from real waves to bits of coloured paper.

Theology, says Lewis, is like a map. Theologians base their maps on man's empirical knowledge of God in the Bible. Theology as science relates our thoughts, stated as precisely and clearly as possible, to the concrete presence of God. (Theology as art broadens this to include emotions.) The map analogy depicts theology as a science bound concretely to its own matter. It also depicts theology as very practical, with no divorce permissible between theory and practice. Theology for Lewis is as practical as a map on a journey. And we are all on a pilgrimage.

When Lewis describes theology as a map, it is unlikely that he is referring to traditional efforts at systematic theology such as Thomas' Summa. Rather he refers to the great facts of faith as summarized in the ecumenical creeds of the Church. This empirical priority of the datum of Christian faith means that, as with Torrance, theology begins on the positive ground where God is actually known in the grateful worship of the Church, which does not sever adoration of the Father, through the Son and in the Spirit from believing intellectual reflection.

In other words, Lewis only incidentally or indirectly inquires into the possibility of or validity of maps in
general or discusses the nature of maps. Theological science inquires directly into the knowledge of God. A map's proof lies in its empirical fit to the coastline. It does not ask questions of the grounds and basis for knowledge, except within its own actual knowledge. To inquire into this actual knowledge of God means we seek to "penetrate through the inner and necessary relation between our knowledge of God and the inherent rationality of the truth of God, to God himself as he really is". That is, thoughts about God are not theology's goal, but rather the living, concrete Lord to which our thoughts point.

A theological map exists for the sake of the oceans and our journey to the sea. It results from the journey and (let us note) seeks to enable others to make the journey as well. We are not professional map readers. We wish to venture out and help others venture out to the sea and enjoy the genuine rewards of map-reading (theology) as they arrive at a real solid destination, the knowledge of the living God.

Lewis' analogy bears witness to the priority of the object for our thought forms in a posteriori theology. Maps point to the reality outer-and other. No map ever created a coastline. The best maps are those made rigorously a posteriori. True maps result from a thorough empirical knowledge of a coastline, not from imagined structures of ideal coastlines arrived at prior to actual knowledge. Theology does not build up a systematic presentation based on a presupposed logical-conceptual scheme of clarity, but arranges its clarity and coherence as a glove to the hand of its own object. In this way its mode of logical precision may truly reflect its object. There is no final or absolute map, for all theological maps stand open to correction by reality itself.

Clearly, Lewis' metaphor of theology as a map artfully describes rather than conflicts with what Torrance scientifically prescribes; and it enishes an object-centred theological science which is empirically grounded in the positive knowledge of God.

C. The Implications of Art for Theology

We must now proceed a step further. There are important
questions which Lewis' understanding of art and literary criticism puts to theology and to Torrance. Lewis' map-beach analogy illustrates the relationship of theology to God so that he communicates in a tangible and sensory way. In so doing, he involves us personally so that we may enter inside the relation of theology to its object. This is the art of Lewis' theology. To put it simply, Lewis describes and enjoys what Torrance prescribes and interprets. Certainly there is prescription in Lewis and enjoyment in Torrance, but the mixture of elements differs as art differs from science.

If, as Kahler says, science increasingly analyses and specializes in order to advance material knowledge, whereas art seeks to integrate reality through an intuitive grasp of the whole, then it may be said that Torrance has sought to make theology an art. Torrance displays his own profound grasp of the whole when he recognizes the importance of other modes of rationality (namely, the organismic and aesthetic) as he seeks to integrate science, culture and theology from a centre in Christ. Nonetheless, he admits that his own theological concern has been a limited one, namely, the relation of word to number rationality for theology. Unfortunately, his lack of a sustained integration of aesthetic rationality with word and number rationality accounts for the intellectualism of which Torrance is accused by his critics. When Torrance gives priority to the interpretive precision of imageless and relational thinking over images, hearing the Word over seeing, tasting and touching, he de jure and de facto gives priority to interpreting reality over enjoying it. This creates a severe outward impression easily misinterpreted by unsympathetic critics who therefore fail to appreciate the enjoyment and participation in Christ which is everywhere present but occasionally hidden between the contour lines and precise language of his theological science.

The task of a theoretical physicist "demands the highest possible standard of rigorous precision of the description of relations; such as only the use of mathematical logic can give". But the "supreme purity, clarity and certainty" for which Torrance the scientist strives is "attained only by the sacrificing of completeness" for the scientist contents himself, (as
Einstein admits) with only a "slim sphere of reality".  

If, as Torrance passionately believes, theology is about God, not simply concepts about God, then theology is concerned not merely with the intellectual, but with the emotional and volitional aspects of knowing God. This leads us inexorably on, not only to theology as art, but to a political theology as well. Though Torrance himself refrains from discussing the aesthetic rationality of theology, much less the political-economic implications of a theology of grace, his framework of theology as science is intrinsically open to it. I would argue that theology is given its fullness when it dialogues with art and politics as well as natural science. To speak of the art of theology, therefore, does not overthrow theology as science but complements and probes further. To correlate theology as art and science does not suggest a new discovery, let alone create a new task for theology, but merely attempts to survey from a different landing a new continent discovered by Torrance and Lewis. A surveyor does not create an artificial bridge to connect two realms but points out by means of charting and surveying the inherent connections of their mutual theological task: the enjoyment and understanding of the living God. 

For Lewis, theology, like a good map, exists not only to reflect the coastline accurately, but it also seeks to enable those on their own pilgrimage to meet God. Theology as art seeks to bring the knower into a qualitative experience of theology's Lord, to taste and see as well as to think and hear. 

We have seen that literary criticism best serves art by casting a retrospective, clarifying light on its object in order to remake our experience and increase the reader's enjoyment. Unfortunately the modern English honours student frequently graduates with a great knowledge of Chaucerian criticism but with very little knowledge and enjoyment of Chaucer. Lewis' complaint is that the primary literary experience of reader—encountering-text occurs infrequently. For the same reason, Tolkien considers the analytic study of different fairy stories a poor preparation for enjoying or writing fantasy, even as the historical study of drama in all periods and lands is a dubious preparation for the enjoyment or writing of stage-plays. The
critical question Lewis raises for English faculties, and by analogy, theological faculties, is whether they should re-tool their programmes from analysis to participation and enjoyment. Ought not theology as serving the Gospel place within its central purpose the need to "multiply; prolong, and safeguard experiences" of the living God? 67

Often theology struggles to safeguard approved thought forms by prescribing doctrinal boundaries. Theology as science runs the danger of working so rigorously to protect, prescribe and interpret the correct conceptual statements that it fails to describe and enjoy the presence of the living Lord of theology. To paraphrase Lewis on literary criticism, a system which heads us off from abstraction by being centred on God in operation is what we need. 68 This is no doubt why Barth was weary of methodological arguments. 69

Art asks theology to think through the fact that theology is not concerned with a conceptual knowledge about God (savoir) as an end in itself. Rather, it seeks to serve the knowledge of God (connaitre) which exists in Jesus Christ, knowledge by personal acquaintance. Therefore, a theology which does not foster this God-Man rational encounter of the whole man in intellect, emotion and will, whereby God and man meet in atonement and grace, has ceased to keep its eye rigorously on its raison d'être, and has slipped into subsidiary issues, speculative, or didactic-psychological.

We have noted that the subject-object relationship in art and theology seeks organic connections and object-centred responses. Lewis writes that art's value lies not in its consequences, but in what happens while we read. So theology must describe, re-present and enjoy man in his concrete, living union with God in Christ, and not be content only to prescribe concepts abstracted from this direct, concrete reality. That is, theology as art desires to depict reality's beauty and truth as much as theology as science seeks to interpret it.

Art desires to evoke the concrete particularity of its object. Science legitimately generalizes laws and abstracts from the particular. Einstein once described science as that which covers the greatest number of facts by logical deduction.
from the smallest of hypotheses or axioms. But the train of thought from axiom to fact becomes increasingly longer and more subtle until the theoretical scientist is guided increasingly by "purely mathematical, formal considerations", which alone can lift him into the desired region of highest abstraction.

Torrance rightly perceives that the scientific method, with its tendency to generalize and abstract, often sins against the concrete particularity of the knowledge of God. But it is the realm of art which uniquely emphasizes this particularity which theology too must apprehend and communicate.

Let us recall how art performs its task. It creates a sensory-rich, empirically tangible form which embodies and communicates the content and proper relationship of the object to the knower. This is the way of incarnation. That is, in imitation of God's own self-communication by putting on human flesh, Lewis uses poetic language to communicate qualitatively the concrete, empirical reality of God. In his theological art, he communicates by means of vivid analogies which contain sufficient conceptual depth to incorporate the rigorous scientific insights of Torrance.

A further question which arises from the notion of theology as art is the role of communication. Is it an intrinsic part of theology or an application? True art, says Lewis, takes into account its audience and demands co-operation between artist and audience. Art seeks not only to express the truth, but to communicate it. In art, the recipient subject has an essential part to play. Lewis' views on how communication takes place are well worth listening to, for as Coghill puts it, Lewis "was easily the greatest teacher of our time in his chosen field".

A contrasting view is that of Barth. Barth was once asked if his lecture would change if his audience had non-Christians in it. He replied, "It makes no difference to me". Not dissimilarly, Torrance would (quite properly in one sense), reply that the key to communication is for the knower to adapt himself to the object by submitting his mind to the inherent connections and structures of reality. The Gospel is God's own self-adaptation to man "which also lifts up our humanity.
into communion with God". On the other hand, Torrance admits that true communication of the Gospel must take into account the receiver, but the receiver can never determine the content of the truth.

Nonetheless, Torrance is not sympathetic with what he calls the Church's endless concern to relate the Gospel to national or cultural structures for the sake of communication. Rather than bring the knowledge of God down to lower levels, he urges us to allow our understanding to be raised up to God's rationality. There is no mention from Torrance that the communication of the once-for-all Gospel entails the never-ending imitation of God's descent. The Church's proclamation of the Gospel is a continual redescending with the truth downwards to human frailty in order to lift all men to the truth. The descent of truth is the tone and style of the incarnation.

Lewis firmly believed that real art (i.e., art which seeks to communicate) presently occurs chiefly in so-called 'low-brow' art forms, such as film and detective and children's stories. By implication, theology must take seriously the revealing form of the incarnate God--who became flesh and dwelt among us by emptying himself. As Calvin puts it, God accommodates himself to our frailties, revealing himself with utter clarity and simplicity in Jesus. Yet he did this in a mode totally in accord with his divine nature, for Jesus was the express image of the invisible God.

Newbigin argues that a theology which desires to communicate across cultural boundaries inevitably uses the models with which the audience is familiar. But it always asks the question, does the Jesus so introduced, judge and determine the model used or is he judged and determined by their model so that the only elements of him allowed are those acceptable to that culture? Newbigin thus reminds us that all theological structures must be open, lest, for example, theology as science or art be seen as an elitist Western middle class model, or by liberation theology be reduced to a working class or underprivileged model.

Lewis reckons that a scholar's vocational disease is to emphasize the audience's duty to recognize and appreciate
(and hence, repent and adapt) while forgetting that the artist's duty is to "teach and delight". Here is the facet of theology to which Lewis the poet gives emphasis and Torrance the scientist tends to ignore. As John Macmurray points out, the strength of the scientist is his object-centredness; his weakness is that in concentrating on his object, he fails to keep in touch with the thou, the recipient person, student, listener. Art's genius, on the other hand, is that it masterfully communicates the inherent quality of its object to the thou.

Here, too, we may have the germ of the difference between Bonhoeffer and Barth. Whereas Barth, like a master scientist, accurately diagnosed 'religion' as the cardinal enemy of Christianity, he lacked Bonhoeffer's poetic passion to communicate the Gospel to the world. He contented himself instead with teaching and working in the Church. Bonhoeffer's passion was to take non-religious, worldly man as seriously as the religious, church-going man, for both are judged and forgiven in Christ. Hence he sought to develop further Barth's suggestion of a religionless Christianity. This is one aspect of Bonhoeffer's charge of 'positivism of revelation' against Barth.

In a religious or post-religious West, the meaning of Christianity has become misunderstood through laziness, ignorance and malice. In such a situation, theology has a choice. It may try to communicate the Gospel (not culture Christianity) with the old vocabulary. This was largely Barth's strategy. It is problematic in that the audience is full of a priori misreadings brought on by familiarity with the old vocabulary. This burdens the audience with the demanding intellectual task of taking in the new and holding back the old. It also implicitly creates a subject-centred response. "You must repent and change your beliefs." On the other hand, theology may choose to evangelize culture by inventing new terms and a religionless form. I believe it is in this way that Lewis used fantasy as a non-religious form by which to recover and communicate the Christian message to a religion-saturated culture.

Theology as art realizes that no one ancient expression of the Gospel is sufficient. It strives to communicate the same reality to which the old Patristic language points, with new words
and images, baptizing them into theological service. Instead of demythologizing, Lewis remythologizes. Lewis the poet takes the risk of communicating the truth of the incarnation without using the ancient, familiar or technical theological terms. Instead he gives us Aslan, Ransom and many more imaginative embodiments. Lewis clearly recognized that an important source of Narnia's appeal is that it "by-passes one's reverence and piety". This is certainly one kind of religionless Christianity. Lewis' writings are an aesthetic experiment, a longing search for a form to communicate Christianity past the watchful subject-centred dragons of religion.

In Miracles, we see a further illustration of Lewis' religionless communication. He seeks to give the sceptic the core of Christianity apart from the "mythological expressions", that is, the religious and hence pietistic language. Though not religious, the core itself remains unashamedly and utterly miraculous. Lewis' decision to baptize his favourite literary genre for the task of Christian mission reveals an artistic strategy of sidestepping the subject-centred, a priori preoccupations of religion rather than confronting them with a direct intellectual attack. Bonhoeffer unfortunately did not live long enough to pursue in his own way this task. But his martyrdom reveals a political translation more eloquent than words or images.

Lewis desired to communicate the Gospel at all levels of society. His vision extended far beyond his own efforts to "smuggle" theology into children's stories. He once advised young writers to write books with their Christianity latent in subjects other than religious. "We must attack the enemy's line of communication." Lewis reckoned that modern man's materialism is not usually the result of a direct defense of materialism but a result of the implicit materialist assumptions which pervade science, culture and the scientific books one reads.

In this context, it must be said that Torrance expresses a similar concern without Lewis' poetic sensitivity to his audience. For he too sees as inherent in evangelization the task of reconstructing the basis of culture. His dialogue with science must be seen in this light.

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Lewis' concern for his audience is also displayed in the didactic style of evangelization used in *Mere Christianity*. For didactic purposes he spends thirty-six pages on the law before he comes to his *de jure* starting point, the Gospel of Christ. He admits this is a roundabout method, but defends his approach by saying that "When you are sick, you will listen to the doctor," and not before. Christianity is only coherent to those who are aware of their sins and their need for forgiveness.

Lewis' passion to communicate the Gospel led him to assert that all examinations for ordinands should include a translation of an important theological work or doctrine into vulgar English. "Any fool can write learned language. The vernacular is the real test. If you cannot turn your faith into it, then either you do not understand it, or you do not believe it." The burden to communicate can be quite exasperating as Lewis reveals in discussing the problem of pain. "How can I say with sufficient tenderness what here needs to be said?" Lewis had no desire to placate hostile readers, "but it matters enormously if I alienate anyone from the truth".

John Keble wrote that in Christ, God himself has condescended "to become the object of description, affection and sympathy, in the literal sense of these words". In this sense, the incarnation is the poetry of God; Jesus gives body to what had been before invisible and inaudible. A theology of the dynamic Word must not only reflect precisely and rigorously upon the incarnation, but dare to re-present it. This is why in Christian worship, Word proclaimed and Word embodied in sacrament are an organic union of interpretation and representation. By the very nature of theology's unique object, who not only truly expresses himself as the eternal Word of the Father, but genuinely communicates himself to us by the eternal Spirit, theology as art seeks to re-present this movement so that our emotions as well as our thoughts may rest appropriately upon reality, and so culminate in deeds and acts of love.

As well as sharing important similarities with Lewis' object-centred theory of art, Torrance's object-centred theology can learn from it. For instance, Lewis' purpose for literary
criticism is that it might enable us to enjoy literature (the object) more. In theology, therefore, I would suggest that "penetrating through the inner and necessary relation between our knowledge of God and the inherent rationality of the truth and being of God to know God himself as he really is" (Torrance), is a true statement which means, among other things, that we are invited (even summoned) to enjoy the One whom we have the chief end of man. A true response to the Gospel entails an emotional "heart" response appropriate to the object of theology. The Gospel does not descend from heaven vacuum-sealed in its essence from taint of man. At its heart, Christian theology, reflects its divine-human object, Jesus Christ, the man who is for God and the God who is for man. It seeks to represent conceptually, to represent dramatically in art and to imitate empirically in deeds of love, God's incarnate presence to man. Thus theology seeks to communicate the quality of the love deep within the trinitarian heart of God, and to extend this to man and summon him by word, image and event to stand within this loving presence.

If the object of theology prescribes that we communicate the multi-dimensional rationality of the good news as what it means to 'do theology', then our thought forms (word rationality) must reflect upon, our emotion forms (aesthetic rationality) represent and our deeds imitate those qualities which inhere within the Lord of theology. The Gospel is pro nobis in its inner nature, and our desire to communicate it reflects the pro nobis character of Christ. Theology is a science, seeking to penetrate into the intrinsic rationality which inheres in its object; equally, theology is an art which enjoys and communicates the affectional reality of the truth, goodness and beauty which inheres in its Lord.

We have stated that theology, like art, is personal communication which by its own nature is not content merely to express the truth of God, but out of gratitude for the truth desires to communicate Christ in its qualitative depth, even as Christ authentically demonstrated the Father's love for us. A theology of the Gospel is a theology of gratitude, which seeks to embody in all its multi-faceted rational forms the quality...
of the life which inheres in its object. Theology as art and science, is concerned not only with the objective realities in which we by grace participate, but out of gratitude for the Gospel, seeks to share this participation in mission.

Theology as art unashamedly seeks to move us to gratitude to God. As W. A. Whitehouse testifies, "Having now seen the Isenheim altar... I now realize that an artist can do what science and philosophy cannot do for me..." The altarpiece communicates to our own emotional unbelief (and hence emotional irrationality) that Jesus Christ, crucified and risen, embodies the resources through which the universe has been made, and who desires to redeem that creation.

When Sidney argued that poetry turns dead truism into vital experience, he had in mind this emotional appropriation which only art produces. Theology as poetry not only teaches the truth, it moves us with desire for the truth. Lewis candidly admits that the reason he brought us to Narnia, was, as Hooper puts it, "to woo our hearts from all but Aslan". As Aslan tells the children,

This is the very reason you were brought to Narnia, that by knowing me here for a little, you may know me better there.

This brings me to suggest that the time has come for theology to reclaim the form of art as well as science as an essential way to understand its service to the Gospel. Theology as art helps put the scientific-dogmatic form of theology in perspective and opens theology to concern itself with further aspects of its task. Once converted, Lewis the poet naturally sought to embody his theological beliefs in symbol and mythopoetic forms. Poetry, as Lewis reminds us, is not a substantive field, but a way of saying things and its character depends on its subject-matter. It is therefore theology's subject matter which prescribes in what sense we mean theology is poetry.

Scripture itself invites us to use our sensuous capacities to understand its object. Rather than moralize on the virtue of humility and the evils of uncharitableness, Christ presents us Dives and Lazarus. Instead of an essay on disobedience and
mercy, he tells a story of a lost child and a gracious father. To "taste and see that the Lord is good" invites us to embark on an empirical encounter which overwhelms language with the semantic demands necessary to represent its object.

Of course, God is so utterly concrete and so transcendent in his depth of reality, that our most richly sensuous and empirical images are pale glimpses, but nonetheless valuable as qualitative pointers beyond themselves to the concrete reality of God. Theology as art perceives and communicates that God is concrete reality; we by comparison are metaphors. The Old Testament's lively images of God's thundering, promising and pleading transmit the sense of living reality "which evaporates in abstract thought".110 Knowing God is in many respects more like the recurrent pleasure one receives from a work of art than the once for all discovery of a scientific breakthrough. A beautiful story brings continual satisfaction.111 Tolkien reminds us that a factual or scientific breakthrough may through familiarity become mundane. A story or work of art recovers a truth which has grown familiar. Familiarity, says Tolkien, is the penalty of appropriation and artful theology helps us recover the power and purity of the original discovery of God.112

Théology as art has a peculiar advantage over théology as science. Because theological science inevitably takes on a dogmatic and hence prescriptive style, it in effect issues an intellectual challenge to change one's view. But théology as art tells a story, and thereby avoids the subjective demand to change one's views. Lewis tells a correspondent that he seeks to evangelize England by writing of Christianity implicitly through art. "Any amount of théology can now be smuggled into people's minds under cover of romance without their knowing it".113 The mythological or fantastic engenders a direct, palpable experience of things we have never known before, and thus "instead of 'commenting on life' can add to it".114 After one enjoys the subject matter in a new light, one may indeed desire to change one's intellectual commitment. But in parable, story and picture, one has at least temporarily been freed of the massive subjective preoccupation to submit and to change
one's intellectual position and has instead been invited freely to enjoy, to taste and to see. Theology as art momentarily frees the theologian from the subject-centred temptation to achieve intellectual victory over the opponent. (Of course, theology as art introduces a new source in which to take pride in e.g., one's painting of heaven.)

Ultimately, the validity of using fantasy to communicate theology is grounded in the Biblical events themselves. There we find a historical event into which a transcendent rationality has interacted and thereby transfigured history. In Lewis' language, myth has become fact. Therefore, our approach to such events should incorporate a proper literary-imaginative openness as well as the more usual historico-critical approach. A theology of the incarnation may be tutored by literary criticism, including a grasp of the fantasy genre, as well as by natural science and its grasp of the structures of space-time.

I have argued that theology as art seeks to express and communicate the quality of reality which inheres in the object's character, of which all authentic theological knowledge must taste. To relegate the communication of this qualitative reality from theology proper to preaching or practical theology unnecessarily invites a return to a scholasticism which makes the knowledge of God logical, dialectical or existential, but thereby, abstracts theology from the living presence of Christ.

In response to the severe criticism of Norman Pittenger, Lewis replied that he wrote his theology in the context of a Christianity presented either in the highly emotional form of revivalism or in the unintelligible, but highly intellectual form of the cultured clergy. Most people were reached by neither.

My task was therefore simply that of a translator—one turning Christian doctrine into the vernacular, into language that unscholarly people would attend to and could understand. The constant goal of Lewis' theology is to communicate the objective quality of the Gospel in such a way that his hearers would indwellingly respond to it in a manner appropriate to good news. In practice he never divorces theology from evangelism and preaching. Though Lewis' theology vigorously explores the
relationship between our thought forms and God's reality, he never explores this without the artist's awareness of his audience, as if he must never at any cost abstract theology from proclamation.

Too often a major lack in theology is the absence of an authentic emotional grasp of the epistemological situation which the Gospel announces. The emotional rationality involved in knowing God, so essential a part of real knowledge, is often left untranslated in theology. While Torrance appreciates the place of depiction, and his own writing is full of theological passion, he places this task structurally in the work of preaching. In kerygmatic preaching, the "original event" of Christ incarnate, crucified and risen "becomes event all over again for the hearer", in an eschatological way. But in his theological science, he has limited himself to an integration of word and number rationality and has therefore not endeavoured to embody the imageless reality as would theology as art. I am arguing that a proper emotional rationality must be a part of theology as well as of preaching. "Certain things, if not seen as lovely or detestable, are not being correctly seen at all." Thus Lewis says if I write about toothache without evoking in my reader a bit of nausea and hatefulness, I have only expressed an abstraction. Unfortunately, the emotional reserve of modern poetry degenerates into sheer factual statement. But to mould the reader's emotions is a necessary part of poetic art if we would have the reader experience the emotional truth which inheres in the subject-matter. Of course art cannot tell us how to feel; it can only show us by description.

Revivalism (and Pietism) do, it is true, attempt to make central the emotional response to God, but often do so by means of an anthropocentric focus on man's sin and desperate need. Hence the response engendered primarily consists of the subject-centred motivations of guilt and fear. Lewis reckons the older divines exhausted their eloquence in their endeavour to arouse the fear of God. But it lasts for only a little while and is soon avoided or forgotten. Prior to his conversion, Lewis was asked if he was ever afraid in his foxhole during the war.
Lewis replied, "All the time, but I never sank so low as to pray".125

The fatuity of moralizing is that our problem is not so much knowing what is right; it is doing the right. Moralizing only "heals in us what is not sick and abandons what is".126 What is needed in Sidney's words, is to entice our passion to virtue.127 "For the communication of pleasure is the introductory means by which alone the poet must expect to moralize his readers."128 Unless the joy which inheres in God, is 'tasted and seen' inducements to moral duty easily become a heavy-handed moralizing whereby Gospel is transposed into law and makes repentance a condition of forgiveness.129

Moreover, a response from guilt or fear does not reflect or represent the quality of the presence of the Son of the Father, the judge who in redeeming us takes our judgement upon himself unconditionally in grace. A response of guilt or fear reflects man's own needs, hopes, insecurities and fears. It engenders a self-preoccupation which focuses on the subject's faith or obedience. But if the subject is to encounter the object aright, the qualities of forgiveness, judgement and love, which inhere in God's own being as Father, Son and Spirit are the very qualities which need to be participated in by the subject. We must not eclipse the object's own character by the story of our own crisis of sin and guilt. "The soul that has once been waked or stung or uplifted by the divine character will inevitably awake to a proper fear of losing him, but not a morbid, self-centred fear."130

Equally inadequate is an academic theology which ignores the qualitative emotional-aesthetic dimension and disregards the fact that the emotional quality of the knowledge of God inheres in the object as genuinely as do proper thought forms. For the theologian to leave this quality of theological knowledge to the preacher or evangelist has often led the latter to focus on application and appropriation in ministry, which resembles the knowledge-as-power, technology-centred scientific error. This, in effect, replaces the Gospel's focus on Christ's being and acts and our response of participation with a focus on our being and acts that is not grounded in our participation.
in Christ's faith and acts on our behalf. This engenders a subject-centred evangelism which emphasizes the believer's internal work of faith, not the objective faith of the Son of God which we may freely receive and participate in by the Spirit.

The dangers of moralism, intellectualism, aestheticism and emotionalism occur when we forget that both the appropriate thought forms and emotion forms and our personal righteousness inhere in the object. A concept or feeling-centred theology results when the object of faith is shrouded by the subjectivity of our response. Thus, pietism and rationalism are twin branches of the same root. Lewis describes the moralizing Puritan upbringing of his Belfast friend, Arthur Greeves, as the "form which the memory of Christianity takes just before it finally dies away altogether in a commercial society, just as emotional ritualism is the form it takes before it dies in a fashionable community". The differences between the two pale before their mutual subjectivism.

Macmurray reminds us that our emotions must be rational too, that is, appropriately related to their object. And to do that, they must appropriately reflect the inherent qualities of the object to which they respond. Theology must beware of omitting the qualitative, experiential response which inhere within the Gospel of reconciliation. For God has bound torn humanity to himself by the painful, costly love of grace. If the theologian analyses and describes this message, but evokes no gratitude in his hearers, he has only communicated an abstraction.

In the object-centred theological art of Lewis, the appropriate quality of emotional response to the object is brought right within the heart of theology. Without it, the object discussed, taught and communicated is not the real object of theology. In the theological maps Lewis draws, he seeks to bring a wisp of sea breeze and the smell of salt water and paint a living map, like the picture of a boat at sea in *The Voyage of the Dawntreader*. The picture suddenly surges and heaves and becomes a live boat upon the waves which sucks up the children into another world, a world filled with a new and strange presence, a new reality calling them into a new depth of life and thought. Of course the Holy Spirit is the one who must lift
us out of ourselves and our thoughts into the presence of One quite beyond the circle of the self. But theology is obliged to align its form to the living content of its object and to implement for heuristic aid and communication every artistic skill together with every scientific and logical tool, to be an offering and altar shaped and used by the Lord of theology for his service.

In this context emerges another difference between Torrance the scientist and Lewis the poet, namely, the attention Lewis gives to phenomenological description in his theology. This arises from Lewis' concern to communicate the concrete emotional quality of the object, which true knowledge must experience. Atmosphere, setting, tone and sensitivity to words are offered in service to the Word. This also reflects Lewis' concern for his audience and the pedagogical flexibility which theology as art provides.

At times Lewis seeks also to penetrate into the qualitative state of fallen man, that is, what it feels like to live without the presence of God. It is only by participation from within the unbelief of modern man, taking with full seriousness man in his worldliness (Bonhoeffer), that one can communicate authentically the reality of God to unbelieving culture. Lewis does not pretend to be a disinterested observer. He is a Christian interpreting reality through the lenses of the incarnation. He practises a dogmatically informed phenomenology and seeks to integrate concrete description into his theology, because only concrete description captures the emotional quality which inheres in the object. The danger in phenomenological description is to take it too seriously and to turn it into dogmatics.

Lewis as artist seeks to participate not only in the object he seeks to communicate, but also in the feelings and thoughts of his audience, believers and unbelievers. Theology as art takes unbelief seriously, especially its powerful sense that all is not well in the universe. Often intellectual unbelief is merely the tip of an iceberg, which is not a starting point, but conceals a deeper personal alienation which engenders dislike of others and God, which in turn engenders misunderstanding.
and leads to intellectual error and malice. This anthropological sensitivity to his readers enables Lewis to understand from within modern man's difficulties with Christian faith.

For example, Lewis' indwelt understanding of unbelief led him to see that Christianity often appears absurd because people in the West often compare an adult knowledge of pantheism with a knowledge of Christianity they acquired in childhood. Another a priori objection is the egalitarian and idealist mood of modern man which sees the particularity and uniqueness of Israel and the one incarnation of God in Christ to be scandalous.

Chad Walsh notes that the achievement of The Screwtape Letters lies in the psychological penetration which reveals that Lewis knew his audience as well as his object. This sensitivity is further seen in that when he preached the Gospel to the Royal Air Force, Lewis reckoned that a very different approach was needed than when preaching to the army. If, as Flannery O'Connor suggests, a cardinal task of Christian art today is to make modern life's repugnant features "appear as distortions to an audience which is used to seeing them as natural", then an indwelling of that culture is needed to understand and address it with appropriate tenderness or firmness. Simone Weil wrote

Nothing is so beautiful, nothing is so continually fresh and surprising, so full of sweet and perpetual ecstasy, as the good; no desert is so dreary, and boring as evil. But with fantasy it is the other way around. Fictional good is boring and flat, while fictional evil is varied, intriguing, attractive and full of charm.

Theology as art seeks to effect the conversion from fantasy to reality.

Lewis' concern to know what a non-believing theological position 'feels like from within' extends to an awareness of the acutely personal side of unbelief. He recalls how the early loss of his mother, his being sent off to boarding school and his physical clumsiness all contributed (though not logically) to a mental bias against belief in a benevolent deity. Lewis, unlike Torrance, had lived body and soul in the secular village,
which gave him the double advantage of knowing the secular from within and therefore a unique view of the Christian world. This background made Lewis admirably suited as an evangelist who could go to those entrenched in their village and never venture into the church or theology's usual technical language. Lewis would proclaim the meaning of the faith on their terms. This missionary desire led to Lewis' founding of the Oxford Socratic Club. For as one undergraduate complained, "no one seemed ready to discuss the questions agnostics raised about God". 144

As we have seen, in exploring theology as science, Torrance does not explicitly concern himself with the aesthetic or emotional side of the knowledge of God. Instead, he probes and diagrams his object in the manner of the field models developed in natural science, which understand the world in terms of the 'imageless relations' of mathematical field connections. 145 As Einstein puts it, "the aim of every physical theory is the same: namely, to order and understand the world of our sense impressions". 146 Einstein's goal for physics is to make sense experience correspond to a logically uniform system of thought. 147 But to see theology's goal merely as the ordering and understanding of our knowledge of God can be restrictively intellectual. Torrance's Einsteinian influence, concern for rigorous thought forms, and his concern to integrate the natural and theological in the wake of Barth has led him to leave undescribed and unintegrated the emotional rationality (Macmurray) of theological epistemology. But Torrance himself reminds us that when one level of rationality is neglected, nature punishes this by limiting our discoveries through it. 148 In other words, theology as science abstracts from out of the densely woven intuitive knowledge of God, with its cognitive-emotional unity, the invisible-theoretical framework. The pursuit of imageless field connections which probe and reveal the transcendent depth of reality lead paradoxically away from the tangible physical world. The scientific rigour which measures flora and fauna, space and time, can so involve us that we may ignore the gentle beauty, scent and shape of a rose or the playful grace of a cat chasing butterflies. So too, the search for theological instruments and imageless connections with which we may penetrate
further into the grammar of the Gospel may preoccupy us with the passion to structure and interpret rather than to taste and see the Word made flesh. In theology as science and art, the imageless scientific scaffolding of homoousion and Trinity must not lead us to neglect the aesthetic-historic bricks and mortar of Bethlehem and Golgotha. For theology as art and science, the organic conceptual scaffolding which inheres in the object co-inheres with the beauty and truth of Jesus in a hierarchical connection of truth and meaning. Torrance desires concepts which are intuitively and organically connected to reality. This same intimacy and closeness to reality attracts Lewis to the natural images God has used in creation and redemption. Rather than denying or giving priority to either, both are brought together in a theology as art and science.

Here we should briefly note John McIntyre's fears that Torrance has disproportionately relied on the paradigms of natural science for theology, exploiting their unquestionable success for the purpose of a successful contemporary apologetic. To be fair, Torrance's concern is not success but the epistemological objectivity and rationality which gives science its success. Torrance finds in the epistemological approach of modern science a deep confirmation of the non-dualist epistemology and ontology of the Church Fathers and the Reformers.

Even granting the paradigmatic priority of science over philosophy (for theology), the unique qualitative nature of theological knowledge is easily shrouded by the generalizing and abstractive tendencies of the scientific model applied to theology. Torrance himself has been a critic of this tendency. Theology cannot afford to communicate this false impression. Torrance's paradigm of theology as a science is not an exhaustive description nor an exhaustive rational expression of theology's nature. For theology is limited only by the inexhaustible riches of its object, Father, Son and Spirit. This is why Torrance's theological science is not compromised or qualified, but complemented and aided in expressing and communicating the multi-dimensional rationality at the heart of theology, by the notion of theology as art, which is implicit in Lewis' object-centred theology and literary criticism. Certainly as with
science, the artistic paradigm must only be applied in terms appropriate to the object of theology and in harmony with theology's true purpose.

It would be sadly misleading to suggest that Torrance denies the personal, qualitative nature of theology or its subject, the God who is essentially love in his three-personal nature. Rather, Torrance's realist premise that theology is an empirical science in which the object prescribes the mode of knowing is the only basis known to me which gives full play to the multiple rational modes which Torrance himself argues inhere in the Gospel.

D. Theology as Art and Science

Historically, theology today is in a time of transition or reconstruction, where old forms are breaking up and the new is coming. Torrance and Lewis are borderland figures who point in a certain direction and whose strengths need to be recognized and built upon. It would be a great loss should modern theology not seriously weigh their contribution. For I would argue that in its finest expression, theology is the marriage of art and science in which the two fields join in an act of worship-knowledge, adoring with mind and spirit, sense and intellect, act and being her transcendent object, he who stooped from his eternal majesty, descended to our contingency and weakness and gathered our sins upon himself in an act of inexorable love.

In all three realms, science, art and theology, we seek to know and to experience our subject matter out of itself in accord with its intrinsic natures. To use literature for our subjective psychological states is not applying literature to life but inventing a new story with the self as the main character; it usurps the living particularity of the story. To be preoccupied with technological manipulation is not to apply science to life, but is a process which is more concerned to manipulate and control nature than to know it.

It is a genuine part of a theology grounded in the empirical reality and knowledge of God that theology as art (in order not to falsify by neglect) re-presents the deep emotional-affectional and aesthetic qualities which inhere in the objective knowledge of God. But perhaps one might ask whether theology's
most organic form is neither science nor art, but both as they merge in the form of adoration, worship and prayer, perhaps not unlike that of Anselm of Canterbury, who wrote his theology in the form of prayer. Here we recall P. T. Forsyth's suggestion that prayer is to the theologian what original research is to the scientist. Above all, it is theology as prayer which grasps with signal clarity that in all its multiple levels of rationality, theology is essentially dialogical; God addresses us and we respond in obedience and faith.

Form in worship and in communication are not accidental, but must be true to the form and quality of the object of whom we speak. For he is the One who freely gives himself to us to be known, loved and obeyed, and only secondarily to be discussed, argued over and explained. Theology seeks to enjoy and communicate its Lordly object by concepts, images and deeds. The paradigm which theology pursues may lean at times in the direction of a precise, interpretive science. At other times, it may lean closer to sensuous and depictive art. Each pole of expression will have its strengths and limitations.

Theology as art and science includes both reflective analysis and the participatory knowledge of God, bringing them together in a theoretical-empirical unity. Here in its own way, theology, even as physics, merges the theoretical and empirical. Thus any polarizing dichotomy between enjoyment and interpretation breaks down and emerges transformed, even as true science merges with artistry, and in theology faith unites with reason from out of which emerges a living, participatory knowledge.

In the finest theology, interpretation and enjoyment are not polarities, but an organic mixture. Thus through Christianity's influence, Western realism developed its own unique blending of the rough, graphic, comic and common with the classical, tragic and sublime. Here was disclosed a new form necessary to capture the content which the incarnation had brought to culture. Similarly, I believe in contemporary theology, the interaction and interpenetration of the academic and the pastoral, participatory indwelling and scientific objectivity, and also theological science and theological artistry are pressed upon us by the weight and authority of theology's Lord.
Paul Holmer sees in Lewis' theological writings "a reshaping of thinking itself" which, I believe, Christianity pressed upon him. Lewis' theological writings are not merely theoretical analyses, but the occasion for a fresh experience of God. The radical source of this reshaping can be seen only as emerging from his openness to his object and allowing his communication to consist of a multi-dimensional unity of rationalities, including the marriage of science and aesthetics. Theology as art and science seeks both the finest concepts which increase our cognitive precision and clarity and the finest images which enrich our taste and feel of God.

Theology as art is not the final solution. If theology as science can reduce theology to intellectual concerns, theology as art can be an emotional indulgence. The artist as artist gives himself only to people in general, not to particular, concrete persons. Enjoyment which does not flow into concrete acts of love for persons in society is ethically void. If theology as art fails to move man the ethical agent, it does not reach the maturity of personal response which theology's Lord requires. The beauty of theological art and the knowledge of theological science must culminate in a commitment of concrete service in relation to Christ and his world of persons and things. The way of glorifying and enjoying God is not merely to present theology in a beautiful aesthetic form, but to translate it into action. Theology as art and science is not a fulfillment but a promise and pledge of theology's maturity. For theology not to press on from art and science paradigms to the concreteness and activity of personal agents is to abandon theology to the perimeters of existence, to classrooms, pews or drawing rooms of the Western educated elite, but not to engage in the social and personal life of twentieth century man.

This staggering challenge for theology should not deter us, for theology springs from the belief that we are concerned not with the possibility of man, but with the activity and actuality of God. It is God himself brooding upon us by the epistemological release of his Holy Spirit which frees us to discover the truth which inheres in Father, Son and Spirit. Theology must continually be reminded that it lives and thrives only in its
openness to the Lord's intimate presence in its thought forms, 'emotion forms' and community worship and witness to the knowledge and presence of Jesus Christ.

Lewis recalls that in "earliest times, theology, science history, fiction, singing, instrumental music, and dancing were all a single activity". Gradually, they became specialized and drew apart. Though I have argued that theological knowledge has scientific and aesthetic qualities, I am not suggesting a return to a primitive unity of disciplines. Rather I have sought to draw attention to the natural womb of theology, art and science, the natural way of knowing which inheres in them, and their organic partnership in the rhythm of service and adoration of the transcendent Lord of culture.

E. The Threat to Theology:
The Self as the Epistemological Problem

For whoever would save his life will lose it, and whoever loses his life for my sake will find it. --Matthew 16:25

I strove toward God and I stumbled on myself. --Anselm

Within the a priori interior world that man inhabits, a jungle of illusions, habits, instincts and slogans combine to alienate him from others. Such a sophisticated and multi-faceted alienation makes personal life so often mediocre, silly or simply boring, for our a priori of alienation means we do not so much meet others as look past them. It is this false reality which we must overcome at all cost, even at the cost of a death to self.

Throughout his writings, Torrance has argued that the Hellenic and modern (Kantian) dualism of sensible and intelligible, of phenomenal and noumenal, has contributed greatly to epistemological dead-ends in both science and theology. John Macmurray suggests that at the heart of this dualism lies a deeper problem. That is, when dualism creates a conflict between these two essential elements of life, it destroys any integrated understanding or healing of theory and empirical, of visible and invisible which science and theology both desire. To unite these two, both men are convinced we must break out of the dualist structures which polarize them and most significantly,
says Macmurray, "the demand for isolating the self which sustains it". 161

Self-abandonment is a universal signpost on the road of knowing which marks the paths of knowledge in all fields and is the personal correlate to an object-centred method of inquiry. "Here as in worship, in love, in moral action, and in knowing, I transcend myself; and am never more myself than when I do." 162 Coleridge once described the man of genius as him whose feelings, thoughts and images have a number, clarity and vivacity "of which the sensation of self is always in an inverse proportion". 163 Einstein pays subsidiary witness to the same truth when he describes the key to scientific discovery as a rapturous amazement at the harmony of the world which impassions the scientist "in so far as he succeeds in keeping himself from the shackles of selfish desire". 164 It is the self who laughs at himself, who is self-critical before reality, who learns to die, who is also open to consider the adequacy of his rational forms in expressing and apprehending his object. 165

The paradox of self-death as the road to new knowledge and new life is for Lewis the source of the originality of Medieval poetry. 166 So many riches lay around to be set forth better than they had ever been that to create something new was considered a poverty. Where the modern seeks to turn base metal into gold, "the Medieval seeks to let the gold shine... and it's everywhere!". 167 Their abdication of originality brought out the originality they really possessed. Lewis grants his highest praise to Dante's achievement, for Dante's art is a self-abandonment achieved "when the whole image of the world the poet sees has entered so deeply into his mind that henceforth he has only to get himself out of the way, to let the seas roll and the mountains shake...". 168 Lewis does not find this way of self-abandonment utterly surprising in a universe where the Creator himself descends to die, and in so doing, lifts up his creation to redemption. We eclipse objective knowledge when instead of attending to the object, we first attend to our attitudes and theories about the object. It is a common form of self-assertion. As a starting point in science, prearranged criteria necessarily mislead. Butterfield recalls
how a longstanding prejudice which regarded air as a simple substance, not a compound, held back the advance of chemistry. 169 In the wake of Mach's attempt to discredit the new ideas of Einstein and Planck, Jaki concludes that often a new theory is only accepted once its opponents die out. 170 Prearranged criteria are cousins to all a priori speculative frameworks. They do not focus on the object, for it has been abandoned in order to make a prior interior gaze.

Those who seek to know God by means of internal reflection or analysis into consciousness, are not far removed from those who conclude that the self is God. Thus because Bultmann begins by accepting only what is conceivable within modern man's self-understanding, he can make the confusing (and even dangerous) statement, "the question of God and the question of myself are identical". 171 A subjective preoccupation leads to what Torrance calls the projection of our own piety into theological ontology. 172

Introspective, self-conscious or self-understanding approaches to God enable the self in one way or another to eclipse our focus on the object. In Till We Have Faces, Orual's pride, selfishness and jealousy cause her to think too much about her own face. But she can have no face until she looks away. 173 Because the New Testament calls into question all self-understanding not derived from the Gospel, Barth's question to Bultmann is fundamental: "How can I understand and explain my faith, of all things, unless I turn away from myself and look to where the message I believe in calls me to look?" 174 Bultmann's self-centred method led Karl Jaspers to describe him as having a shut-in obstinacy. 175 For D. M. MacKinnon, any method whereby our self-understanding is cut off from our relationship to God as an approach to Christ, is the "opposite... of Jesus Christ's attack on every form of human self-centredness". 176

Both the commercial technological society of Western man and the collectivist materialism of Marxist man have promised a paradise on earth without transcendence. In the West, modern existentialist psychologies have debunked this myth only to replace it with the myth of paradise through self-knowledge. 177 For theology to adopt the notion that self-understanding or
self-realization is the goal of theology (or psychology), is self-deception. True self-knowledge arises only as we see ourselves as we really are, namely, persons known, judged and forgiven by God in Christ. 178

A science of God is needed, says Torrance, not because God is a problem, but because we are. If an object is inherently rational, we are to blame if we fail to understand it. We have probably brought to it inappropriate ideas or wrongly extrapolated thought forms from other fields of knowledge. Therefore, to penetrate into the rationality of our object means we must cut back into the self and our presuppositions.

Theology should have no illusions about the difficulty of this task. As Lewis comments, to give back the will to God which we have "so long claimed for our own...is a grievous pain...to surrender a self-will inflamed and swollen with years of usurpation is a kind of death". 180 Lewis describes the self-willed life as full of self-conceit, essentially competitive, and one which fundamentally desires power over others. This is pride, man's root affliction. It is the fundamental barrier to theological knowledge. 181

God's revelation in Christ is the fundamental and final assault on our pride, self-confidence and autonomy. "In God you come up against something which is in every respect immeasurably superior to yourself." 182 Because of man's alienation from the truth; theological knowledge can only take place through a conversion which entails a critical reconstruction of our mental and emotional structures of consciousness in accord with the nature of the object. 183 That is why the possibility of knowing God is grounded in the reconciling death of Jesus on the cross, where through receiving death into himself in the climax of atonement, God lays to rest man's resentment and opposition. 184

All forms of Romanticism which posit a hidden or ultimate identity of man with God's mind or spirit eclipse the difference between Creator and creature, and cut themselves off from reality, ending imprisoned within the self's own consciousness. Lewis' 'Great War' with Barfield illustrates his commitment to object-centredness and aversion to all anthropological starting points
or self-consciousness epistemologies. Lewis denies Barfield's claim that he had rejected himself. He agreed that it is cowardly to avoid useful self-knowledge. But "morbid, fidgety curiosity about one's self" does no good and creates the danger of making self-knowledge one's lifelong subject of research. Besides, as a way to know one's self, let alone God, Lewis believes all forms of introspective self-consciousness "so full of deception that the object I call me and think about (both in my moments of pride and my moments of humility) is very different from the I who thinks about it". As a criterion of verification, introspection cannot tell which experience is subjective or which one is real. To one sexually perverted, normal love seems weak; margarine may taste better than butter to one familiar with it. Immediate feelings may assault or confirm any belief or idea.

Lewis sees it as a fundamental error in thinking to cultivate self-consciousness and the subjectivist frame of mind. When I examine my thinking, says Lewis, it stops happening. He regarded Barfield's 'beta-thinking' (thinking about thinking) as utterly misleading. Lewis' rejection of introspection is tied to his realist commitment that reality is external to consciousness, with its own inherent rational and aesthetic qualities which we discover. One reason he opposed the literary criticism of Leavis and Richards was that they looked for reality by examining one's own consciousness which projects meaning into the world. As Lewis' teacher, Samuel Alexander puts it, "A mind which broods over itself...abandons itself to the enjoyment of itself". St. Augustine offered an earlier warning: "If the mind being immediately conscious of itself, takes pleasure in itself...the greater it wants to be, the less it becomes". Lewis' great avoidance of Barfield's consciousness-centred Christianity is reflected in his gentle rebuke to Barfield's confession of spiritual depression: "Save yourself, Pickwick for my sake. As Mr. Winkle said, skating madly in the opposite direction".

The identity of self-consciousness with external reality is expounded in the Hindu idealist, Radhakrishnan. He describes Hindu knowledge as an intuitive knowledge which fuses the mind
with reality so that we become the object of knowledge; the object becomes part of the self. Hence in Hindu knowing there is no real distinction between subject and object, only a logical one. "That which knows and that which is known are really the same thing." (Aristotle) In contrast, Lewis was so convinced of the difference between the object-centred enjoyment and subject-centred enjoyment that he wondered if another word should be used to designate the one experience from the other. Lewis suggests through Screwtape that subject-centred thinking and enjoyment should be called the absorption of all into the self. In contrast, Christianity or object-centred knowledge seeks not the absorption of all into the undifferentiated self or God, but the transformation of servants into sons, a losing of our life in order to receive it back in a reconciliation of persons. Here is a participation of persons which is a being in the truth by means of the freedom of obedience. For the Christian, the self is neither absorbed nor to absorb, nor is the peculiar self called I or me to be exalted or given preferment to others. This claim must be killed. The self is God's creature, and thus an occasion for love and rejoicing; it is to be pitied and healed.

Symptomatic of this self-preoccupation is a trend observed by Lewis, that within the various sciences, the climate of theological belief often varies according to the proximity of the field to anthropology. Mathematicians, astronomers, and physicists are often religious. Biologists are less so and economists and psychologists are very seldom. Why? "It is as their subject matter comes nearer to man that their anti-religious bias hardens." Man's inexorable fascination and preoccupation with himself eclipses the external, outward focus on the object. Self-transcendence, the prerequisite for the discovery of all knowledge, becomes increasingly avoidable.

Among many working scientists, the acceptance of certain mental categories as necessary has often led them to dethrone God by reducing him to a capricious interferer with the laws of nature or the bridge between empirical gaps in our knowledge. The new power which scientific discovery gave man has repeatedly tempted him to usurp the role of providence for himself.
A self-governing universe shares the odium of a self-justification or a self-righteousness which vainly seeks to transfer the seat of truth and goodness from God and enthrone it within the mind of man.

Art understood as self-expression shares this flaw. Instead of foliating creation and glorifying the other, it narcissistically turns in upon itself. The key which unlocks aesthetic enjoyment is self-forgetfulness.

The happiest moments are those when we forget our precious selves and have neither [the itch for self-regard, nor the pleasure of self-approval] but have everything else (God, our fellow humans, animals, the garden and the sky) instead... 200

This does not imply a Christian cannot write an autobiography. Quite the contrary. Augustine's Confessions stands as the artistic breakthrough into a new dimension of theologically informed and repentant self-understanding as well as an exciting and original form of literature. The difference between Augustine and the later Confessions of Rousseau is that in the latter, his own temperament is an absolute, whereas Augustine's (and Lewis') autobiography is a medium "through which something universally profitable appeared to him". 201

For Augustine, the self is "a too narrow house for Thee to enter—oh make it wide. It is in ruins—oh rebuild it". 202

For the Christian, anthropological writings are valuable because of the knowledge of God which comes through our experiences. The Christian artist freely uses autobiography or phenomenological description as a pointer to the beauty of the other and to the transcendent beauty of God. 203

A focus on the self—its righteousness, its rationality or its feelings is the anthropocentric, unobjective state of mind and seemingly, the inevitable bent of man not only in theological science, but perpetually in natural science and art as well. In the moral sphere, Lewis realized that in working through his grief over the loss of his wife, his thoughts were "about myself, and about H. and about God. In that order. The order—and the proportion—exactly what they ought not to have been". 204

The abortive result of the self-centred approach in...
theology can be seen in Lewis' "pilgrim's regress" from a Puritan upbringing to adolescent unbelief. By burdening his prayer life with an introspective conscience, he descended deeper and deeper into a spiritually fatiguing self-absorption. (For much the same reason, Christians often do not enjoy or become edified by reading the Bible. We expect to be edified and thus our psychological focus is on the self.) Lewis records how he habitually turned his mental-emotional focus on to himself and away from God, the supposed object of prayer. He incessantly asked himself, "Were you really thinking about what you had said? For example, as well as last night?" "No." "Well, should you not try again?" His prayers became overwhelmingly self-preoccupied. How sincere was that statement, this emotion? Lewis sought to triumph over this self-condemnation by using sheer moral will power to effect a vivid imaginative realization of each item of prayer. The only concrete result was a new dread of bedtime. At the first intellectual moment that scepticism was plausibly suggested, with great relief, Lewis abandoned Christianity. This unscientific, self-oriented methodology created an unconscious anxiety and gave rise to the conscious doubt of a precocious adolescent.

It is a similar method of anthropocentric soul-searching which creates the spiritual problem of assurance in the Christian life. The eye of the believer turns inward upon his own heart and not outward to his Lord and Saviour. But as Lewis notes, to try to discover the Holy Spirit's work in us by introspection is fatal. It cannot reveal the secrets of God's Spirit or ours. Such a focus leads only to pride, presumption or despair. An appropriation-centred theology does not live from God, but towards him; it lives not from grace but to grace. As in other sciences, the road to God, when bent on the power of self-knowledge or self-certainty, dries up the springs of possibility by letting loose an all-absorbing subjectivity. Because theology, like all disciplines, suffers from the "inveterate preoccupation with ourselves", Torrance has urged theology to build into its thinking remedies for this propensity. He suggests two in particular which we have explored: that we develop our knowledge in accordance with the object's nature and
that we ask questions and develop our theological structures in a mode of rationality appropriate to our object. 212

Fortunately, Lewis' adolescent loss of faith was not the end of the story. His eventual deliverance from this anthropocentric error was not unlike Luther's experience of simil peccator et justus, the epistemological breakthrough which delivered him from this most recurrent and recalcitrant of all heuristic roadblocks, being turned in upon the self. Luther's outward look and participation in God's justice, Jesus Christ, the Father's justification of the sinner, freed him from the false conscience of his internal law (self-justification). 213

Here too, is the catalyst of the Reformation. Torrance insists that subjectivist theologies emerged from Medieval pietism through anabaptism to neo-protestantism, but "not through the Reformation". 214 However, through the influence of Kant and Descartes in Protestant theology following the Reformation, "there is a marked turning of the attention inward upon the self". 215 Even in the Westminster documents, there is a return to subjectivism. The catechetical form is not the Reformation's 'through partaking of Christ we partake of his benefits', but is instead, 'through partaking of Christ's benefits we partake of Christ'. 216

The epistemological neighbour of Lewis' youthful error is the more sophisticated eclipse of the object in theology which is the bane of the systematic theologian. The danger of writing "an analysis of the method of x's theology" is that it very nearly makes the object of theology the study of theology, rather than God. Whenever we explore theology or seek to communicate theological knowledge, we are tempted to replace the natural connections that theological truths have in Jesus Christ, their object, with a foreign connection--dialectical or logical. 217 The theologian eclipses the concrete object of faith, Jesus Christ, when he reifies truth and grace into rational (or existential) structures. We might accuse existentialism of the one tendency and idealism of the other. Either approach unfaithfully represents the relation of theological thinking to its object; we abstract from Christ the living, personal centre of theological epistemology and from the
immediate dialogical activity and object-centredness of worship, to a dialectical or logical order.

The basic question of theology is the basic question of life: Who is at the centre, me or God? In theology, man's self-confidence rears its head with peculiar danger, for besides the ordinary pedantry and conceit of an expert in his expertise, the temptation to self-righteousness and self-justification (spiritual pride) cuts us off from the objective righteousness which inheres only in theology's true object.

In theology's concern for an organic, coherent connection between its thought forms and its object, Lewis, in a masterly piece of self-criticism, sees the great temptation of the theologian. A rationality not controlled by the object's own criterion creates the all too familiar predicament of being so interested in the rational demonstration of God's reality that one comes near to lacking interest in God himself. The danger is to begin theology by laying our effort before God as an offering and taking its pleasure and pain as from his hand, but later to pursue theology for its own sake, making intellectual questions about God ends in themselves "as if our pleasure in thinking were the end and finally as if our pride and celebrity were the end". Similarly, the danger in a vital concern for evangelism is that we ourselves cease to respond to Christ in faith and thanksgiving, having become preoccupied with reaching others (or even worse, with techniques for reaching others). Again and again the subtle error is to exchange our focus from the object to the self. In sexual joy, we sin when we turn from the beloved as God's gift and sheer grace to us, with the aura of gratitude pervading the pleasure, and instead see her as my property who by right should give pleasure. When the grace of gratitude flees, only the raw data of lust or desire remains. The painter of heaven desires to paint for the acclaim his art receives, not for the enjoyment of the heavenly landscape. The exchange is deadly. It involves the move from the love of the object we tell (paint, interpret, proclaim) to the love of the telling, from the love of God, to the love of theology.

The "astounding egocentricity" which Torrance objects to
in Bultmann, is the recurrent bane of all theologians. We are all tempted to seek by way of ethics, idealism or even theology, to refract the direct encounter with God and to interpose a mental barricade between the self and God. We see in the theologian's learned folly an attempt to give the self one last foothold of independence and security which the rebel soul can call his own.

The more beautiful and rational one's theology, the more it must be called upon to learn, enjoy and witness from Christ its living centre. If liberal theology's abstracting schemas such as demythologization detract from the object by their self-preoccupation with modern thought forms, apologetics and self-understanding, conservative theology detracts from the object by its focus on appropriating the Gospel to the point of materially altering the content, making the anthropological question of appropriation the focus of theological inquiry and preaching.

To be fair, most theologies accept that we depend on God for our knowledge of him as for all things in life, that our call to discipleship is a call to die to self, as Bonhoeffer reminds us. But Lewis admits he had an endlessly recurrent temptation and if we are honest, so might most of us. The temptation is to go down to that Sea (God) and there neither dive nor swim nor float, but only dabble and splash, careful not to get out of my depth and holding onto the lifeline which connects me with my things temporal.

What must be resisted in theology is what must be resisted in our lives, that there be some part which is not under his Lordship. "For he claims all, because he is love and must bless." Like Barth, Lewis sees free, self-giving love to be the very heart of God's being. Therefore it is the rhythm of all being and of all knowing. "There's nothing outside of it but hell." He cannot bless us unless he has us. When we try to keep an area within us that is our own we try to keep an area of death. Therefore in love, He claims all. There's no bargaining with him.
If indeed there is no bargaining, the Christian faith gives us the severe promise that this way of self-transcendence which entails a self-death is only possible through Jesus Christ, who judges us that he might free us, and who tears our selfishness wide open (Torrance), in order that we might participate in the suffering and healing of his own atoning wounds.

1. Theology as art qualifies this exclusive focus on thought forms and word rationality and reveals another difference between theology and philosophy.

2. Theology and Church, p. 31.

3. Ibid., p. 37. This is the clash between realism and idealism.


5. Theology and Church, pp. 38-40.


8. Theological Science, p. 85.

9. Theology and Church, p. 37.


11. This is in contrast to Pannenberg, p. 299.

12. McIntyre, Theology and Method, p. 201.

13. Elsewhere McIntyre says the many disciplines of Christian theology are united by their centre, Jesus Christ. (p. 208).

14. McIntyre admits that unless one is self-consciously aware of what one is doing, and the criteria employed, one will have a very inadequate reflection on the content of theology. Ibid., p. 209.

15. Theology in Reconstruction, p. 269.

16. Theology and Church, p. 47.
17 cf. The Place of Christology in Biblical and Dogmatic Theology in Theology in Reconstruction, pp. 128-149.

18 Theological Science, p. 300.

19 Brown, p. 182.

20 God in the Dock, pp. 90f.


23 God in the Dock, p. 91.


25 The Ground and Grammar of Theology, p. 130.

26 This is the same context in which Torrance seeks to study the problem of evil in God's universe. Similarly, the fact that Christianity is aesthetically less pleasing initially than "my own stuff" indicates we are dealing with more than jelly we mould. Screwtape Proposes a Toast, p. 100.

27 God in the Dock, pp. 90f.


30 Jaki, Theological Aspects of Creative Science, p. 162.


32 Theological Science, p. 295

33 Ibid., p. 297.

34 Theology and Church, p. 39.


36 Theological Science, p. 299.

37 Ibid., p. 131.

38 Christian Theology and Scientific Culture, p. 69.

Einstein and Infeld, p. 27.

Theology and Church, p. 38.


Theology and Church, p. 30. I would propose to extend Torrance by asserting that theological rationality and thus theological science transcends 'thinking' because the rational form of theology extends also to emotions, images and actions.

God in the Dock, p. 68.

Reason and Emotion, p. 121.

God in the Dock, p. 68. Shocking especially to a culture still accustomed to Kantian assumptions.

English Literature in the 16th Century, p. 123.


For the clarity of this contrast I am indebted to Professor J. B. Torrance.


God in the Dock, p. 80.

Screwtape Proposes a Toast, p. 41. On the next page, Lewis writes that if poetry is writing which arouses and satisfies the imagination, then theology is inferior poetry. Here Lewis stays within the traditional notion of theology as statements about God. I have, however, sought to extend the rational form of theology beyond thoughts to emotions and hence the imagination's organic role in theology and thus described theology as art as well as science.

Mere Christianity, p. 130.

Ibid., p. 131.

Torrance describes theology as practical because the Gospel is directed to human need. Theology in Reconstruction, p. 26.

God and Rationality, p. 90.
The Problem of Natural Theology in the Thought of Karl Barth, p. 30.

Kahler, p. 109.

Christian Theology and Scientific Culture, p. 115.

e.g., Langford, T. F. Torrance's Theological Science: A Reaction, pp. 148ff.

cf. Einstein's revealing comments about similar tendencies of Marie Curie, especially her "curious severity unrelieved by any artistic strain". Out of My Later Years, p. 227.

The World as I See It, p. 124.

Ibid., p. 125.

An Experiment in Criticism, p. 123.

Ibid., p. 129.

Tolkien, p. 56.

An Experiment in Criticism, p. 104. Even Barth's understanding of theology in Church Dogmatics I/1, The Doctrine of the Word of God, p. 47, does not clearly express this, but sees theology as measuring the proclamation of the Word by reference to the Word of God. He does not refer to aesthetic or emotional rationality, for his is a scientific, conceptual approach to theology, though often his dogmatics is written with startling power and refreshing concreteness. Of course his scientific approach rejects any detached "theology of bats and owls". Anselm: Fides Quaerens Intellectum, p. 94. Both Torrance and Barth see theological knowledge as participatory, not objectivistic, in which man's entire being is involved in his thinking.

An Experiment in Criticism, p. 104.

cf. Busch, pp. 417, 429. "A good theologian does not live in a house of ideas, principles and methods. He walks right through all such buildings and always comes out into fresh air again."


Ibid.


cf. Chapters VI and IV of this thesis.

This implies a companion question to Torrance's notion of science. That is, does technology inhére in the task of
science or is it just an application, an auxiliary task? Torrance seems to take the latter view.

75 Bodleian Library, Martlets Ms. Top Oxon d. 95/3, p. 108. Thus narrative poetry is no longer popular because the modern reader will not give it the effort it demands. (211th meeting, Nov. 3, 1920).


77 Busch, p. 337.

78 The School of Faith, p. xxv. cf. God and Rationality, p. 196.


81 Theology in Reconciliation, p. 272.

82 Theology in Reconstruction, p. 9.

83 Screwtape Proposes a Toast, p. 118.

84 Colossians 1:15.

85 Newbigin, Christ and the Cultures, p. 12. Newbigin sees the doing of Christology as a task of open fellowship and mutual learning and correction among all cultures who confess Jesus as Lord.

86 English Literature in the 16th Century, p. 529. Though I am critical of Torrance here, he does himself recognize Christ's own use of parables were heuristic devices which avoid overwhelming us with God's majesty and leave room for man's integrity of response in faith and decision, and yet is an effective means of confronting man with the truth. Conflict and Agreement, II, p. 64.


88 Bodleian Library, ms. facs. c. 48, Aug. 1959, p. 123.

89 Miracles, p. 74.

90 God in the Dock, p. 93.

91 Ibid.

92 The Ground and Grammar of Theology, p. 74. Lewis has not always been judged successful. He himself reckons that The Pilgrim's Regress was his worst book. Lawlor agrees with him and sees it as based on an "incomprehension of the modern
mind". Lawlor, The Tutor and the Scholar, p. 82.

Mere Christianity, p. 37. Lewis avoids turning this into the dogmatic form, God will only love you if you repent. Lewis' concern for his audience is also less publicly but more profoundly evident in the thousands of letters he wrote to his correspondents who had inquired about Christianity from reading his books. cf. Letters of C. S. Lewis, Memoir of C. S. Lewis, by W. H. Lewis, p. 16.

God in the Dock, p. 338. Also p. 98. Lewis' concern took him to RAF bases during the war to use his gifts to communicate the Gospel. Stuart Babbage, who accompanied Lewis on several of these occasions, has analysed his technique and listed 5 ingredients: 1) Lewis rooted his subject-matter in the knowledge and experience of his hearers. (An imaginative participation in their unbelief.) 2) His deliberate use of idiomatic style, related to the conventions and patterns of ordinary speech (direct, simple, clear words, avoidance of pomp, pedantry, and abstractions). 3) His use of metaphor and image. 4) His empathy and self-identification, disarming the listener by placing himself on the same level. 5) His personal rather than oratorical style of speech. Stuart Barton Babbage, To the Royal Air Force, C. S.Lewis, Speaker and Teacher, pp. 95-102.

The Problem of Pain, p. 96.

Ibid.

Keble, Sacred Poetry, p. 176.


Romans 5:12.

"But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, self-control; against such things there is no law." Galatians 5:22,23.

W. A. Whitehouse, Christ and Creation, Essays in Christology for Karl Barth, pp. 126 note, 132.

Ibid., p. 126.


Selected Literary Essays, p. 21.

Past Watchful Dragons, p. 122.

The Voyage of the Dawntreader, p. 209.

Letters of C. S. Lewis, p. 260. Lewis is especially
fond of a "realism of presentation", that is, a making something vivid by sharply observed or imagined details. *An Experiment in Criticism*, p. 57. (e.g., a dragon sniffing along a stone.)

108 Bodleian Library, ms. facs. c. 47, p. 15.

109 *Selected Literary Essays*, p. 16. The stories more concretely inhabit both the memory and the judgement. The poet, he continues, gives food for the tenderest stomach, the philosopher teaches only the learned, i.e., those who have already been taught.

110 *Miracles*, p. 95.

111 Tolkien, p. 56.

112 Ibid., pp. 57-58. Tolkien in this context has fantasy in mind. cf. *An Experiment in Criticism*, pp. 41-42, where Lewis notes that myth, unlike adventure story, has a very simple narrative, which does not move us by its exciting events and hence it need not be well written to move and satisfy us. Thus the Gospel can and often is uneloquently expressed, yet its power to move and satisfy is undiminished. Keble notes how poetry can be direct or indirect. Keble, *Sacred Poetry*, p. 180. Lewis writes the former, Tolkien the latter.

113 Letters of C. S. Lewis, p. 166.

114 *Of Other Worlds*, p. 38.

115 Tolkien, p. 53.

116 That is, unintelligible to the theologically untrained.

117 *God in the Dock*, p. 183.

118 Torrance clearly contrasts the dramatic, kinetic, Hebrew language of the Bible which Greek philosophy is prone to replace with static relations between ideas and concepts. *Conflict and Agreement*, I, pp. 305-306. But unfortunately a philosophical-scientific translation of Christian faith easily leaves this dynamic quality untranslated.


120 *A Preface to Paradise Lost*, p. 53.

121 Kahler, p. 105.

122 *A Preface to Paradise Lost*, p. 54.

123 *Studies in Words*, p. 317.

124 *Letters to Malcolm*, p. 76.

In the preceding discussion, I am indebted to Professor J. B. Torrance, for pointing out to me that gratitude and thanksgiving are the only response to the Gospel which reflects the objective character of God's grace in Christ. Gratitude is the reasonable response to grace and is the natural correlative of grace. Any other response is inappropriate and subjectivistic.

This is an aesthetic analogy of the way that Christ took upon himself fallen humanity in order to heal and renew from within our evil. cf. especially The Great Divorce and The Problem of Pain.

The more educated have different temptations. Lewis lists new enemies beyond materialism, namely, isms and cults inherent in pseudo-science.

For example, Torrance says theology is best understood, like science, as an on-going interpretive activity. cf. review of A. McKinnon, Falsification and Belief, p. 447.
Einstein and Infeld, p. 296. (Italics mine.)

Out of My Later Years, p. 98.

cf. Langford's similar but more general concern when he says Torrance has given an intellectualistic view of faith which fails to give adequate provision for the affective, volitional or active dimension of the response of the total man to God in Christ. Langford, T. F. Torrance's Theological Science: A Rea-


God and Rationality, p. 44.

Torrance describes Anselm's theology as "the most care-


The School of Faith, p. xliii.

Auerbach, pp. 271, 317, 330.

Holmer, pp. 95, 105.

Reason and Emotion, pp. 145-166.

Hence I would regard the 'theology of liberation' not as a theological dead-end, to be short-lived and soon forgotten. Its concern for the poor, for the outworking of mercy and justice, are Gospel implicates. Though it must be said that many of its expressions and programmes often seem to retreat into sub-

Studies in Medieval and Renaissance Literature, p. 143.

Anselm, Basic Writings, (Proslogium), p. 5.

Auerbach, p. 489.

Reason and Emotion, p. 215.

An Experiment in Criticism, p. 141. cf. Mere
Christianity, p. 188, where Lewis makes a similar concluding statement. Also The Problem of Pain, p. 76.

163 Biographia Literaria, p. 25.

164 The World as I See It, p. 28. Einstein elsewhere describes a truly religious person as "one who has liberated himself from the fetters of selfish desires" (p. 25). Here is another clue to the epistemological unity of theology and science. cf. also The Road of Science and the Ways to God, p. 270, where Jaki suggests that the recurrent dislike within physics of Christian theism and cosmic singularity is because "we would like to think of ourselves as necessary--not contingent". In the sphere of personal relationships, Lewis records his astonishment at the "reward of knowledge" given "whenever I succeed in beating down my selfish point of view, and make an approach to charity, the motives and feelings of all the other persons concerned become transparent". Bodleian Library, ms. facs. c. 47, Letter to Griffiths, p. 17. For other memorable examples of Lewis' capacity for self-criticism, cf. Letters of C. S. Lewis, p. 215, and his ability to laugh self-critically at himself, English Literature in the 16th Century, p. 149.

Dying to self is the key to mental health, says Becker. Daily we must risk our lives to the dangers and problems of the world. Mental illness results, writes Adler, when we lose the courage to die daily. Becker describes schizophrenia as the inability or unwillingness to suffer this death which creates a boundless megalomania, the very opposite of mental health. It is summed up in Karl Marx's defiant cry, "I am nothing and should be everything!" quoted from Becker, p. 265. Following Athanasius, Torrance calls subjectivism the failure to distinguish objective realities from subjective conditions. It is man's recurrent mental disease. Theology in Reconstruction, p. 231.

165 So Torrance describes Barth. Theology and Church, p. 8. Here Torrance refers to thought forms only.

166 The Discarded Image, p. 211.
167 Ibid.
168 Studies in Medieval and Renaissance Literature, p. 76.
169 Butterfield, p. 216.
170 Jaki, Theological Aspects of Creative Science, p. 155. cf. Planck, p. 34.
171 quoted in Christian Theology and Scientific Culture, p. 135.
172 Theological Science, pp. 41f.
173 Till We Have Faces, pp. 294ff.
Barth asks, "Is this what Bultmann really means to say?" Barth, Rudolf Bultmann--An Attempt to Understand Him, p. 86.


176 quoted in God and Rationality, p. 107.
178 Theological Science, p. 87.
179 Ibid., p. xi.
180 The Problem of Pain, p. 91.
181 Mere Christianity, p. 108.
182 Ibid.
183 Theological Science, p. 98.
184 Theology in Reconstruction, p. 29. cf. God and Rationality, p. 92. cf. also Theological Science, p. x, xiii.
185 Letters to Malcolm, p. 34. We cannot always and ultimately know ourselves, but that is all right. "Peace, prattler and get on."
187 Christian Reflections, p. 41.
189 Adey, p. 33.
190 Carpenter, p. 62. This procedure leads to poetolatry, which Lewis regarded as fundamentally anti-Christian.
191 Alexander, II, p. 89.
192 quoted in Adey, p. 32, from Of Free Will.
193 Bodleian Library, ms. facs. Letters of C. S. Lewis, Aug. 22, 1944 [or 49], p. 201. Torrance states uncategorically that to base doctrine upon self-knowledge is the source of heresy and in fact leads to atheism. The Hermeneutics of St. Athanasius, p. 453.
194 Radhakrishnan, p. 109.
195 An Experiment in Criticism, pp. 2-4.
196 The Screwtape Letters, pp. 46f, 68.
Bultmann speaks of death to the self. cf. Bultmann, New Testament and Mythology, p. 31. But he does so in terms reminiscent of a Hindu detachment from the world which is unreal. Hence the space-time structures are not ultimately real for God (and hence neither for us).

Butterfield, p. 229.

Letters of C. S. Lewis, p. 256.


Ibid.

A Grief Observed, p. 49.

Surprised by Joy, pp. 53-55.


Surprised by Joy, p. 54.

Theology in Reconstruction, p. 160.

Screwtape Proposes a Toast, p. 86.

The Doctrine of Grace in the Apostolic Fathers, p. 133.

God and Rationality, p. 52.

Ibid.

See George Yule's inaugural lecture as Professor of Church History, University of Aberdeen, 1979, "Martin Luther: Theologian for Protestants and Catholics." In 1938, Lewis writes, "If Luther is right, we have waked from nightmare into sunshine: if he is wrong, we have entered a fool's paradise". Selected Literary Essays, p. 117.


The School of Faith, p. xlviii.

Ibid., p. xlii.

Theological Science, p. 127. cf. Coleridge's stern rebuke of Intellectual Christianity which uses the Bible to support doctrines "that had been learned before hand from the oracle of common sense". Aids to Reflection, p. 152.

cf. The Problem of Pain, p. 76.
Reflections on the Psalms, p. 51.
The Great Divorce, p. 71.
The Problem of Pain, p. 76.
God and Rationality, p. 60.
Theological Science, p. 43. The Great Divorce is a startling psychological portrait of how and why we refuse to open ourselves to God. Self-pity, self-preoccupation and self-deception are all participated in by one who knows each feeling too well. The climax comes when we see the Spirit try for one minute to get the ghost's attention off himself, believing he will be saved if he can do just that. cf. pp. 15, 34, 54, 63.
Screwtape Proposes a Toast, p. 121.
Ibid., p. 124.
The Problem of Pain, p. 152.
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Screwtape Proposes a Toast, p. 124.
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cf. Theology in Reconstruction, p. 118.
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(For a thorough bibliography of C. S. Lewis, see Walter Hooper, A Bibliography of the Writings of C. S. Lewis. Light on C. S. Lewis, Edited by Jocelyn Gibb, pp. 117-160. Also see Joe R. Christopher and Joan K. Ostling, C. S. Lewis An Annotated Checklist of Writings about him and his Works. The Serif Series: Number 30 Bibliographies and Checklists. Ohio: Kent State University Press, n.d. [1973]. For Torrance, see Bryan Gray, Bibliography of the Published Writings of Thomas F. Torrance (1941-1975). Creation Christ and Culture, Edited by Richard W. A. McKinney, pp. 307-321.)