

The doctrine of revelation in the theology of Thomas F. Torrance

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

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This thesis is dedicated to the memory of Thomas Forsyth Torrance born August 30 1913, died December 20 2007.

Abstract

This thesis is an exposition and close reading of Torrance's doctrine of revelation and of the theological epistemology that emerges from it. In Torrance's account personal knowledge of God is available only in his self-revelation in Christ. However, it is shown that his understanding of the place of the Bible and nature in theology points to them both as places of divine self-revelation.

There is a gracing of all knowledge of God whether in Christ, Scripture or nature which means that God is always sovereign of his self-revelation. In his engagement with the writings of Einstein on scientific method Torrance finds a similar gracing of scientific knowledge.

Chapter one demonstrates the foundational place of revelation in Christ in Torrance's theology. From this self-revelation Torrance arrives at his definition of scientific method, namely the precedence of ontology over epistemology. The epistemological significance of the doctrine of justification by grace is applied to the place of the Bible in revelation (chapter two). Barth's reasons for rejecting natural theology are explored (chapter three). Chapters four and five demonstrate that the gracious aspect of knowledge of reality applies not only to theology but also to the natural sciences. The natural sciences are brought under a larger theological account of reality in which their inexplicable ability to uncover the reality of the universe is founded on the creative Word of God. Torrance is shown to have turned the natural sciences into natural theology but in a way that compromises neither the independence of the sciences from theology in their operation nor the sovereign and gracious aspect of all knowledge of God.

From Torrance's doctrine of revelation there emerges a critically realist epistemology which takes account of the subjective element in all human knowing, is non-dualist, correlates with the epistemology which characterises contemporary scientific practice and unifies a wide range of disciplines including the natural sciences, the social sciences and humanities including theology.

Contents

Introduction		7
Chapter One	Revelation in Christ	13
1.1	Introduction	13
1.2	Revelation in Christ according to Torrance	15
<i>1.2.1</i>	<i>Revelation in Christ as the foundation of theological epistemology</i>	15
<i>1.2.2</i>	<i>The epistemological significance of the homoousion</i>	17
<i>1.2.3</i>	<i>The influence of Barth on Torrance's Christocentric theology</i>	22
<i>1.2.4</i>	<i>Discussion</i>	25
1.3	Jesus Christ: God's revelation in time and space	25
<i>1.3.1</i>	<i>God and space</i>	25
<i>1.3.2</i>	<i>Space as relation</i>	28
<i>1.3.3</i>	<i>Discussion</i>	32
1.4	Torrance's theological anthropology	33
1.5	Revelation: act and grace	36
<i>1.5.1</i>	<i>Personal knowledge of God</i>	36
<i>1.5.2</i>	<i>Torrance's critique of Schleiermacher</i>	38
<i>1.5.3</i>	<i>The vicarious humanity of Christ</i>	39
<i>1.5.4</i>	<i>Discussion</i>	42
1.6	Revelation as reconciliation	43
<i>1.6.1</i>	<i>Incarnation and revelation</i>	43
<i>1.6.2</i>	<i>The hypostatic union</i>	46
<i>1.6.3</i>	<i>Discussion</i>	49

1.7 Reconciliation as revelation	50
<i>1.7.1 The mediation of Christ in Barth and Torrance</i>	50
<i>1.7.2 Jesus Christ the mediator</i>	52
<i>1.7.3 The paradox of revelation in Barth's theology</i>	56
<i>1.7.4 Discussion</i>	58
1.8 The historical Jesus and systematic theology	59
1.9 Revelation in Christ and the natural sciences	63
1.10 Conclusion	65
Chapter Two Revelation and Scripture	69
2.1 Introduction	69
2.2 Revelation and Scripture	71
<i>2.2.1 Barth and the three-fold Word of God</i>	71
<i>2.2.2 Torrance's reading of Barth on revelation and Scripture</i>	75
<i>2.2.3 Discussion</i>	77
2.3 Scripture and revelation in Torrance's theology	78
<i>2.3.1 Torrance's early writing</i>	78
<i>2.3.2 The problem of fundamentalism</i>	80
<i>2.3.3 The Bible as witness to the Word</i>	85
<i>2.3.4 Revelation as divine encounter</i>	89
<i>2.3.5 Revelation and reconciliation</i>	93
<i>2.3.6 Discussion</i>	96
2.4 The Bible as a divine and human word	97
<i>2.4.1 Theology and the Scriptures</i>	97

2.4.2	<i>The paradoxical nature of the Scriptures</i>	99
2.5	Conclusion	103
Chapter Three	Natural Theology I: Torrance and Barth	107
3.1	Introduction	107
3.2	Torrance's Reading of Barth on natural theology	110
3.2.1	<i>Barth's 'No' to natural theology</i>	110
3.2.2	<i>Torrance: Barth as preacher of the Word</i>	115
3.2.3	<i>Torrance's interpretation of Barth's position</i>	116
3.2.4	<i>The unity of act and being in theology and the sciences</i>	120
3.2.5	<i>God's creative relation to the universe</i>	121
3.2.6	<i>The 'unscientific character' of independent natural theology</i>	124
3.3	Torrance's explanation of Barth's rejection of natural theology	127
3.3.1	<i>Natural theology and the doctrine of grace in Barth</i>	127
3.3.2	<i>The objectivity of God's self-revelation and natural theology</i>	130
3.4	Torrance's development of the critique of natural theology	133
3.5	Discussion and conclusion	136
Chapter Four	Natural Theology II: non-independent natural theology	139
4.1	Introduction	139
4.2	Torrance's relocation of natural theology within dogmatics	140
4.2.1	<i>Natural theology as a dogmatic science</i>	140
4.2.2	<i>The a posteriori nature of scientific method</i>	142
4.2.3	<i>The unscientific nature of traditional natural theology</i>	144

4.2.4 <i>The relocation of natural theology within revealed theology</i>	145
4.2.5 <i>Natural theology and the self-revelation of God</i>	148
4.2.6 <i>Natural theology and the rational structure of the knowledge of God</i>	151
4.2.7 <i>Discussion</i>	154
4.3 Doing theology in an Einsteinian universe	155
4.4 The dialogue between theology and the natural sciences	158
4.4.1 <i>Natural theology and belief in the natural sciences</i>	158
4.4.2 <i>Dualism and natural theology</i>	160
4.4.3 <i>Discussion</i>	163
4.5 Epistemological and cosmological dualism in natural and theological science	164
4.5.1 <i>The integration of form and being in natural and theological science</i>	164
4.5.2 <i>Scientific method in theology</i>	167
4.5.3 <i>The dualist tradition in western thought</i>	169
4.5.4 <i>Einstein and Polanyi</i>	173
4.5.5 <i>Dualism in contemporary theology</i>	176
4.5.6 <i>Morrison and dualism in Torrance's scientific theology</i>	181
4.5.7 <i>Discussion</i>	183
4.6 Torrance's transformed natural theology	184
4.6.1 <i>The creator's relation to the creation.</i>	185
4.6.2 <i>God, Einstein's universe and natural theology</i>	188
4.6.3 <i>Discussion</i>	192
4.7 Conclusion	193

Chapter Five	Natural theology III: theological science	196
5.1	Introduction	196
5.2	Theology and science	197
5.2.1	<i>God and the creation: introduction</i>	197
5.2.2	<i>Torrance's Christocentric doctrine of creation</i>	198
5.2.3	<i>God the transcendent creator</i>	203
5.2.4	<i>The contingent creation</i>	207
5.2.5	<i>The contingent creation and the incarnation</i>	208
5.2.6	<i>The contingent necessity of the universe</i>	210
5.2.7	<i>The contingent intelligibility of the universe</i>	211
5.2.8	<i>The contingent freedom of the universe</i>	213
5.2.9	<i>Theology and the natural sciences</i>	216
5.2.10	<i>Discussion</i>	221
5.3	Theological science	222
5.3.1	<i>Einstein and the overcoming of western dualism</i>	222
5.3.2	<i>Theology among the sciences</i>	227
5.3.3	<i>Objectivity in theological and natural sciences</i>	230
5.3.4	<i>The distinction between theology and the other sciences</i>	233
5.3.5	<i>Torrance's 'disclosure model'</i>	238
5.3.6	<i>Torrance's actualist account of critical realism</i>	240
5.3.7	<i>Theology as a scientific discipline</i>	245
5.3.8	<i>Discussion</i>	250
5.4	Conclusion	251

Conclusion	255
Bibliography	264
A Primary texts	264
B Works on T. F. Torrance	268
C Other works consulted	272

Introduction

The doctrine of revelation is fundamental to the theology of Thomas F. Torrance. As a reformed theologian and Barthian this is to be expected. However, despite its central place in his thought none of his many works contain a systematic presentation of his understanding of revelation; yet the doctrine of revelation impinges on every aspect of his theology. This thesis presents a systematic exposition of the doctrine of revelation as it appears in Torrance's works. At the same time it represents a close reading of this doctrine as it appears in Torrance's theology and an account of the theological epistemology which emerges from his doctrine of revelation.

The two main conclusions of the thesis are that in Torrance's theology revelation is by the sovereign grace of God, and that the theological epistemology which emerges from his doctrine of revelation is a realist approach which is applicable to a wide range of disciplines.

Despite his argument that revelation occurs only in Christ and his equating of divine self-revelation with revelation in Christ, there is a more fundamental doctrine of revelation implicit in Torrance's theology, namely revelation by grace. Torrance argues that the place of the Bible in revelation is as a divinely provided witness to Christ, yet on examining his writings on the Scriptures we find a clear understanding that they represent a place within the creation where the transcendent God chooses to encounter his people. Similarly in his description of the work of the natural scientist in uncovering the rational order inherent in the universe he presents the scientist as a priest of creation who, in investigating the universe, encounters the creative Word who is the source and ground of that rational order and of humanity's ability to uncover and comprehend reality by empirical investigation.

Inherent in his doctrine of revelation there is an understanding of the gracious nature of our knowledge of God. Torrance operates with a realist theological epistemology which is both objective and takes full account of the subjective element of all human knowledge. The grounds of this epistemology will be examined as will his argument that it is this objective method which allows him to count theology among the sciences. It will be demonstrated that Torrance's realist epistemology achieves more than a rapprochement between theology and the natural sciences: it is applicable to a very wide range of disciplines including the social sciences and humanities.

Chapter one will focus on the foundation of Torrance's doctrine of revelation, namely revelation in Christ. The fundamentally gracious aspect of all knowledge of God will be demonstrated, for revelation is primarily personal rather than propositional. Jesus Christ is the place or event where the transcendent God interacts with the contingent universe. The patristic doctrine of the *homoousion* means, for revelation, that God as he encounters creation in Jesus Christ is not different from God as he is in himself. A consequence of this is that Jesus Christ is normative *and* contingent for all knowledge of God; normative in terms of the content of theology but contingent because there is neither compulsion nor necessity for God to reveal himself in Christ. A second consequence is that theology founded on revelation in Christ must pay attention to the scientific understanding of the universe because Jesus Christ is an element of the contingent creation as are those theologians who seek to engage with God's self-revelation.

The personal aspect of revelation means that true revelation will also always be an act of reconciliation between God and those who receive this self-revelation. Torrance argues that Jesus Christ, as fully divine and fully human, is not only God's self-revelation; he is also the place in which that revelation is received and where it meets

with an adequate response. Again there is a clear emphasis on the gracious nature of revelation and on God's sovereignty in his self-revelation. Torrance presents revelation as an aspect of grace but he equates this with revelation in Christ. Against Torrance and from his own writings it will be argued that although revelation in Christ is the supreme example of God's self-revelation and remains normative for the content of Christian theology, there is genuine divine self-revelation in both Scripture and nature.

Chapter two will examine the place of the Christian Scriptures in Torrance's doctrine of revelation. Initially he appears to do little more than repeat Barth's understanding of the Bible as witness to the living Word of God who is Jesus Christ. This is clearly how he understands and presents the place and role of Scripture. However, when close attention is paid to Torrance's writings another aspect to his doctrine of Scripture is found. The Bible, a human artefact, becomes not merely a witness to revelation but by God's grace it becomes or may become a place where God encounters his people. Revelation in Scripture remains a dynamic and gracious self-revelation of which God is always in control, but when Torrance writes of the Bible as a meeting place between God and humankind within the universe of space and time he has gone beyond the Barthian formulation of Bible as witness to revelation. Yet there is no conflict between revelation in Scripture and revelation in Christ for the God who encounters us through the Bible is the God who becomes part of the contingent creation in Christ. According to Torrance the Bible is a divinely provided record of revelation and a divinely provided dynamic witness to revelation; this thesis will demonstrate that in Torrance's theology it is also a locus of revelation.

Chapter three will examine Torrance's interpretation of Barth on natural theology. He argues that Barth objects to the independent nature of traditional natural theology and that he leaves open the possibility of a non-independent natural theology.

Torrance's interpretation of Barth on this point will be shown to be supported from Barth's own writings. More important for theological epistemology are the reasons why an independent natural theology presents a problem. According to Torrance independent natural theology is unscientific precisely because it is independent of actual self-revelation. In the sciences method is determined by the object of enquiry. It is also objected that natural theology introduces dualism into the being of God arriving at the doctrine of the one God who is known through general revelation and the Trinity who is known through special revelation.

A further objection is that independent natural theology is problematic even with respect to propositional knowledge of God. The idea that we can know of God without God's will and act is difficult to sustain; if the Barthian argument that knowledge of God is always personal is accepted then independent knowledge of God becomes meaningless.

Chapter four will continue the exploration of Torrance's non-independent natural theology which he transposes into the body of systematics where it is more accurately designated a theology of nature. By doing this he brings together two different accounts of reality, theological and scientific, and argues that each can benefit from this relationship. The model of reality disclosed to the natural sciences is important for a theology which focuses on divine self revelation, for it is in the real universe that God discloses himself to creatures who are part of that world. The unitary account of reality in Einstein's model of the universe has implications for theological epistemology undermining the dualism inherent in much western thought, specifically that which obtains between the formal and empirical components of knowledge. The Christian doctrine of creation provides an answer to questions raised by the very success of the natural sciences and their empirical method. The inexplicable comprehensibility

of the universe is one such question, but as the comprehensibility of the universe is a basic assumption of the natural sciences it is a question that the sciences are unable to answer. In this respect the sciences point beyond themselves to a transcendent source of unity and structure in the universe. It is here that a non-independent natural theology finds its place, and it is a similar place to that occupied by the cosmological argument in traditional natural theology.

Chapter five will examine Torrance's argument that the nature of reality disclosed to the natural sciences exhibits a congruence with the understanding of creation disclosed to theology through the core concepts of incarnation and *creatio ex nihilo*. He argues that the understanding of the universe in the post-Einsteinian natural sciences points to God as the source of its existence and rational order. In his articulation of the work of the science's investigation of the universe Torrance argues that the natural scientist is brought into relationship with the creative reason which fashioned and ordered the universe. Torrance's theology will be shown to imply a real revelation, an understanding of divine disclosure in nature. Again though the God who is encountered in the investigation of the universe is identical with God as he has supremely revealed himself in the incarnation for the creative Word who is the source of order and meaning in the universe is the Word who became incarnate in Jesus Christ. When natural theology is transposed to a place within the body of systematics it becomes a theology of nature which provides an interpretative framework for the whole scientific enterprise.

Whether in Christ, Scripture or nature there is a fundamentally gracious aspect to human knowledge of God. Torrance's account of the doctrine of revelation discloses an epistemology which is realist and operates with a disclosure model and yet is not naively realist but takes account of the subjective element in all human knowledge.

Einstein's writings on scientific method show a similar decision to allow the reality of the universe to determine his apprehension of it, while at the same time rejecting any sort of logical bridge between the two. The correlation between scientific and theological epistemology is Torrance's justification for positioning theology among the sciences. However, the argument of this thesis will be that this realist epistemology does more than bring together theological and natural science. It has application to all human ways of knowing and points to the gracious aspect of all human knowledge. From this Christologically grounded doctrine of revelation there emerges a universally applicable epistemology.

Chapter One Revelation in Christ

1.1 Introduction

The doctrine of revelation is central to Torrance's theology.¹ According to Torrance revelation is Christologically founded, and this insight shapes not only his understanding of revelation but the whole of his theology and epistemology. He argues that revelation and reconciliation are complementary doctrines, and are two sides of the same coin. Despite a career spanning the decades from the 1940's to the 1990's and beyond we see little change of direction in Torrance's thought. The seeds of his later work are found in his early writings on Calvin (Torrance 1952), the reformed creeds (Torrance 1959) and in his Auburn lectures on the doctrine of Christ from 1938 and 1939 (Torrance 2002a). In his later writings we see him developing these earlier ideas and applying the principles which he found in his study of Barth, Calvin and the patristic theologians.

The argument of this chapter is that the unifying idea of Torrance's theology is revelation in Christ. The gracious aspect of human knowledge of God in Christ is the foundation of Torrance's theological epistemology. In this I agree in part with the assessments of Morrison² and Seng (1992) and disagree with Colyer (2001a). God's self-revelation in history and in the universe in the person of Jesus Christ is the foundation of Torrance's theological and scientific epistemology and the reason why he places theology among the sciences. His understanding of how theology is faithful to God's self-revelation is foundational for his understanding of what constitutes a

¹ See the comment in Kruger 1990:367.

² Morrison quotes Torrance: 'It is in this identity between revelation and reconciliation, in the oneness between what God is in the Person of Christ and what he has done for us in the atoning sacrifice of Christ, that the objective truth of the Blessed Trinity belongs to the very heart of the Gospel, for it gathers up and embraces the evangelical message of the grace of the Lord Jesus Christ, the love of God and the Communion of the Holy Spirit' (Torrance 1996a:33; cf. Morrison 1995:53).

scientific epistemology. It is the argument of this thesis that Torrance's Christologically grounded epistemology affords a rapprochement between biblical and systematic theology and between theological and scientific epistemology; more than this it points to an epistemology which is applicable to all human ways of knowing.

Seng argues that the patristic doctrine of the *homoousion* is central to Torrance's theology (Seng 1992:341); however, he interprets the *homoousion* in a wider sense to mean 'the epistemological centrality of the Incarnation' (Seng 1992:342, quoting Torrance 1975:222). Our argument is that what is foundational in Torrance's exposition of revelation in Christ is the gracious aspect of that knowledge. Colyer proposes the rejection of dualism as the central unifying concept of Torrance's theology (Colyer 2001a:57–60); but this is included in his doctrine of revelation in Christ for there is no general or universal revelation but only a real and particular revelation.

The result of Torrance's period of study under Barth in 1937 was his thesis on the doctrine of grace in the second century fathers (Torrance 1948). He remained in touch with Barth throughout his career and was one of the editors of the English translation of the *Church Dogmatics*. Torrance clearly sees his work as building on Barth's theology. He considers Barth to be as important for twentieth century theology as Athanasius was in the fourth century; and as important for theology as Einstein is for the natural sciences. Barth has exercised great influence on Torrance's understanding of revelation. Torrance follows Barth in arguing that divine revelation is self-revelation; that what God reveals to humanity is himself rather than information about himself. According to Torrance divine revelation is not propositional, it is personal; but he does formulate propositions about God based on his self-revelation.

Torrance's life's work could be regarded as a sustained meditation on and application of the central theological principle of God's self-revelation in Christ. It is not just that God has revealed himself, but that he has revealed himself in Christ that is foundational for Torrance's theology. Torrance reads the patristic doctrines of the *homoousion* and the hypostatic union through the double lens of their interpretation by Calvin and Barth. Torrance's doctrine of revelation in Christ is the foundation of his

later writings on theology and science and especially for his insistence that theology is to be counted among the sciences. Revelation in Christ forms the basis of his writings on doctrine.

In this chapter I propose to present Torrance's account of the doctrine of revelation in Christ and to examine his sources. Barth's influence can be seen throughout but particularly in the areas of the unity of revelation and reconciliation. Mackintosh, Torrance's teacher in Edinburgh, is another influence on his Christology. Calvin and the Nicene theologians, notably Hilary and Athanasius, are also important for his development of the doctrine of revelation in Christ.

The whole of Torrance's work is a sustained meditation on God's self-revelation in Christ; this makes it difficult if not impossible to separate the various strands of his output. His work is thoroughly integrated and a chapter upon doctrine must refer to his writing on science. For this reason there is an overlap in the contents of the chapters of this thesis. The present chapter on revelation in Christ touches upon every area of Torrance's theology; the substantial issues in other areas of the doctrine of revelation will be noted and dealt with in the later chapters.

Revelation in Christ is central to Torrance's work because it provides the central datum of theology. Torrance presents it as the objective fact within history and the universe to which all Christian theology must respond.

1.2 Revelation in Christ according to Torrance

1.2.1 Revelation in Christ as the foundation of theological epistemology

God's self-revelation in Christ is, according to Torrance, an act of sovereign grace. In his understanding of revelation in Christ and its foundational role in Christian theology Torrance is working through the epistemological implications of the reformed doctrine of justification by grace (Torrance 1990:143). In his writings Torrance uses revelation in Christ and revelation by grace interchangeably for he regards them as the

same thing. In his earliest work Torrance writes that the transcendent and inaccessible God has broken his silence; the invisible and unreachable God has spoken to us in his Word who is 'identical with the Person of Jesus Christ' (Torrance 1948:58). Torrance's assessment of the central importance of the incarnation for revelation is unchanged in his later works where he writes that: 'The Christian doctrine of God is to be understood from within the unique, definitive and final self-revelation of God in Jesus Christ' (Torrance 1996a:1). As the Word of God Jesus Christ is God manifest to humankind. When we read closely Torrance's writings on revelation we see that although God's self-revelation in Christ is the supreme example of the epistemological implications of the doctrine of justification by grace, yet he also writes of revelation in Scripture and in nature as distinct from revelation in Christ.

The self-revelation of God in Christ is the reason for Torrance's rejection of all independent sources of the knowledge of God. We will see in Chapter Two that this influences his interpretation of Scripture and in Chapter Three it lies behind his reconfiguration of natural theology as a component of revealed theology. The rejection of an independent source of the knowledge of God means that we cannot know God apart from his will to be known by us. For Torrance all true knowledge of God originates in self-revelation and is therefore act of sovereign grace.³ This point is made by Mackintosh who argues that the very notion of knowledge of God independent of his self-revelation is incredible because it asserts that we can know God apart from his will to be known by us (Mackintosh 1929:65).⁴ In Christ God chooses to be known and is in fact known by humankind on earth and in history. In the extended introduction to a translation of the creeds of the reformed churches Torrance writes that in the doctrine of

³ Jüngel, another scholar influenced by Barth, writes: 'Apart from the access to himself which he himself *affords*, no thinking will ever find its way to him, (Jüngel 1983:158, emphasis Jüngel).

⁴ This point is made by Torrance in several places, e.g. Torrance 1996a:13.

God it is the ‘knowledge of God in Christ which governs all’ (Torrance 1959: lxxiii).⁵

Torrance nowhere presents arguments or evidence for this central presumption of his theology, namely that God has revealed himself in Jesus of Nazareth. His is a work of systematic theology not of apologetics. Jüngel writes that Christian theology must begin with a presumption, a ‘presumable presumption’ of God’s self communication (Jüngel 1983:161f); and that self communication is in Jesus (Jüngel 1983:155). Torrance’s doctrine of revelation is an exploration of the implications of this basic presumption of Christian theology and an exposition of its implications for the relationship between scientific and theological knowledge. We will also explore the implications of Torrance’s Christologically founded theological epistemology for all human ways of knowing.

1.2.2 The epistemological significance of the homoousion

The summary of Christian doctrine articulated in the Nicene Creed (more properly the Niceno-Constantinopolitan Creed) of 381CE is important to Torrance’s theology. He often refers to the creed and his exposition of patristic theology (Torrance 1988a) is organised as a commentary on this statement of belief. Those theologians of the fourth century associated with the creed are also important to Torrance. Torrance regards the creed as ‘the fruit of Eastern Catholic theology’ (Torrance 1988a:2) the decisive formulation of the Christian Trinitarian doctrine of God (Torrance 1994b:4).⁶ The Niceno-Constantinopolitan Creed can claim to be the most universally accepted creed (Leith 1963:32) and for centuries has been used in the liturgies of Roman Catholic, Protestant and Orthodox churches (though the orthodox omit the *filioque*

⁵ Cf. Torrance 1996a:3. We see very similar themes and a similar approach to revelation in Torrance’s earlier writings as we find in his later and more developed works.

⁶ See also Torrance’s introduction to the collection of essays *The Incarnation*, Torrance 1981b:xi-xxii).

clause). The universality of the Nicene formulation of Christian doctrine is one reason why it is important to Torrance's theology. For many years he has been involved as a Church of Scotland representative in ecumenical dialogue with Roman Catholic and especially Orthodox churches.⁷ While not universally accepted, the creed remains the closest thing to an official statement of the Christian faith which transcends individual churches and confessions.

The roots of Torrance's doctrine of revelation are found in the patristic understanding of the nature of Christ and of his relation to the Father.⁸ Of particular influence on Torrance's thought is the Nicene doctrine of the *homoousion*, which states that Jesus is *homoousios tō patri* (Torrance 1988a:130).⁹ In his doctoral thesis Torrance writes that Jesus Christ is 'in his own person all that God is in his saving relation to mankind' (Torrance 1948:59). The implication of the *homoousion* for the doctrine of revelation is that what God is towards us in Christ he is eternally in himself; that he is of one and the same being as the Father (Torrance 1988a:124).¹⁰ For Torrance the essence of the gospel is the ontological relation of being and action between the Father and the incarnate Son,¹¹ which ultimately concerns the relation of the economic Trinity and the immanent or ontological Trinity. This emphasis in Torrance's theology may be compared with Barth's insistence on the unity of act and being in God. In the *Church Dogmatics* Barth states that 'God is who He is in His works' (Barth 1957:260).¹² Furthermore, Torrance argues that if Christ is not of one being with the Father, then

⁷ See the biographical essay by Torrance's brother David in Colyer ed 2001b:22-24.

⁸ In the text of this thesis the words 'Father, Son, Holy Spirit, God, Trinity and Christ' are capitalised in order to emphasise the transcendent nature of God.

⁹ Cf. Seng 1992:341.

¹⁰ Cf. Barth 1975:438.

¹¹ Cf. Barth 1957:51: 'The revelation of God... is the disposition of God in which He acts towards us as the same triune God that He is in Himself, and in such a way that, although we are men and not God, we receive a share in the truth of His knowledge of Himself'.

¹² See the whole section in Barth 1957:257-321.

God cannot be known (Torrance 1962:115, cf. 1988a:133). In his exposition of Barth's early theology Torrance writes that in Jesus we meet God 'face to face'; in Jesus we truly know God. Authentic revelation depends upon the unity of act and being of the Father and the incarnate Son, therefore Torrance argues that the *homoousion* tells us that what God is in Jesus Christ in time and in history he is in himself eternally (Torrance 1988a:136). He also writes that: 'there is no dark unknown God behind the back of Jesus Christ' (Torrance 1988a:135). Clearly in Torrance's thought, founded on classic Christological doctrine, what God reveals of himself is normative for the content of Christian theology; but is divine revelation in Christ normative for theological epistemology? Torrance argues that it is, but a close reading of his theology points to other sources of revelation which are both distinct from and related to revelation in Christ.

Torrance follows Barth and Mackintosh when he argues that all authentic knowledge of God comes by divine self-revelation. He asserts that is impossible for God's creatures to know him unless God wills it (Torrance 1996a:13).¹³ Torrance formulates his doctrine of God not by speculating on what God might be but on what God has shown himself actually, concretely and historically to be. We have noted that God's self-revelation in Jesus is the foundation of Torrance's theology.¹⁴

Revelation is one-directional: from God to humanity. It is an act of divine sovereignty which breaks into life and calls human knowledge into question (Torrance 1996a:19). Torrance argues that any knowledge of God which is independent of God's desire to be known and of his act of self-revelation is impossible (Torrance 1999:24). Molnar restates Torrance's argument that we can only know God from God when he

¹³ Cf. Mackintosh 1929:65.

¹⁴ See Molnar 2002:11-13 who cites Torrance to support his argument that 'True knowledge of God ... could take place only through Christ who was and is one in being with the Father' (Molnar 2002:11).

writes that any theology which does not come from God to humanity is ‘arbitrary’ (Molnar 2002:12). Torrance argues that God accommodates his self-revelation to our finite and creaturely minds which he has created; thus God’s actual self-revelation sets the boundaries of Christian theology (Torrance 1999:24).

God’s decision to be known to humankind lies at the heart of Torrance’s epistemology. His is an epistemology of grace rooted in the reformed tradition (Torrance 1969a:299f). Torrance formulates his doctrine of revelation in such a way that he rules speculation in theology out of court. It is for this reason that Torrance, like Barth, begins his approach to the doctrine of God and the doctrine of revelation, not with the possibility of divine revelation but with its actuality; not with how God may conceivably reveal himself but with how in fact he has revealed himself; he begins with *a posteriori* knowledge. For Torrance, as for Barth, epistemology follows ontology (Torrance 1969a:206).¹⁵ Here Torrance also follows Mackintosh.¹⁶ Torrance argues that our knowledge of God in the incarnation is certain because Jesus Christ is the place in space and time where humanity is able to share God’s knowledge of himself and know him and believe in him ‘in accordance with his own self-interpretation’ (Torrance 1996a:17).

For Torrance the Christian doctrine of God is necessarily Christocentric, for it is in Jesus Christ that God has shown himself as he really is.¹⁷ Moreover the incarnate Jesus Christ, of one substance with the Father, is the place in space and time where the transcendent God chooses to be known and believed in as Father (Torrance 1969b:15-18). The implication of the doctrine of the *homoousion* for Christian theology is that revelation in Christ is normative for our knowledge of God. This insight governs

¹⁵ Cf. Morrison 1997a:150.

¹⁶ Cf. Mackintosh 1929:65f.

¹⁷ Cf. Mackintosh 1929: 82 who writes: ‘what we learn of God by looking at Jesus is, or ought to be, determinative of *all* our religious beliefs’.

Torrance's theology.¹⁸ However, the argument of this thesis is that revelation in Christ is normative for the content of Christian theology and not necessarily for the locus of divine self-revelation as we will see in our discussion of revelation in scripture.

Torrance comments upon the importance of Rahner's approach to the doctrine of the Trinity which also begins with God's self communication in Jesus Christ (Torrance 1994b:78, cited in Molnar 1997:288). Molnar argues that an approach to Trinitarian theology which begins with God's self-revelation in the incarnation affords a rapprochement between systematic and biblical theology (Molnar 1997:288). This is also true of Torrance's theology. His emphasis on the incarnation as the point in creation where we have access to the reality of God brings together the disciplines of biblical theology and systematics. Not only does Torrance insist upon the centrality of God's self communication in Christ for all of our knowledge of him; he also insists that the historical facts of Jesus life must be kept in their theological context.¹⁹

Torrance focuses on the Christological foundation of theology; to speak of God in ways not grounded in divine self-revelation is to speak in abstract and from a point external to God. Torrance speaks and writes of God only in ways grounded in God. To attempt to speak of God from some point outside of God is to have no point of contact with the reality of God by reference to which our understanding of God can be tested; instead we are 'flung back upon ourselves' (Torrance 1988a:51) and our theology is grounded in ourselves and our own experience. The problem that Torrance's thoroughgoing Christological grounding of all theology faces is the charge of fideism, that he appears to do nothing more than assert the actual revelation of God in Christ as a

¹⁸ Torrance writes: 'There is no God except He who has shown us His face in Jesus Christ, so that we cannot go behind the back of Christ to find God, or know anything about Him apart from this God, for there is no other God apart from this God. Here then it is not some prior ontology, but Christology which is all - determining in our knowledge of God' (Torrance 1959:lxviii. cf. Torrance 1996a:14).

¹⁹ See section 1.8.

doctrine to be accepted without question or external support. However, we will see that Torrance does offer support for his Christological objectivism; this support does not come in any prior arguments for the reality of God's self-revelation in Christ as such arguments would fail to pass Torrance's test of a properly scientific epistemology which as we will see is *a posteriori*. The support for his position comes when he demonstrates that his theology, grounded as it is in the presupposition that God has truly revealed himself in Christ, correlates well with an understanding of reality derived from the natural sciences. His justification is posterior not anterior. His theology functions like a hypothesis in the natural sciences which he tests by examining its congruence with the model of reality derived from the natural sciences.

1.2.3 The influence of Barth on Torrance's Christocentric theology

Torrance develops his doctrine of revelation from his engagement with Barth. Like Barth he argues that knowledge of God comes by an act of divine self-revelation and is a miracle of grace. Torrance writes about the changes forced upon Barth and his approach to theology by the events of the First World War and also by his experiences as a pastor and preacher in Safenwil. In the pro-war, nationalistic stance of his teachers Barth saw the bankruptcy of liberal theology and its consequent inability to take a prophetic and critical stance at that crucial time; and so he rejected liberal theology in favour of the strange, alien world of the Bible.²⁰ It was in his teachers' attempt to find a natural point of contact between humankind and God that Barth located the problem of liberal theology; therefore Barth rejected this path from nature to grace which begins with human beings on earth and works towards God in heaven.

²⁰ See Barth 1928:28–50.

This is the context for Barth's rejection of natural theology. Torrance understands Barth to mean the rejection of *independent* natural theology.²¹ In his lectures on dogmatics delivered at Göttingen in 1924 - 1925 Barth expands on what he means by revelation (Barth 1991:87-95). For Barth revelation is revelation of God; God revealing himself to us not simply filling in the gaps in our knowledge about him. Revelation means knowing God not merely knowing about God. Barth's chief objection to natural theology is its independence of God (Barth 1991:92f); when we understand that by revelation Barth means that God is the content of his revelation (Barth 1991:88) then we can see that it is meaningless to talk about independent knowledge of God. According to Barth independent knowledge of God is human arrogance, an assertion of humanity over against God (Barth 1991:93). For Barth knowledge of God comes only from revelation in Christ and the same is true for Torrance. Mackintosh also rejects the idea of independent natural theology. Of God's revelation in nature Mackintosh argues that it is not natural theology nor is it natural religion for it did not emerge in a vacuum; rather it is to be regarded as an aspect of revelation (Mackintosh 1929:70). This understanding of God's act self-revelation in nature is how Torrance develops what he regards as a Barthian natural theology.²²

According to Torrance independent natural theology is the attempt to know God in theory while bypassing him in practice. This is what Torrance means when he speaks of our attempts to know God behind the back of God (Torrance 1959:lxiii). Torrance cites Irenaeus' principle that '*without God, God cannot be known*' (Torrance 1996a:13, emphasis Torrance). We will see that Torrance argues that traditional natural theology

²¹ See the preface to the 1998 edition of *Space, Time and Resurrection*, Torrance 1998:ix-x in which Torrance reports his last conversation with Barth in the summer of 1968, some months before Barth's death, in which he reported that he explained his own position on natural theology to Barth, who concurred with Torrance's development of his thought. See Chapter Three.

²² See Chapter Four.

as a preamble to faith is an attempt at an independent way of knowing of God which our actual knowledge of God derived from revelation renders invalid and unnecessary (Torrance 1999:33f).

Torrance argues that Barth posits an epistemology based on the doctrine of grace. This epistemology of grace carries with it an implicit anthropology which makes natural and human knowledge of God impossible.²³ Torrance writes that God's self-revelation in Christ penetrates through the barriers built by our estrangement from God. At the incarnation Christ forged a link between God and humanity (Torrance 1999: 85f). This language of human estrangement from God is evidence of Torrance's well developed theological Calvinist anthropology which undergirds much of what he writes about divine revelation.²⁴ In one of his earliest works we find a rejection of natural theology based on revelation in Christ and Calvin's anthropology. He emphasises the point that we can know God only as he has given himself to be known by us. The reality of revelation precludes speculative metaphysics as an approach to God for he argues that 'any attempt to know God out of the perverted order of nature can only partake of its perversity' (Torrance 1952:164).

It is only by paying attention to his self-revelation to Israel and in Christ that we can know God; but when we have come to know God in his self-revelation we are then able to recognise him in creation (Torrance 1952:168). Torrance argues that this is the basis of legitimate natural theology which does not try to circumvent God or attempt to know God against his will. This non independent natural theology forms the basis of Torrance's dialogue with the natural sciences in his later works.

²³ He understands human nature as fallen; one consequence of the fall is mental alienation, see Torrance 1996a:41.

²⁴ See section 1.4.

1.2.4 Discussion

The foundation of the argument of this thesis is that Torrance sees a fundamentally gracious aspect to all human knowledge of God. Any knowledge of God which is not a gracious self-revelation is not truly knowledge of God but is instead abstraction or speculation. Torrance makes the basic presumption that it is in Jesus Christ that God has in fact revealed himself in time and space. This is one of the fundamental presumptions of his theology and as such he presents no prior arguments in support.

Torrance argues that it is only possible to come to true knowledge of God by an act of divine self-revelation and the working assumption of his theology is that the place in the universe where God has actually revealed himself is in the life and person of Jesus Christ. More basic to Torrance's theology than revelation in Christ is the necessarily gracious aspect of all our knowledge of God. It will be shown that Torrance's theology points to actual revelation in Scripture and nature, and that from this doctrine of revelation there emerges a realist epistemology which forms the basis of dialogue with the natural sciences and is applicable to all human ways of knowing.

1.3 Jesus Christ: God's revelation in time and space

1.3.1 God and space

Torrance writes that as God's self-revelation in history Jesus Christ is therefore God's self-revelation in the universe of space and time (Torrance 1969b:10f). The nature of space and time is of material importance for Torrance's understanding of revelation. Torrance considers the nature of space and God's relationship to space both as its creator and as the Son of God incarnate within the universe. He knows from his

engagement with the physical sciences, especially from Einstein's theories of relativity, that space and time are not simple entities that can be accepted as inert background to events within the universe (Torrance 1969b:2).

In his survey of the nature of space and time as they relate to the incarnation, Torrance begins, not with scientific theory, but with the theology of the Nicene theologians as they attempt to understand God and his actions as related in the Scriptures. Torrance argues that the key Christian doctrines of creation and incarnation forced the theologians of the early church to reassess their understanding of the spatial universe in its relation to God. Embedded within the creed are spatial elements which, according to Torrance, are not simply symbolic or metaphorical; they are indicative of reality.

In trying to understand the relationship between God and the universe Torrance begins with the doctrine of God as creator. According to the creed God is the 'maker of heaven and earth, of all that is, seen and unseen'.²⁵ The first thing that the creed tells us is that God relates to the universe as its transcendent creator. Torrance notes that God's act of creation includes the creation of time and space and he concludes that God's relation to space 'is not itself a spatial relation' (Torrance 1969b:2). He refers to Athanasius who said that it makes no sense to ask whether God is with or without place.²⁶ The creed also states that God the Son 'came down from heaven' at the incarnation. Again we must not think that a journey through space is intended. Heaven as God's dwelling must not be thought of in spatial terms. Torrance comments that 'it is

²⁵ The translation of the Nicene Creed is found in *Common Worship* published in London for the Archbishop's council in 2000, and is found on page 173. The translation is taken from the ELLC text 1988, see *Common Worship* page 819 for more information.

²⁶ Torrance does not supply the references to Athanasius (Torrance 1969b:2), but in a later work he supplies references to *Contra Arius*, 1.2,11,13 (Torrance 1988a:87f, note 49).

no more a spatial concept than God dwelling in Light... The relation between the actuality of the incarnate Son in space and time and the God from whom He came cannot be spatialized' (Torrance 1969b:3). He notes that the creed does not conceive of a spatial or temporal but of a creative relationship between God and the universe (Torrance 1969b:3). However, when the creed speaks about the incarnation it intends us to understand that in Jesus God actually existed within space and time, and that in the incarnation God interacted personally with the material creation (Torrance 1969b:3).

The question of how God relates to the space-time universe became a problem for the early church and so a model of space that was adequate and appropriate to the doctrines of creation and incarnation had to be developed. The Nicene theologians arrived at a '*relational concept of space*' (Torrance 1969b:4, emphasis Torrance) which was markedly different from that of contemporary Greek thought in which space was regarded as an inert container. However, within Greek thought there were other models of space apart from the container view; such as the Stoic idea of space as 'room forged for itself by an active agency' (Torrance 1969b:10). Torrance argues that this Stoic notion which is close to the Biblical understanding of space helped the Nicene theologians to understand space from the starting point of creation and incarnation (Torrance 1969b:10).

The traditional Greek container view of space was rejected by the Nicene theologians in favour of a model developed from the doctrine of *creatio ex nihilo* which conceives God to be both transcendent and prior to all time and space (Torrance 1969b:11). Torrance argues that as components of the created universe time and space must be regarded not as a container in which events happen but as relations within creation. He writes that:

[t]hey are orderly functions of contingent events within it. Time is in creation, creation is not in time. ... God Himself, then, cannot be conceived as existing in a temporal or spatial relation to the universe. If traditional Greek concepts are to be used, it must be said that God is not contained by anything but rather that He contains the entire universe, not in the manner of a container, but by His *power* (Torrance 1969b:11, emphasis Torrance).

According to Torrance everything that exists in the universe, visible or invisible, is comprehended and encompassed by God. There is no empty void because God is in all places and in all things; even space and time themselves must be understood with reference to the power and activity of God (Torrance 1969b:11f). He cites Origen who holds that the transcendent God limits the universe in that he comprehends all things. In doing so he gives them not only a limit but also rationality; for that which is unlimited is indeterminate and incomprehensible (Torrance 1969b:12). Torrance argues that this ‘creative comprehension’ of the universe by God makes it rational by which he means reasonable and comprehensible. Therefore the model of space inherent in any doctrine of creation has cosmological and epistemological significance.²⁷ Torrance then relates his model of space to the incarnation whereby the creator establishes a rational relationship between himself and the universe and he does this within the created universe (Torrance 1969b:13). We see the central and foundational significance of the incarnation in Torrance’s epistemology: that in Jesus Christ that we have access to the creator within creation.

1.3.2 Space as relation

Torrance develops his understanding of the incarnation in terms of Einstein’s model of space. According to Torrance Origen develops a relational model of space from the Stoic notions of space and body; this provided the essential background to

²⁷ Torrance argues that: ‘[t]he rationality of the universe is ... grounded in the creative comprehension of it by God’ (Torrance 1969b:12).

Athanasius' work on the relationship between space and God (Torrance 1969b:13f).

Torrance argues that the key to understanding the relationship between God and space in Athanasius and the Nicene theologians are the doctrines of the *homoousion* and incarnation: that Jesus Christ who exists as part of the created order is 'of one substance' with the Father. The living and active Word of God through whom all things were created and who comprehends and brings rational order to the universe (Torrance 1969b:12) is of one being with the Father. Jesus Christ binds creation into relationship with God; and this same living Word of God becomes part of the creation by his incarnation and yet in doing so he does not cease to be God nor does he cease to be one with the Father (Torrance 1969b:14). Following Athanasius Torrance argues that the Son is a mediator between the Father and creation not only in terms of theology but even spatially. He is theologically and spatially the mediator (Torrance 1969b:15).

Torrance employs another patristic term, *perichoresis*, to elucidate the relationship between the Father and creation mediated through the Son. He contends that *perichoresis* or coinherence,²⁸ the doctrine that the persons of the Trinity mutually indwell one another, means that when we argue that God the Son became incarnate within the creation without ceasing to be God we are actually arguing that Jesus Christ is the 'place' in time and space where we meet the Father (Torrance 1969b:16). This is of great epistemological significance and Torrance draws out the conclusions for our

²⁸ Torrance writes that *perichoresis*: 'was first used by Gregory Nazianzen to help express the way in which the divine and human natures in the one person of Christ coinhere in one another without the integrity of either being diminished by the presence of the other. It was then applied to speak of the way in which the three divine Persons mutually dwell in one another and coinhere or inexist in one another while nevertheless remaining other than one another and distinct from one another' (Torrance 1996a:102).

knowledge of God.²⁹ He argues that the relation between the incarnate Son and the Father is:

the relation that bridges the separation ... between God and man and supplies the epistemological basis for all theological concepts, and therefore for our understanding of the relation between their creaturely content and the reality of God Himself. It is in Christ that the objective reality of God is intelligibly linked with creaturely and physical forms of thought, so that the latter may be adapted and given an orientation enabling them to direct our minds to what God really makes known of Himself, although in view of His infinite nature they will not be able to seize hold of him as He is in Himself (Torrance 1969b:17).

We will see in Chapter Three that Torrance rejects absolutely any notion of a logically necessary bridge between creation and God; however, he argues that there is an actual bridge and that this is Jesus Christ. Torrance argues that, as the place within creation where we meet the Father, Jesus Christ is the bridge between the creation and God and between our inadequate ways of understanding the reality of God and God as he is eternally in himself. This means that the language and concepts used in theology are part of the creation and are therefore inadequate to the reality of God and Torrance comments that if ‘they are to be used to speak of God they must be stretched and extended beyond the range of the phenomenal world for which they were formed’ (Torrance 1969b:16, 19); yet if the concepts and language used by theology are completely distorted from their everyday use in order to speak of God then they become meaningless. Torrance argues that although the theological concepts are inadequate and creaturely, they still enable us to grasp something of the reality of the God who far transcends all our thoughts and language about him. They direct us to that which is beyond. Our language may be inadequate but it can also be truthful as far as it goes; it can point to a truth which far surpasses it. As Torrance writes:

²⁹ We will also see that he uses the same language of the Bible in revelation. See sections 2.3.3 and 2.3.6.

Theological statements operate ... with essentially *open concepts*—concepts that are relatively closed on our side of their reference through their connection with the space – time structures of our world, but which on God’s side are wide open to the infinite objectivity and inexhaustible intelligibility of the divine Being (Torrance 1969b:21)

This bridge between theology and divine reality which is the epistemological basis for theological concepts and language is Jesus Christ who is God in the space and time of creation but who is nevertheless of one being with the Father. The relationship between the Father and the Son bridges the gulf that exists between creation and God, between the relatively closed creation on our side and the open infinity that is God who bounds the universe of space and time. The incarnate Son grounds theology in the reality of God. It is for this reason that Torrance’s doctrine of revelation, including revelation in Scripture and nature, is Christologically founded.

Torrance’s linking of theology to the reality of God through the incarnate Son is equivalent to Barth’s ‘analogy of faith’. Both theologians reject any natural or logically necessary ‘bridge’ between the world and God which would allow theological language to speak meaningfully about God. Just as Barth rejects the traditional concept of the ‘analogy of being’, and substitutes for it his analogy of faith, so Torrance forges a link between inadequate human language and divine reality through Jesus Christ, the place in the rational, created universe where we meet God and where God has made himself known.³⁰

Torrance has developed a model of space which is founded upon the doctrine of *creatio ex nihilo* which he relates to the general theory of relativity. According to Torrance space is neither a void nor an inertial container; it is a function of the

³⁰ For a definition of Barth’s *analogia fidei* see Hunsinger 1991:283, note 2; see Barth 1975:165f, 227-247.

relationship of objects to one another and to God within creation. God as the source and limit of creation confers order and rationality upon the created universe. Within creation Jesus Christ is the place in history, time and space where we know and relate to the Father. Torrance has made a clear statement of the epistemological significance of the incarnate Son Jesus Christ. Christ, who is of one being with the Father, is the source of all theological knowledge; and as the bridge between the unbounded God and the relatively closed universe he grounds theology in the eternal reality of God. When in later chapters we examine Torrance's development of Barth on natural theology and his own dialogue with the natural sciences we will see how far he is faithful to his epistemological principle developed from his understanding of revelation in Christ.

1.3.3 Discussion

An important aspect of Torrance's theology is that he takes seriously the nature of space and time as disclosed to scientific investigation. Instead of treating the space time universe as an inert container in which events simply happen he attempts to grasp the implication of the theory of spatial relativity for the doctrine of revelation. He attempts to correlate theological discourse about creation with scientific discussion of the universe, and in doing so he demonstrates the relational understanding of space in the theologians of the early church.

In terms of the gracious aspect of all knowledge of God Torrance's discussion of spatial relativity is important for two reasons. As the incarnate Son who is of one being with the Father Jesus Christ is the place within time and space where men and women who are themselves part of the created universe are able to relate to the transcendent creator; Jesus of Nazareth is the mediator, the place where we are able to meet God. Moreover, as the mediator between the transcendent creator and the creation, Jesus

Christ grounds theological discourse in the reality of God. This means that in Jesus Christ, who is part of the contingent creation and who is also of one being with the Father, the reality of God is brought into relation with the physical universe, bridging the separation between God and humanity and providing an epistemological foundation for theological language and discourse.

1.4 Torrance's theological anthropology

We have noted that Torrance operates with an implicit though well developed theological anthropology.³¹ This anthropology, founded on Calvin's writings, is expounded by Torrance in one of his earliest works (Torrance 1952). Although he only writes explicitly about theological anthropology in this early study of Calvin there is a clear Calvinist approach in his later writings. While Torrance often interprets Calvin through his reading of Barth in his anthropology he is closer to Calvin than Barth. According to Torrance our human condition is not merely 'frail and finite' (Torrance 1996a:40); rather to be human is to be 'lost and damned' (Torrance 1990:228).

Torrance's anthropology is implicit in his Christology which is heavily influenced by Barth. Controversially, he follows Barth in arguing that it was our fallen and depraved human nature which Christ assumed in the incarnation.³² Torrance writes that humanity is in a state of conflict with God (Torrance 1992:8); the human condition is in rebellion against God and has consequently fallen into a state of darkness (Torrance 1996a:41). In his exposition of the incarnation we can see how Torrance views the extent of our fallen state. He writes that at the incarnation God has assumed:

³¹ See Section 1.2.3.

³² See section 1.7.2 for discussion of this point.

our fallen nature, our humanity diseased in mind and soul, our actual human existence enslaved to sin and subjected to judgement and death, precisely in order to save us in the very heart of our depraved condition in body and mind where we are [at] enmity with God (Torrance 1990:231).

Torrance emphasises our alienated mind in his description both of our fallen condition and in his argument that it was our fallen nature which God took in becoming human in Christ (Torrance 1956:116–127, c.f. Torrance 1990:231). When he became human Christ assumed our mental alienation from God (Torrance 1996a:41). He argues that at the incarnation Christ took on real, concrete and therefore fallen, human nature; not some ideal, abstract, or universal human nature. Nor did Christ assume human nature in its unfallen state; he experienced real, that is fallen, human nature.

For Torrance it is in the human mind that sin ‘had extended itself inextricably in human existence’ (Torrance 1990:231). The sin of the mind is pride or self elevation; while the paradox of grace is that when we try to elevate ourselves we fail and we fall; our elevation is found in humility. From Calvin’s writings Torrance takes the principle of elevation by abasement, founded on the actions of God’s mercy towards us in Christ (Torrance 1952:144f). He calls this a ‘soteriological inversion’ (Torrance 1952:145) brought about by the cross of Christ. This inversion must take place in our minds. When we know that we are nothing then we take our stand upon God’s mercy and precisely at that point we have truly risen (Torrance 1952:145). We can summarise Torrance’s theological anthropology by the Calvinist phrase: ‘total depravity’ or ‘total perversity’. This means that in our natural, fallen, state we are nothing; we are spiritually dead and thoroughly depraved. Our fallenness is nothing less than total, and so our need is for nothing less than new creation.

It is important that we understand why Torrance lays such an emphasis upon the total depravity of human nature. Torrance spells out not only the doctrine of total

depravity but also its context in Calvin's thought. He argues that Calvin reduces human nature to total depravity only because he wants to emphasise the absolute and total nature of divine grace (Torrance, Torrance and Torrance 1999:29). When Torrance writes that Calvin, 'refuses to enunciate a doctrine of sin apart from the doctrine of creation, and except in the context of the doctrine of grace' (Torrance 1952: 83), he could equally be writing of his own theological anthropology. The absolute nature of divine grace in Christ argues for a total fall (Torrance 1952:85).

There are epistemological consequences of the fall. The total nature of the fall means that in order to have any knowledge of God we need God's self-revelation as an act of pure supernatural grace. Apart from grace human nature, including the mind, is so totally perverted as to make knowledge of God impossible.³³ Total salvation in Christ by the total grace of God implies a total state of fallenness in our human condition apart from grace and apart from Christ; but we can speak of total depravity only in the context of grace. Torrance's anthropology is driven by his epistemology of grace. If all is done for us by Christ then we can contribute nothing either to our salvation or to our saving knowledge of God. It is fitting to Torrance's whole approach to theology that he begins with God in his grace not with humankind in its need. The movement in Torrance's theology as in his epistemology is always from God to humanity, from heaven to earth, and never vice-versa. Torrance's Calvinist anthropology, particularly his emphasis upon the alienated mind, has obvious implications for his epistemology. It helps to understand his emphasis upon divine self-revelation as the only possible way to knowledge of God. The impossibility of humanity knowing God apart from God's self-revelation leads Torrance to posit an epistemology of grace.

³³ Barth also developed his anthropology and his understanding of the doctrine of sin as a consequence of his doctrine of reconciliation, for according to Barth we can only see and understand sin in the light of God's action to deal with it (Barth 1956b:389-91).

1.5 Revelation: act and grace

1.5.1 Personal knowledge of God

In Torrance's theology revelation is an aspect of divine mercy and compassion, for without God there can be no knowledge of God (Torrance 1962: 40, 115; Torrance 1996a:13). Torrance's point is that grace is not only an object of theological enquiry it is also the only means of our knowing God. Torrance's theological epistemology is an epistemology of grace; for without God's act of self-revelation we are left with speculation. This is the basis of Torrance's disagreement with those theologies developed from Schleiermacher. According to Torrance revelation alone provides a sure starting point and a firm foundation for theology. Without revelation theology's foundations are built on sand. What Sykes writes of Barth is equally applicable to Torrance:

Barth's entire theological programme can be seen as the attempt to do justice to the autonomy of Christian dogmatics, to listen to the Divine Word, and to be obedient to what God alone, in his sovereign freedom, makes possible by his self-revelation' (in Barth 1986:7).

Torrance argues that the idea of grace as a theological method is found in the writings of the protestant reformers. In his first systematic exposition of reformed doctrine Torrance writes that by revealing himself in Christ God draws his creatures into conversation and into relationship with himself (Torrance 1959: lxxii). We find in this early work Torrance writing of knowledge as relationship, a theme which becomes of significance in his later work. There has never been any hint in Torrance's theology of revelation as primarily revelation of propositional truths about God brought together to form doctrines and dogmas; for him knowledge is always personal knowledge of God. In Torrance's theology knowledge of God is always primarily relational and it is

only as a corollary that it is propositional.

In this we see the influence of Polanyi even on Torrance's earliest works. He depends on Polanyi for certain aspects of his claim that theology is to be regarded as a science. Polanyi argues that science is an art which involves the scientist personally; it involves both skill and personal commitment to the object of enquiry. Polanyi argues that this is the case even for the physical sciences (Polanyi 1962:300-303).³⁴ It is not clear exactly when Torrance first encountered Polanyi's writings. McGrath suggests that it could have been as early as 1946 (McGrath 1999:230). This is supported by the fact that although *Theological Science* (Torrance 1969a), in which Polanyi's influence on Torrance's understanding of scientific method can be clearly seen, was not published until 1969 it was based on lectures delivered ten years earlier.

Torrance's argument that knowledge of God is personal knowledge supports his insistence on the Christological foundation of all Christian theology for Jesus Christ is the objective place within creation where God is to be met.³⁵ Torrance draws a helpful distinction between objective knowledge and objectification within knowledge. Objective knowledge of God is knowledge of God as he give himself to be known thereby remaining the sovereign of all our knowledge of him (Torrance 1969a:300); objectification is an attempt to subject God 'to our natural habits of thought and forms of knowledge' (Torrance 1969a:300).³⁶ It is for this reason that Torrance argues that properly objective knowledge of God comes by grace alone (Torrance 1969a:299f) and by this he means through Christ alone.

³⁴ See Torrance 1969a:93.

³⁵ See section 1.3.2.

³⁶ Cf. Torrance 1969a:279f.

*1.5.2 Torrance's critique of Schleiermacher*³⁷

Torrance contrasts the approach to theology exemplified by Barth and Mackintosh, the way of grace and divine self-revelation in Jesus Christ as the means to knowledge of God, with nineteenth century liberal theology which sought to found its knowledge of God on human nature and experience. Schleiermacher sought a natural capacity within human nature for God and he found this in the act of faith. Torrance quotes with approval Barth's comment that Schleiermacher only speaks of God 'by speaking of man in a loud voice' (Torrance 1962:57),³⁸ when he attempts to ground theology in our natural human capacities. For Torrance theologians such as Schleiermacher always end up reducing theology to anthropology, and spirituality to psychology. He writes:

what Schleiermacher and his contemporaries and followers were concerned with was not the living God, holy and transcendent above and beyond man who condescends to him in his compassion, not an Infinite above man and really coming to him, but an Infinite within the finite, an Eternal immanent within the human spirit, who cannot be disentangled from the religious self-consciousness for it is one with it and native to it, and indeed cannot be disentangled even from man's consciousness of the world (Torrance 1962:57; c.f. 59,61).

Torrance argues that in his debate with Harnack in 1923 Barth was trying to do justice to the idea of God's self-revelation, rather than the discovery of our human religious potential (Torrance 1962:81).

Barth wrestled with Schleiermacher throughout his life reading and re-reading the man he regarded as the greatest nineteenth century theologian. He often rethought his own position in dialogue with Schleiermacher. Barth's main argument is that a faith

³⁷ See also Torrance's article 'Hermeneutics according to F. D. E. Schleiermacher' Torrance 1968:256-267.

³⁸ Here Torrance is quoting from *The Word of God and the Word of Man* (Barth 1928:196).

like Schleiermacher's which lies in human subjectivity can find that its statements about God are too easily collapsed into statements about humanity.³⁹ Barth's early writings on Schleiermacher contain the sort of critiques that we find in *The Word of God and the Word of Man* quoted by Torrance; however, he began to reassess Schleiermacher's theology when he began lecturing at Göttingen in 1923/24. Webster sounds a note of caution in reading Barth's assessment of Schleiermacher only in terms of his early antagonism. He argues that Barth's relationship to Schleiermacher is complex and that this complexity is often overlooked, and his engagement with Schleiermacher reduced to 'a few sloganised antitheses' (Webster 2000a:37). Torrance's interpretation of Barth and his critique of Schleiermacher based on that interpretation falls into this category and while his interpretation may be true to Barth's early writings he cannot be said to do justice to his position after Göttingen.

The point of Torrance's critique of Schleiermacher, even if it is unfair to Schleiermacher himself, is his argument against any theology which begins in human nature or capacity and which attempts to build a bridge from humanity to God. Torrance's approach to epistemology is rooted in God's being and action and not in human nature or endeavour.

1.5.3 The vicarious humanity of Christ

In Torrance's theology knowledge of God is personal knowledge and therefore his theological epistemology is founded on God's decision and act to make himself known. He argues that God's self-revelation is unexpected and unlooked for: there is nothing in human nature that could have prepared us for it. God's self-revelation in Christ is not from the known to the unknown (the way of liberal theology) but from the

³⁹ This is the argument of the nineteenth century materialist philosopher Feuerbach; see Barth's introductory essay in Feuerbach 1957:x-xxxii.

unknown to the known (the way of revelation). Torrance argues that God's revelation is new and strange; it is completely different from our human conceptions and endeavours (Torrance 1996a:19).⁴⁰ The gap between God and humanity cannot be bridged or crossed from our side; no religious consciousness or perception can bridge the gulf between the word of God and human words (Torrance 1962:102f).

Writing on the vicarious nature of Christ's humanity Torrance draws out the radical implications of the doctrine of grace for the human response to God. He argues that Christ as true God and true man offers to God on our behalf a proper and perfect human response to divine grace (Torrance 1960a:15f). We find a similar understanding in Barth for whom Jesus Christ is the 'inclusive human being' (Hunsinger 1991:128). Barth emphasises objectivity of revelation and salvation in Christ. Jesus' perfect response to the Father has implications, not only for Christian believers, but for all people.⁴¹ Hunsinger calls this universalising tendency in Barth a 'soteriological objectivism' (Hunsinger 1991:129). There is a corresponding Christological objectivity in Torrance's understanding of salvation. Christ's response and obedience to the Father are for us and on our behalf; Christ's humanity, including his response to the Father, is vicarious (Torrance 1960a:81; Torrance 1992a:76f, c.f. 62f).

The doctrine of Christ's vicarious humanity is one of Torrance's most important contributions to Christology and is found in his early and late writings. He argues that:

Jesus Christ is not only the Word of God become flesh, He is also Believer, but Believer for us, vicariously Believer, whose very humanity is the embodiment of our salvation.... That He stood in our place and gave to God account for us, that He believed for us, was faithful for us, and remains faithful even when we fail Him again and again, is the very substance of our salvation and the anchor of

⁴⁰ We see here echoes of Barth's early writings, especially his essay 'The Strange New World Within The Bible', Barth 1928:28ff.

⁴¹ See Hunsinger 1991:128–135; c.f. Barth 1958:271–275.

our hope. (Torrance 1960a:81f).⁴²

According to Torrance Christ has fulfilled the covenant from both the human and the divine side. He is the unconditional self-giving of God to humankind and the divinely provided human response to this gracious self-offering.

Despite this emphasis on the vicarious nature of Christ's response to the Father Torrance insists on the importance of our response to God. Like Barth he wrestles with the problem of proclaiming the gospel of absolute grace and still insisting upon the necessity of a human response to divine grace (see for example Torrance 1992a:92-98). Torrance writes that the 'all Christ' of grace does not mean nothing of humanity (Torrance 1992a:95). A personal response is still necessary. There are universalistic implications of the epistemology of grace which Torrance, like Barth, struggles against.

Barth's position on the efficacy of grace is that Jesus Christ as the representative man has made the response to God's grace for all people and the salvation wrought by Christ is effective for all (Barth 1958:528). Nevertheless, he also writes about the 'basic perversion of the human will' which brings a person to 'enmity against the grace of God directed to him' (Barth 1958:454). Barth conceives of the 'terrifying ...impossibility' of the rejection of grace (Barth 1958:535). Human disobedience to the command of grace is to Barth 'inconceivable, inexplicable and impossible' (Barth 1958:535) yet Barth avoids a dogmatic statement of universalism by accepting this impossible possibility.

In Torrance's theology there is a different nuance. He argues that the grace of God must be appropriated and consequently he develops his understanding of the vicarious humanity of Christ to include repentance; at Jesus' baptism we see a vicarious

⁴² C.f. Torrance 1992:76f 'Jesus Christ constitutes in his own self-consecrated humanity the fulfilment of the vicarious way of human response to God promised under the Old Covenant, but now on the ground of his atoning self-sacrifice once for all offered this is a vicarious way of response which is available for all mankind' (Torrance 1992:76f).

act of repentance, our nature being so fallen that we are unable to do even this for ourselves (Torrance 1992a:85f). Torrance exhorts the church to proclaim, not conditional grace, but the unconditional grace of God in Jesus Christ (Torrance 1992a:93); and to do this is to invite people to put their trust in Christ, not only as God the redeemer, but also as man making the perfect response to God. Our response to the unconditional grace of God is not our response instead it is Christ within (Torrance 1992a:98). We appropriate the unconditional grace of God by always trusting in Christ's response to God and not our own. For instance when we pray we know that our prayers are worthless and powerless; all that we can do is to rest in Christ's vicarious prayer (Torrance 1992a:88f).

Torrance, like Barth, has a radical doctrine of the grace of God in his reconciling revelation. Both theologians regard redemption as objective, as something done for humanity by Christ. Redemption is efficacious and universal in its application. Yet also like Barth, Torrance resists the logical next step of universalism. He argues that the unconditional grace of God shown in Jesus Christ must be appropriated by a radical act of trust in Christ.

1.5.4 Discussion

Torrance argues that the doctrine of revelation in Christ places human knowledge of God on a firm foundation. In this he contrasts the revealed theology of Barth and the reformers with the approach of Schleiermacher. However, his understanding of Schleiermacher's position lacks the depth and subtlety of Barth's interpretation and Torrance can be said to be arguing against a caricature rather than the developed theology of Schleiermacher himself. What is clear in his attack on theologies which are founded on human experience and nature rather than on divine self-revelation

is that for Torrance the reformed notion of grace is much more than an element of Christian theology; it is the method of reformed theology. Central to his understanding of revelation is that what God reveals is himself and not something about himself. Revelation is encountering or more properly being encountered by God, and according to Torrance this occurs in Christ alone; for him revelation by grace and revelation in Christ are used interchangeably.

This is further evidence of the centrality of grace in Torrance's theology in his exposition of the vicarious humanity of Christ. He argues that not only is Jesus Christ the personal revelation of God to humankind, he is also and at the same time the vicarious human response to divine grace. Jesus Christ is the place in the universe of space and time where divine revelation and human response meet. Instead of following his argument to its universalistic conclusion Torrance argues for a human response of trust in Christ's vicarious response.

1.6 Revelation as reconciliation

1.6.1 Incarnation and revelation

Torrance argues that revelation is an act of the grace of God, a personal revelation in which God reveals himself (Torrance 1999:85). This self-revelation of God is not general and universal, it is particular and historical. There is no logically necessary reason why God should reveal himself in Christ therefore there can be no prior justification for Torrance's presumption that God does reveal himself in Christ. This is a fundamental working assumption in Torrance's theology. We will see that all human disciplines, including the natural sciences, operate with their own fundamental assumptions which can only be justified *a posteriori*, and so Torrance's presumption

that God has in fact spoken in the life of Christ does not necessarily invalidate his theology. Torrance's doctrine of revelation assumes the Chalcedonian understanding of the nature of Jesus Christ as both fully God and fully human in hypostatic union. This is why there is such an emphasis in Torrance's writings on the unity of revelation and reconciliation in Jesus Christ, for in the one person of Christ divine and human nature are united. The incarnation is an act of atonement and reconciliation between God and humanity; it is also the revelation of God in human flesh (Torrance 1988a:114). The aim of revelation is not to increase knowledge about God but to bring about reconciliation (Torrance 1965:132).

According to Torrance the New Testament presents Christ as God become man (Torrance 1988a:114). However, the incarnation is not a uniting of divine nature with ideal or abstract human nature nor is it unity with humanity in general; rather it is union with a particular, historical, man Jesus (Torrance 1988a:147, c.f. Molnar 2002:257). It is for this reason that Torrance argues that at the incarnation Christ assumed fallen human nature.⁴³

The doctrine of the hypostatic union has implications for the doctrines of revelation and reconciliation. For the doctrine of revelation it means that in Christ God reveals himself to us in history in the universe of time and space and that what God is to us in Christ he is in himself. The God whom we meet in the economy of revelation and salvation is God as he is in himself; and the God as he mediates himself to us in space and time is God as he is in eternity (Torrance 1992:23). For the doctrine of reconciliation the hypostatic union means that reconciliation between God and humankind takes place in the being, we could even say in the flesh, of Jesus. We may speak of an incarnational atonement; this incarnational atonement constitutes Jesus

⁴³ See section 1.7.2.

Christ as the mediator between God and humanity (Torrance 1988a:155). For Torrance reconciliation between God and humankind is not only something that Christ does; it describes who he is in his incarnate person. For Jesus Christ is the reality and substance of God's self-revelation within space and time (Torrance 1969b:68). Therefore in God's self-revelation in Christ revelation *is* reconciliation and reconciliation *is* revelation (Seng 1992:342f). God reveals himself to us in his work of reconciling humanity to himself in the life, death and resurrection of Christ (Torrance 1996a:33).

The unity of revelation and reconciliation in Torrance's theology is founded upon the classic patristic formulations of Trinitarian and Christological doctrine; it grounded upon the inner relations of the Father and the Son (Torrance 1992:104). The incarnate Son is *homoousios to patri* and so in his self-revelation he reveals to us what is eternally true of the Father. What God is towards us in the economy of revelation and salvation he is eternally in himself; the economic Trinity *is* the immanent Trinity. The unity of revelation and reconciliation is also built upon the doctrine of the incarnation. The incarnation is an act of divine self-revelation but, because what God is in his revelation is not different from what he is in himself, in revealing himself God has united himself to us thereby effecting reconciliation. In Christ God comes to us as a human being embracing in his own person both sides of the mediating relationship. From the side of God he is gracious self-gift; from the human side he is the perfect human response to divine grace. Torrance argues that Christ is no mere agent of reconciliation and revelation; he is what he mediates to us. He is both the content and the reality of revelation and reconciliation (Torrance 1992:56f). Torrance draws out the implications of the patristic doctrine of the *homoousion* in a Barthian-Polanyian understanding of personal knowledge. One of the strengths of Torrance's position is that he focuses attention on the salvific significance of the incarnate life of Jesus Christ

when much western theology has only seen soteriological importance of his death.⁴⁴

1.6.2 The hypostatic union

According to traditional understanding, as formulated in the Nicene Creed, the incarnation of the Word of God takes the form of hypostatic union between divine and human nature. Torrance argues that this hypostatic union is ‘the immediate ground for all Christ’s mediatorial and reconciling activity in our human existence’ (Torrance 1992:65). In Christ God is with us and we are with him; he makes his own the physical nature of our fallen existence in order to heal and sanctify it (Torrance 1976:49f).

We have seen that in Torrance’s theology Christ is not only God for us; his vicarious human nature is also for us as well.⁴⁵ Jesus Christ is both the reality of Divine revelation to us and of our receiving of that revelation. It is only in and through Christ that we are able to hear and to understand the Word of God; on our own we are unable to do so (Torrance 1962:142). It is for this reason that Torrance is critical of expressions of the doctrine of substitutionary atonement which focus exclusively on Christ’s death as effecting atonement. He develops the meaning of substitution in relation to Christ and argues that the whole of Christ’s vicarious life, including his death, is substitutionary. He argues that:

Substitution understood in this radical way means that Christ takes our place in all our human life and activity before God, even in our believing, praying and worshipping before God, for he has yoked himself to us in such a profound way that he stands in for us and upholds us at every point in our human relations before God. (Torrance, Torrance & Torrance 1999:24).

Paul’s phrase in Galatians 2:20, ‘I live by the faith of the son of God’, is central to Torrance’s development of the reformed doctrine of Christ’s substitutionary atonement. Everything is done for us and on our behalf by Christ. Torrance even argues that our

⁴⁴ See section 1.6.2.

⁴⁵ See section 1.5.3.

faith is sustained by Christ's faithfulness. We are saved by God's grace alone. His radical interpretation of the doctrine of grace leads him to criticise evangelical theology as Pelagian in throwing humanity back in the last resort upon its own act of faith which makes salvation depend upon belief (Torrance, Torrance & Torrance 1999:28).

However, we have seen that Torrance refuses to follow the logic of his position to its conclusion by asserting universalism. Ultimately his insistence on our need to appropriate the unconditional grace of God by a radical act of trust is no less 'Pelagian' than a call for faith; he has simply moved the necessary human response one step further back.⁴⁶

We have noted that Torrance argues that in Christ God comes to us in our fallenness, depravity and enmity with God (Torrance 1992:39). He takes upon himself our fallen human nature in order to redeem it from within (Torrance 1992: 40).⁴⁷ He argues that the atonement is not an external action but something which occurs in the person of the mediator (Torrance 1990:230). He illustrates this point by recalling an incident during his time as moderator of the Church of Scotland:

During my first week of office as Moderator of the General Assembly of the Church of Scotland... a highlander asked me whether I was born again, and when I replied in the affirmative he asked when I was born again.... I told him that I had been born again when Jesus Christ was born of the Virgin Mary and rose again from the virgin tomb, the first-born from the dead.... He took my corrupt humanity in his Incarnation, sanctified, cleansed and redeemed it, giving it new birth, in his death and resurrection.... so that when we speak of our conversion or our regeneration we are referring to our sharing in the conversion or regeneration of our humanity brought about by Jesus... (Torrance 1992a:85f).⁴⁸

Torrance is critical of what he calls the 'Latin heresy' in western theology. This is a gospel of external relations between God and humanity (Torrance 1990:214). He argues that in it a theory of atonement emerges which deals with the penalty of sins but not

⁴⁶ See section 1.5.3.

⁴⁷ See section 1.7.2.

⁴⁸ Torrance was moderator of the Church of Scotland in 1976-7.

with sin itself; not with fallen human nature or with the reality of human estrangement and corruption. He argues that atoning reconciliation takes place within the being of the mediator and not simply by his death as a price paid. Christ assumes our fallen nature and reconciles this fallen nature to the Father (Torrance 1990:227f) by living vicariously a life of response to divine grace.

Torrance argues that western theology, Protestant and Catholic, has tended to downplay the significance of Christ's life and has concentrated instead on the incarnation and the passion - resurrection. The atonement is reduced to an external action between a sinless Christ and God; on the cross Christ pays the price for human sin to the Father. However, if in his incarnation Christ assumed our fallen nature, then atonement or reconciliation between God and fallen humankind occurs in the depth of Christ's being. In the person, in the very *flesh*, of Christ who is both divine and human God and fallen humanity are reconciled. Atoning reconciliation is no longer an external contract but is effected in the person of the mediator (Torrance 1990:230).

Torrance's theory of atoning reconciliation or incarnational redemption is criticised by Macleod who makes two charges against Torrance's understanding of the atoning significance of the incarnation. First he accuses Torrance of being unbiblical as the New Testament insists upon the centrality of the cross; his second charge is that when the focus shifts from the crucifixion to the incarnate life of Christ then 'what is stressed is not atonement but compassion gained through human experience' (Macleod 2000:131).

Notwithstanding Macleod's charges, the cross is clearly central to Torrance's understanding of the reconciliation and atonement mediated by Christ. He writes that 'Jesus did what no one but God could do, in forgiving and undoing sins through the atoning sacrifice of himself upon the Cross' (Torrance 1996a:52, c.f. 249). In Torrance

the atonement is not merely something that Jesus does on the cross; the cross is the culmination of a reconciliation which begins at the moment of incarnation (Torrance 1992a:41). The cross is central to Torrance's doctrine of atonement but it does not exclude the rest of Christ's incarnate life from having atoning significance. In fact theories of atonement which focus only on the cross are unbiblical because they not only divide Jesus death from the rest of his life; they render that life immaterial to salvation as if Jesus is only important because he lived and died.

Macleod's second charge, that theologies which accentuate the incarnation stress not atonement but compassion, is not substantiated. It is precisely the atoning and reconciling significance of the incarnate life of Jesus that Torrance lays great emphasis upon. For example he writes that 'atoning reconciliation began to be actualised with the conception and birth of Jesus of the Virgin Mary' (Torrance 1992a:41; c.f. pages 39-42). In Torrance's theology the incarnation is an act of atonement and not simply an illustration of God's compassion. The atoning significance of the incarnate life of Jesus is the ground of Torrance's doctrine of the vicarious humanity of Christ. It is the atoning significance of the incarnation that leads Torrance to accept Barth's argument that it was fallen human nature that Christ assumed in becoming human.

1.6.3 Discussion

Torrance argues that revelation and reconciliation are complementary doctrines because true knowledge of God is not propositional but a personal encounter. He argues that reconciliation between God and humankind occurs in the person, in the flesh even, of Jesus Christ, because his human nature is a vicarious human nature. Jesus Christ's human response to divine grace on our behalf means that he embraces both aspects of reconciliation between God and humanity. This allows him to argue that we are not

saved by our response to divine grace but by Christ whose faith is for us and on our behalf. Torrance demonstrates a clear understanding that we are saved by grace alone, a grace evident in both the divine and human aspects of reconciliation. It is the argument of this thesis that this emphasis on grace is true not only for Torrance's doctrine of reconciliation but is also true for his doctrine of revelation. It will be demonstrated that the doctrine of revelation by grace is even more fundamental to Torrance's theological epistemology than revelation in Christ. This will be shown by the exposition of the role of Scripture in Torrance's doctrine of revelation in chapter two and in his transposition of natural theology in chapter four and five.

1.7 Reconciliation as revelation

1.7.1 The mediation of Christ in Barth and Torrance

Barth argues that God is inaccessible to humanity except as he chooses to reveal himself. In practice for Barth this means as mediated by Christ.⁴⁹ There is a chasm between humankind and God which from our side is totally unbridgeable but which God is able to cross; in Jesus Christ the incarnate Word he has in fact crossed it (Barth 1956: 29).⁵⁰ This is an important starting point for Torrance's theology and epistemology. It is important for his development of Barth's theology of revelation, especially for the direction in which he develops what he conceives of as a Barthian natural theology; similarly it is an important point in his dialogue with the natural sciences on epistemology.

Barth makes the point that God is identical with his revelation (Barth 1975:296).

⁴⁹ See Hunsinger 1991:76.

⁵⁰ Cf. Hunsinger 1991:79, 'No truth of God's identity is higher, different or more complete than the truth of God's identity in the humanity of Jesus Christ'. See also Bromiley 1979:19.

This is the reason why he begins his doctrine of the word with the Trinity. In his revelation God reveals not something *about* himself; he reveals *himself*. For Barth, followed by Torrance, *God is Trinity*. There is no general revelation of the unity of God followed by a second movement to the doctrine of the Trinity.

We find in Barth an insistence upon beginning not with the possibility of revelation but with its actuality; not with how God might reveal himself but with how God has in fact revealed himself (Barth 1956:3, 7). It is for this reason that we refer to the position of Barth and Torrance as ‘actualist’. What is meant by actualist is that their understanding of revelation is founded upon how God has revealed himself rather than on speculation as to how God might reveal himself (Torrance 1996a:199). For Barth revelation is an act of God’s sovereignty; it is possible from God’s side alone.⁵¹ In Barth’s theology the revelation of God is God’s presence with and for us (Barth 1975:353). For Barth no less than for Torrance revelation *is itself* reconciliation. In Scripture God reveals himself as reconciler (Barth 1975:399).⁵² Reconciliation, like revelation, is an act of God’s sheer grace and mercy to us, and it is unlooked for and unmerited.⁵³

The unity of revelation and reconciliation which he found in Barth’s writing is central to Torrance’s theology. As one reality, both human and divine, Jesus Christ in his incarnate person embraces both sides of the mediating relationship. He quite literally *embodies* the gospel of reconciliation; as Torrance writes: ‘what he mediates and what he is are one and the same’ (Torrance 1992:56). Reconciliation is the taking up of

⁵¹ Barth writes ‘From the reality of Jesus Christ we gather that revelation is possible on God’s side, that God is free for us, in such a way that His Word by becoming Man at the same time is and remains what He is, the true and eternal God, the same as He is in Himself at the Father’s right hand forever and ever, (Barth 1956:37).

⁵² Barth writes, ‘Revelation takes place as the revelation of reconciliation. Reconciliation is indeed revelation’ (Barth 1961:8; cf. Barth 1975:409).

⁵³ See Webster 2000a:133, where he quotes Barth 1961:46.

human being in and through Christ into the inner relations of God's own life, and this reconciliation takes place within the person of the mediator. In his life and being he bridges our estrangement from God and puts an end to our enmity with God.

1.7.2 Jesus Christ the mediator

In his writings on Christology Torrance emphasises Christ's vicarious humanity. Jesus Christ, he argues, embraces both sides of the mediating relationship in hypostatic union (Torrance 1992:76f). Torrance's position is that Christ has fulfilled the covenant from both sides. In Christ alone God's self-revelation meets with a faithful response; and Christ's response to God's self-revelation is made vicariously. Christ is for us both in his divinity and in his humanity. Torrance regards the vicarious humanity of Christ to be the 'cutting edge' of his theology (Palma 1984:16).

Torrance explores the implications of the vicarious humanity of Christ in several areas including revelation and reconciliation. As Torrance conceives of revelation in personal terms this means that the vicarious human nature of Christ is the fulfilment of divine self-revelation. At the incarnation 'the Word was translated into a human life' (Torrance 1992a:78); and there is also provided for humanity a way of response to God in which each person is free to share through communion with Christ. Jesus is the content of God's word to humanity and of our response to God. In Torrance's understanding of the nature of Christ not only does the Word of God become flesh; the flesh of Jesus becomes our word of response to God.

Torrance argues that in order to effect reconciliation when the Son becomes incarnate he enters our fallen and estranged state and in his own human nature he brings it back to God the Father in obedience and love (Torrance 1992a:79). His whole life is a vicarious human response to God provided for us and on our behalf by God (see

Torrance 1992a:80, Torrance 1988a:150f).⁵⁴ Torrance follows Barth in arguing that the human nature assumed by Christ at the incarnation was not human nature in its pre-fallen state but was in fact fallen human nature. Torrance claims that this position was held by the fathers of the church from Irenaeus to Cyril of Alexandria, by Luther and even by Mackintosh who explicitly rejects this doctrine (Torrance 1990:231, 232, c.f. Mackintosh 1913:276-8). Torrance believes that the patristic doctrine that ‘what is not assumed is not healed’ in the incarnation means that Christ must have assumed fallen human nature in order to heal it (Torrance 1990:231). Barth explores the implications of John 1:14, ‘The Word became flesh’. ‘Flesh’ here is the Greek word *sarx*, which, according to Barth, refers to *fallen* human nature which falls under the wrath and judgement of God (Barth 1956:151f). Barth writes: ‘Flesh is the concrete form of human nature marked by Adam’s fall’ (Barth 1956:151). In his reconciling revelation God in Christ puts himself on the side of his own enemy. God reveals himself in our fallen nature and what he reveals in that nature is himself.

Barth notes that in the writings of earlier theologians there is an understandable reserve in ascribing to the incarnate Christ fallen human nature (Barth 1956:153f). However, he cites exceptions to this reserve including Irving who was deposed from the ministry for holding this doctrine. Barth discovered references to Irving in Mackintosh who dismisses Irving’s position (Mackintosh 1913:277).

Torrance also argues that it is important for soteriology that Christ assumed fallen human nature (Torrance 1990:231); it is certainly important for Torrance’s work on the vicarious humanity of Christ. Torrance’s argument is founded on what he refers to as ‘the cardinal soteriological principle of the ecumenical Church that “the

⁵⁴ On the implications of this for Torrance’s understanding of the relationship of the Christian Scriptures to revelation, see chapter two.

unassumed is the unhealed”” (Torrance 1990:232).⁵⁵ Torrance argues that Christ unites himself to our human nature in all its weakness. He goes so far as to say that in Christ God takes on our ‘corruption and damned existence’ (Torrance 1976:49); and it is precisely in our corrupt and fallen human nature that he lives a life of truth, holiness and purity, overcoming in our fallen human flesh our separation and estrangement from God (Torrance 1976:49). Christ lives human life for us as it ought to be lived in response to and in relationship with the Father. Torrance’s argument for fallen nature of Christ is based upon his understanding of vicarious humanity of Christ.

Macleod argues that Irving was a direct influence upon the development of Torrance’s Christology (Macleod 2001:125). As we have seen the doctrine that Christ assumed fallen and corrupt human nature is central to Torrance’s Christology. If Torrance first encountered it in Mackintosh’s lectures it has left little impression upon him for we find no reference to Irving either in Torrance’s writings on doctrine or in *Scottish Theology* (Torrance 1996c). Macintosh dismisses Irving’s doctrine of reconciliation as ‘eccentric though touching’ (Mackintosh 1913:277) and treats his thought as an interesting but ultimately flawed attempt at Christology. Macleod states that although the idea of incarnational redemption, so central to Torrance’s theology, was also held by Irving it was expressed differently (See Macleod 2000:130). Against Macleod the lack of references to Irving in Torrance’s writings suggest that Irving was no influence on the development of Torrance’s theology and that the direct influence on this crucial element in Torrance’s thought is Barth.⁵⁶

Crisp⁵⁷ argues that the condition of fallenness is not essential to human nature; we can conceive of a fully human person not being fallen – this is the traditional

⁵⁵ C.f. Torrance’s reference to Cyril of Alexandria who wrote that ‘what has not been taken up has not been saved’ (Torrance 1988a:165).

⁵⁶ I am very grateful to Dr A. F. Mason for discussion of this point.

⁵⁷ Crisp 2007, chapter four.

understanding of Adam's nature before the fall. For this reason he questions Barth's argument that it was fallen human nature which Christ assumed at the incarnation. Crisp argues both that sinfulness entails actual sin and that fallenness requires sinfulness thus he rejects Barth's argument. Instead he allows Augustine's argument that 'Christ's human nature was affected by the Fall without being actually fallen' (Crisp 2007:115). We can see in Jesus the effects of the fall but he himself is not fallen.

That Christ assumed fallen human nature is central to Torrance's case for incarnational atonement in which Christ takes on fallen human nature in order to redeem it from within (Torrance 1990:229); thus atonement begins at Christ's conception. In the hypostatic union the holy God unites himself to sinful human nature and in making it his own he 'healed and sanctified it in his own sinless life' (Torrance 1990:230).

Torrance presupposes that the fall effects a fundamental change in human nature such that if Christ had not assumed fallen nature at the incarnation he would not have been able to redeem fallen human beings; this is not the same as arguing that fallenness is essential to human nature merely that human nature has in practice changed as a result of the fall (Torrance 1976:47). He argues that Christ appropriated fallen nature without committing sin and so from within disobedient and sinful human nature he lived a sinless and obedient life, thus 'he converted our disobedient human being back into true filial relation to the heavenly Father' (Torrance 1990:231).

Torrance does not define how Christ can be sinful yet not actually commit sin and for this reason his Christology is vulnerable to Crisp's criticism (Crisp 2007:93-106); however, Torrance argues that those doctrines of redemption which are an external exchange between the Son and the Father cut off the person of Christ from his work of redemption and that this is unsatisfactory since Christ mediates reconciliation,

like revelation, in his own being (Torrance 1990:231). Torrance's doctrine of atoning incarnation is built on his argument that the fallen nature which characterises all human beings was assumed by Christ at the incarnation. To argue that it was an essentially different human nature, one which was not fallen and could not sin, is to deny the reality of the incarnation and to throw doubt upon the atonement as anything other than an arbitrary exchange. Further if Christ was unable to sin then his victory over temptation can have neither moral nor vicarious significance.

Torrance's position that it was our actual fallen human nature that Christ assumed is supported by Gunton and Hart. Gunton comments that it was our sinful nature and not some idealised human nature that Christ assumed. He asks 'if Christ bore the flesh of unfallen Adam... what is his *saving* relation to us in our lostness?' (Gunton 1992:52, emphasis Gunton). Hart comments that if Christ's human nature is such that it is not possible for him to sin then all talk of obedience and victory over temptation is emptied of meaning (Hart 1995:38f). He goes on to comment that the bearing of a human nature by Christ which is not exempted from the possibility of sin brings a risk of 'frustration and failure' to God's plan of redemption, but he asks:

is it not at least worth posing the question whether some such almighty risk is not intrinsic in the scandal of the message of a God who empties himself and embraces the life of flesh in order to redeem it? (Hart 1995:54).

So while there is a gap in Torrance's argument he presents a strong case for an atoning incarnation which necessitates some form of the Barth/Irving position on the fallen humanity of Christ.

1.7.3 The paradox of revelation in Barth's theology

There are many similarities in the writings of Torrance and Barth on revelation

in Christ and Torrance is rightly regarded as a Barthian, yet, there are important differences between them. The most significant is that while Torrance emphasises that in Christ the hidden, unknown and unknowable God reveals himself, Barth draws back from such a position and more subtly, even paradoxically, stresses that in the human person and nature of Jesus Christ God *hides* or *veils* himself (Barth 1933:98).⁵⁸ Commentators draw attention to this aspect of Barth's theology (e.g. Gorringer 1999:103). In Barth's theology God takes form for us in Christ, but as Hunsinger puts it, 'without dissolving the divine hiddenness' (Hunsinger 1991:76).

In Barth's theology there is veiling in the act of revelation in Christ. Taking flesh as Jesus Christ both enables and limits God's self-revelation (Barth 1957:52). This means that God cannot be possessed or colonised. He is always sovereign in and of his act of revelation (Gorringer 1999:138, 103). While the idea of God being hidden in Christ is not entirely absent from Torrance his overall emphasis is on the actuality and objectivity of divine revelation in Christ. In Christ we can know God as he is in himself, even though in all of our knowledge of him God remains the controlling subject. This actual and objective self-revelation in Christ forms the basis of Torrance's epistemology. Torrance writes:

Christian dogmatics is the pure science of theology in which, as in every pure science, we seek to discover the fundamental structure and order in the nature of things and to develop basic forms of thought about them as our understanding is allowed to be controlled by them from beyond our individualism (Torrance 1969a:338).

Although God's self-disclosure in Christ differs from all other facts and objects of knowledge Torrance depends upon the objective nature of God's self-revelation for his placing of theology among the special sciences. In the context of a discussion of the nature of theological knowledge he speaks of 'the kind of knowledge that is forced upon us when we are true to the facts we are up against' (Torrance 1969a:341). Despite this

⁵⁸ Cf. Mc Cormack 1997:249f.

emphasis on objectivity Torrance argues that God remains in control of all of our knowledge of him (Torrance 1969a:299f).

Torrance is influenced in his understanding of revelation by his work on the relationship between theology and the natural sciences and although he is careful never to argue that God is an object of human enquiry he comes close to giving this impression (Torrance 1969a:51f).⁵⁹ In emphasising the objectivity of revelation in Christ Torrance is in danger of giving God into our hands. In some places in his theology he recognises this problem and acknowledges that revelation is an act of God as sovereign lord (Torrance 1999:140). He acknowledges that the truth of theological statements is beyond our control; they speak of a truth beyond human expression or knowledge (Torrance 1999:146). The truthfulness of theological statements resides not in themselves but in God and part of their truthfulness is an acknowledgement of their essential inadequacy. The fact that theological statements do, indeed must, fall short of the reality of God is essential to their 'propriety and precision' for in their very inadequacy they point to their justification in and by God alone; this is another facet of the epistemology of grace. Torrance argues that the fact that our theological statements fall short of the reality to which they point enables them to be used by God (Torrance 1999:156). The main difference between Barth and Torrance is one of language rather than substance. There is an untidiness, even a playfulness in Barth which is absent from Torrance. Despite this difference in tone and language their positions are close to one another.

1.7.4 Discussion

The importance of Torrance's assertion that it is fallen human nature that is assumed by Christ at the incarnation for his understanding of revelation lies in the unity of revelation and reconciliation in his theology. It has already been noted that for Torrance revelation is personal rather than propositional and it is in itself therefore

⁵⁹ Cf. Barth 1957:22f.

reconciling. It is fallen humanity that is alienated from God and so divine revelation includes reconciliation with fallen humanity which takes place in the person of Jesus Christ.

1.8 The historical Jesus and systematic theology

Torrance argues that we can only know God in his self-revelation and that it is in Christ that God has revealed himself. We have noted that he develops this from his long and sustained engagement with Barth. For both theologians the basic datum with which all Christian theology must engage is God's self-revelation in Jesus Christ. We will argue in Chapters Two and Three that although this Christocentric understanding of revelation is a determining factor in Torrance's exposition of revelation in Scripture and nature, it points to a more fundamental gracing of our knowledge of God.

Despite the Christocentric nature of Barth's theology he has been accused of making the historical Jesus little more than a cipher in his theology; of making the fact of Jesus more important than his person and life. For example Wright argues that although Barth's theology testifies to the importance of the historical Jesus: 'at no point ... has the full impact of the historical evidence been allowed to influence very much the dogmatic conclusions reached' (Wright 1996:26). McGrath makes the same point when he writes that: 'For Barth ... it is the risen Christ rather than the historical Jesus, who is central to theology' (McGrath 1994:129). Again he comments that in the *Church Dogmatics* Barth's 'Christology is construed with only the most superficial of contacts with human history' (McGrath 1994:135).

Whether this is a justified critique of Barth's theology does not lie within the scope of this thesis. However, we have noted that Torrance's theology is also Christologically founded; therefore the question of the relationship of the historical Jesus to systematic theology is important in any attempt to understand Torrance's theology and epistemology. Torrance's conviction that theological epistemology is built upon Christological foundations originates in his engagement with Barth. When

Torrance develops the Christological grounding of divine self-revelation in dialogue with the natural sciences he argues that Jesus Christ is the place within space and time that God reveals himself to creation.⁶⁰

If, as Torrance argues, all of our knowledge of God comes from his self-revelation in Christ and if all theology must conform to the self-revelation of God (Torrance 1965:128), then it follows that the person of Jesus Christ is of crucial importance for systematic theology. When Torrance addresses the relationship of the historical Jesus to systematic theology he comments that the phrase ‘the historical Jesus’ is ambiguous. He asks:

Do we mean the Jesus as we reconstruct his life and teaching by historico-critical method from the evidence handed down to us? Or do we mean the Jesus who actually existed, the Jesus of history? ... It ought to be the case that the Jesus at whom we arrive through sifting the evidence handed down to us is essentially the same as the Jesus of history. But he is not (Torrance 1984b:511).

According to Torrance those who have undertaken a quest for the historical Jesus have in fact abstracted him from his theological context (Torrance 1984b:515). He argues that this theological context is more than merely an interpretative gloss added on to Jesus by the evangelists; rather his theological context is intrinsic to the Jesus of history (Torrance 1984b:524, 520). Historical critics attempt to interpret Jesus apart from the culture and structure of meaning inherent to both Jesus and the gospels and in doing so they force Jesus into their own cultural context which is entirely alien to him (Torrance 1984b:515). Torrance argues that this abstraction of Jesus from his proper context is the result of a dualism in western thought whereby events are detached from their meaning and relocated into the alien context of the historical critic. He comments that the ‘historical Jesus’ is a ‘positivist construct’ who bears little relation to the actual Jesus of history (Torrance 1984b:516f).⁶¹ Torrance argues that this ‘historical Jesus’ is:

⁶⁰ See section 1.3.2.

⁶¹ This is essentially the position of Martin Kähler in *The so-called historical Jesus and the historic, biblical Christ*. Fortress Press, Philadelphia, 1964, translated and edited by C. E. Braaten.

a Christ who never existed, a Jesus clothed in alien conceptualities, indeed a mythological Christ who then needs to be demythologized, but who cannot be demythologized without inevitably being subjected to the same instruments to new mythologizing constructs, which just because they are artificial fail their authors again and again (Torrance 1984b:518f).

According to Torrance the dualism inherent in attempts to reconstruct the ‘historical Jesus’ originates in what Heidegger calls a ‘secession of *logos* from being’ (Torrance 1984b:519).⁶² He argues that in modern scholarship, as represented by historical criticism, there is a disjunction of empirical from theoretical components; he further argues that this leaves us with a Jesus who has been removed from his own intrinsic meaning and significance. Torrance argues that:

they [i.e. historical critics] seek to understand the historical Jesus apart from any inherent *logos*, apart from his intrinsic significance; and when they have produced their so-called “data,” “the assured results” of their scholarship, they expect the theologian to build his theology upon them. But that is not something that the scientific theologian can do, for the “data” thus produced have been severely distorted by having their natural *logos* or intrinsic significance torn from them (Torrance 1984b:520).

As a systematic and ‘scientific’ theologian Torrance attempts to work ‘with the inherence of *logos* and being’ (Torrance 1984b:521); that is he tries to keep together the theoretical and empirical components of knowledge. Torrance grounds his understanding of the Jesus of history in his understanding of the contingency of the universe.⁶³ He argues that historical events are part of the contingent processes of the universe and have their own contingent intelligibility in terms of which they can be understood (Torrance 1984b:522).⁶⁴ Torrance continues his argument by stating that the ‘historical Jesus’ of the critics is in fact a flight from reality; that this is a figure ‘denuded of his intrinsic intelligibility’ (Torrance 1984b:524). He concludes by arguing

⁶² Torrance does not supply the reference in Heidegger.

⁶³ See section 5.2.7 on contingency and rationality.

⁶⁴ Torrance writes about the ‘besetting temptation of scholars to abstract the phenomenal surface from its objective or ontological ground, whether at the level of the biblical narratives or at the level of the Jesus to which they witness’ (Torrance 1984b:522).

that the ‘actual Jesus Christ is the Christ clothed with his own significance, the evangelical and theological Christ’ (Torrance 1984b:524).

There is a problem with Torrance’s position. He correctly criticises those approaches to the historical Jesus which abstract him from his historical and theological context, however, he simply assumes that the gospels present us with a Jesus in his intrinsic theological context and not with a context supplied by the evangelist or the early church.

Despite this problem Torrance’s reflections on the historical Jesus indicate how a Christologically founded theology represents a rapprochement between systematic and biblical theology. A recent work by Bauckham makes a similar point to Torrance’s argument from the perspective of biblical scholarship. Bauckham argues that the gospels are close to the eyewitnesses of Jesus’ life and teaching, and in fact represent eyewitness testimony.⁶⁵ He argues that this testimony conveys both fact and meaning, and that understanding the gospels as testimony ‘enables us to surmount the dichotomy between the so-called historical Jesus and the so-called Christ of faith (Bauckham 2006:473). In a comment which reminds us of Torrance’s call to keep together the empirical and theoretical components of knowledge, Bauckham writes that in testimony ‘fact and meaning coinhere’ (Bauckham 2006:505).

The importance of Torrance’s discussion of the relationship of the actual Jesus of history who comes with his own intrinsic theological context of meaning for his epistemology is that here we find an example of what Torrance calls scientific method at work. The role of the enquirer is to investigate the contingent reality of the universe as it is in itself, not abstracted from its proper context but in its inherent meaning and network of relationships. Torrance’s point is that those who abstract the Jesus of history from his own context and re-present him in another are not engaging with reality but with something of their own creation. We will see in chapters four and five a similar insistence of interpreting the events in the universes in their own proper context in

⁶⁵ See especially Bauckham 2006 chapters five, six and seven.

Einstein's writings on scientific method.⁶⁶

1.9 Revelation in Christ and the natural sciences

There is a current renaissance of Torrance scholarship which focuses on the relationship between theology and the natural sciences in his writings. See for example the works by Weightman, McGrath and Colyer.⁶⁷ His attempt to set theology among the sciences as an equal is part of his larger project to think through the implications of the doctrine of revelation in Christ for every area of systematic theology. His placing of theology among the sciences is derived from his understanding of God's revelation in Christ; just as science progresses by the examination of given reality so theology progresses by considering God's actual self-revelation.

Torrance develops his understanding of science and scientific method from Einstein and Polanyi. From Polanyi he takes the understanding that faith has an important role in the natural sciences for it is an important component in the ultimate beliefs which are part of the essential background to all scientific activity. He also takes from Polanyi an emphasis upon the personal dimension to all knowledge.⁶⁸

Torrance first engages with the relationship between theology and science in the Hewett lectures of 1959. The published version of these lectures, *Theological Science* (Torrance 1969a), forms the basis of his engagement with the natural sciences, particularly physics. Torrance's attempt to position theology among the sciences is directly dependent upon his doctrine of revelation in Christ.

Torrance defines scientific knowledge as that knowledge which comes from letting the realities under investigation disclose themselves to us; it is the disciplined attention of the mind to a given reality (See Torrance 1969a:9). Given this definition of

⁶⁶ See section 5.3.1.

⁶⁷ Weightman, C. 1994, *Theology in a Polanyian Universe*; McGrath, A. 1998, *The Foundations of Dialogue in Science and Religion*; Colyer, E. M. 2001a, *How to Read T. F. Torrance: Understanding his Trinitarian and Scientific Theology*.

⁶⁸ See especially Torrance 1980c:61-71, and Torrance 1984:107-171.

scientific knowledge we can see why Barth's insistence that we begin our theological investigation not with speculative theology but with revealed theology is so important for Torrance. God's self-revelation is the given, the 'object' of the investigation for theological science. Torrance argues that Christian theology arises from the actual knowledge of God as he has made himself known to us in Jesus Christ, therefore theological method is positive or actual, and not speculative; it is *a-posteriori* rather than *a-priori*. A point which Torrance makes repeatedly in his works on science and theology is that theological science is a properly objective science. Objectivity is neither detachment from nor indifference towards the object; for detachment is neither desirable nor possible. Objectivity in a scientific context is a fidelity to the actual nature of the object (Torrance 1969a:55). There is an obviously Christological element to theological science for its proper object is God as he has revealed himself in human being and in human history, that is in Christ (Torrance 1969a:343). For Torrance Jesus Christ is the self-revelation of God within the structures of space and time, and it is therefore Jesus Christ who is the object of scientific investigation. When our knowledge of God is based upon Christ, i.e. God as he has revealed himself to us, we can know that it is based upon the reality of God as he is in himself (Torrance 1980b:40), hence Torrance's insistence on theology focusing on the actual historical Jesus in his inherent intelligibility.

We noted in section 1.8 that Torrance regards the Jesus of history as a contingent event in the created universe who is encountered by theology with his own contingent intelligibility by which he can be properly understood. Jesus is a contingent event or fact of the universe in which God has disclosed himself. The very contingency of the Jesus of history means that our knowledge of God rests on Jesus Christ only because he is the place in the universe of space and time where God has chosen to meet us. Our knowledge of God actually rests upon the decision of God to make himself known, and only contingently upon Jesus Christ. This may seem a small point but it becomes important when, in chapters two and four, we examine Torrance's exposition of revelation in Scripture and nature, for we will see that there is a contradiction at the

heart of his understanding of divine self-revelation; and that this contradiction is explained by our argument that the doctrine of justification by grace is more fundamental to Torrance's epistemology than revelation in Christ.

1.10 Conclusion

The great strength of Torrance's theology is that he works through the implications of revelation in Christ for all aspects of theology and theological epistemology; he does this in fruitful dialogue with the natural sciences, particularly with Einstein's general theory of relativity.

Torrance's theological epistemology is founded on his understanding of revelation in Christ, but there is something even more fundamental to his theological epistemology. Torrance argues that God's revelation of himself in Christ in the universe of space and time is objective and gracious; and this forms the basis of his argument that a Christologically founded theology is a scientific theology. Revelation in Christ also shapes his understanding of revelation in Scripture and in nature. The doctrine of revelation in Christ in Torrance's theology is significantly influenced by his encounter with Barth, Einstein and Polanyi. He is thoroughly grounded in the reformed tradition and works through the epistemological significance of the reformed doctrine of justification by grace; he is no less grounded in the patristic tradition, particularly the Nicene fathers, and he works through the epistemological implications of the *homoousion*.

From Barth Torrance derives the central importance of Christology for all human understanding of God. The unity of act and being in God, derived from Barth, is fundamental to Torrance's theology as it enables him to make a connection between history and eternity, between God and creation, in the life and person of Christ rather than by arguing for any logically necessary bridge. Another element of Barth's doctrine of revelation that is important for Torrance's theology is the notion of personal revelation: that what God reveals to us in Christ is himself and not propositions about

divine nature. Polanyi's work on the personal component of all knowledge is also significant for Torrance's epistemology. This leads Torrance to the unity of revelation and reconciliation in Christ. An important component of his Christology is the vicarious humanity of Christ. Torrance argues that Christ is not only God's self-revelation, the Word made flesh; he is also in his incarnate life humanity's response to the Father, flesh made word. Torrance follows Barth in arguing that it was fallen human nature that Christ assumed at the incarnation. While there are problems with this understanding of Christ's humanity Torrance argues that if the atonement is to be more than an external contract between the Father and the Son then an understanding of atoning incarnation is needed which entails Christ redeeming fallen human nature from within. There is a logical next step to universalism in Torrance's doctrine of the vicarious humanity of Christ which he refuses to take.

Implicit in Torrance's understanding of the epistemology of grace is Calvin's doctrine of the total perversity of human nature. Torrance holds the doctrine of total depravity for the same reason as Calvin. Both men derive their anthropology from their understanding of grace; total grace implies a total fall. Torrance's anthropology is derived from and driven by his epistemology of grace.

In Torrance's theology revelation is an act of God's sovereign grace. Human beings can only have knowledge of God because God has chosen to reveal himself in Christ. Like Barth Torrance operates with an epistemology of grace which means that God is always sovereign of his self-revelation. Torrance argues that although all human language is inadequate to the reality of God, yet it can be used by God to point to reality.

Torrance's dialogue with the natural sciences has tended to give his writing what Hunsinger calls 'the atmosphere of the physics lab' (Hunsinger 1991:11), there is an emphasis upon the objectivity of God's self-revelation which Barth avoids in talking of God's hiddenness in Christ. There is a sense of logical progression in Torrance's writing which is very different from the paradox and dialectics which pervade even the later Barth.

Two elements of Einstein's thought are particularly important for Torrance: the theory of spatial relativity and scientific objectivity. Torrance derives his relational understanding of space from his encounter with Einstein which provides further support for his Christocentric understanding of revelation. Torrance argues that Jesus Christ is the place within the universe of time and space where the transcendent God meets us. In terms of epistemology Torrance takes from Einstein a commitment to the object of enquiry, even if that object is unique, and argues that the method of enquiry is founded upon the reality of the object of enquiry; that is ontology is prior to epistemology. It is for this reason that Torrance argues that theology, when it proceeds by reference to the given reality of God's self-revelation in Christ, is a scientific activity.⁶⁹ In his very person Jesus provides the bridge between God and creation; this link enables our inadequate and creaturely language and ideas about the reality of God which are derived from his self-revelation in Jesus Christ to apprehend something of the reality of the transcendent God.

The element of Polanyi's philosophy which has been of most use to Torrance is his understanding of the personal component of all knowledge, including scientific knowledge. Torrance does not deny the subjective pole in knowledge but he refuses to allow it to dominate his epistemology.

A Christologically grounded understanding of revelation, such as that offered by Torrance, offers the beginning of a way of rapprochement between biblical and systematic theology. Torrance's critique of those reconstructions of the historical Jesus which remove him from his first century historical and theological context and present him in their own cultural context is important but needs to be supplemented by studies of the relationship between Jesus and the gospel traditions if his argument from Calvin that Jesus comes to us clothed in the gospel is to be substantiated.

In his theological epistemology Torrance attempts more than a rapprochement between biblical and systematic theology; it will be argued that his Christologically

⁶⁹ Torrance writes: 'real thinking ... proceeds only by reference to the externally given reality' (Torrance 1969a:288).

founded epistemology points to a gracing of all human knowledge and offers a rapprochement between theology and the natural sciences. His understanding of revelation in Christ is the foundation of his theology and of his work on theological method; therefore it significantly shapes his understanding of revelation in Scripture and in nature as well as his engagement with the natural sciences.

Chapter Two Revelation and Scripture

2.1 Introduction

Chapter One established that Torrance understands revelation to be personal, Christologically founded, and objective. In chapters two and three we will investigate how he relates his doctrine of revelation to the Scriptures (chapter two) and to nature (chapter three). We have noted that Torrance operates with an epistemology of grace in which God is sovereign of his revelation. In his understanding of revelation in Scripture Torrance is influenced by the work of Barth as he is in his understanding of revelation in Christ. We have noted that Torrance's Christology provides a link between Scripture and doctrine in his theology.⁷⁰

Kelsey (1975) notes that most theologians accept that the Bible is an authoritative source for Christian theology; however, they use this source in different ways. He argues that for Barth it is the biblical narrative that is authoritative and that this narrative provides theology with a 'normative link' to God's self-revelation (Kelsey 1975:44f). It is in Christ that God has revealed himself and Scripture is a witness to this self-revelation; therefore, Kelsey argues, its authority for Barth is functional (Kelsey 1975:47). The essential element missing from Kelsey's interpretation of Barth is Scripture as event. For Barth and for Torrance Scripture is more than a record of revelation in Christ; it is the divinely provided means used by God to speak his word to the church. The dynamic, sovereign and gracious element of Barth's doctrine of Scripture is absent from Kelsey's account. As we will see it is the sovereign, gracious

⁷⁰ See section 1.8

and dynamic elements in Barth's epistemology that are of importance to Torrance's development of Barth's doctrine of Scripture.

Richardson comments that Barth rejects 'multiple sources' for theology. He argues that in the *Church Dogmatics* 'the source of theology is always singular' (Richardson 2004:13). Torrance also holds that there is a single source for theology. For Torrance and Barth only God can reveal God. This is as central to Torrance's understanding of revelation in Scripture as it is in Barth. It is to God's gracious and sovereign self-revelation that we must look for the source of a properly dogmatic theology. This insistence upon the unitary source of theology leads to two fundamental questions of Barth and Torrance: firstly, what does the 'Word of God' mean for them; and secondly, what is the relation of the written Scriptures to the Word of God in their theologies?

This chapter will examine the Barthian background to the way that Torrance understands the relationship between Scripture and revelation. We will then examine how Torrance approaches the doctrine of Scripture from a reformed perspective. This approach makes him sensitive to the dangers of both liberal and fundamentalist approaches to the Bible. We will also examine Torrance's understanding of how the Bible mediates the word of God; finally we will look at Torrance's understanding of the nature of the Bible and its relation to systematic theology. We will see that, despite his high regard for the Bible and its substantial role in divine self-revelation, Torrance does not attempt to circumvent the normal human processes of understanding which operate when any text is interpreted. We will also see that in Torrance's exposition of the place of Scripture in divine self-revelation he regards it as more than a record of revelation and witness to Christ; it also becomes a place where God encounters us. However, the Bible does not become a rival to Christ in God's self-revelation rather the God who

graciously reveals himself in the contingent creation in Christ also reveals himself in the Scriptures. These two places where divine grace encounters the contingent creation are neither rivals nor equals in Torrance's theology.

2.2 Revelation and Scripture

2.2.1 *Barth and the three-fold Word of God*

Webster comments that, in his understanding of divine revelation and the relationship of the Scriptures to revelation, Barth attempts to bridge the gulf that existed in his day, and to a large extent continues, between two different ways of reading the Bible. One way is to treat the Bible as a timeless word of God to the church; a second way is to read it as a merely historical and human text like all others (Webster 2000a:65f). Barth attempts to find a way of reading Scripture that does justice to its historical character and its nature as Holy Scripture. For Barth the Bible is a human word, but a human word which speaks of God (Barth 1956a:463). For Barth the Bible is a unique human word, it is not simply one religious text among many others; it is a human word which points beyond itself to God and to his self-revelation (Barth 1975:111).⁷¹ The Bible does not witness to or speak of itself; it speaks of and witnesses to God's self-revelation (Barth 1975:568f).

McCormack notes that Barth's doctrine of the three-fold form of the word of God is first heard in his lectures at Göttingen in the 1920's (McCormack 1997:338). This concept is fully worked out in the *Church Dogmatics*. Busch writes that during this time Barth debated the understanding of Scripture and its relation to God's revelation

⁷¹ Barth writes: 'What we have in the Bible are human attempts to repeat and reproduce this Word of God in human words and thought and specific human situations' (Barth 1975:113).

with members of the faculty at Göttingen, notably with Emanuel Hirsch.⁷² Torrance notes that in 1923 Barth entered into a debate with Harnack over his attempt to understand the Bible as a witness to God's revelation (Torrance 1962:81). McCormack provides a useful summary of what Barth means when he speaks of the 'Word of God in its three-fold form' in the Göttingen lectures. For Barth the Word of God is first and foremost God speaking. McCormack writes:

The Word of God is first of all the speaking of God which is identical with God; identical because it is a speaking by God. Barth calls this form of the Word 'revelation' (Mc Cormack 1997:338).

It is the second form of the Word of God, the witness of the prophets and apostles, which comes to us in the Bible. In the Scriptures of the Old and New Testaments we find a witness to God's Word recorded by those who encountered divine revelation. The third form of the Word of God is faithful Christian preaching. For Barth Scripture is not itself divine revelation; yet it cannot be separated from revelation either. Rather Scripture 'proceeds from' God's self-revelation (Mc Cormack 1997:339).

According to Barth the Bible points to God's revelation in two related ways. It is the human record of and testimony to God's act of revelation; and it is a text used by God as an active witness to his self-revelation. According to Barth the Bible is a witness to God's self-revelation in Christ (Barth 1956a:457). The language of witness is central to Barth's understanding of the nature of Scripture; as Webster notes, 'it has a double purpose: it gives full weight to the function of Scripture as the bearer of revelation, and it does so without taking away from the fact that the Bible is a collection of human texts' (Webster 2000a:65). Barth also regards the Bible as an event (Barth 1975:109). It

⁷² Busch writes: 'Barth contrasted his view of the Bible as evidence of the concrete revelation of God with the view of the Bible as a general religious document' (Busch 1976:134).

is when the Bible truly points us to God's revelation and enables us to see and hear that revelation that it becomes one with the word of God.

Barth takes great care to ensure that his doctrine of Scripture takes nothing away from the sovereignty and grace of God in his self-revelation. He does this by emphasising both the sovereignty of God in revelation and the role of the Holy Spirit in the witness of Scripture. It is only by God's gracious decision that the Bible becomes a true witness to God's Word. Barth calls the event by which the Bible becomes the word of God a 'miracle of divine grace' (Barth 1956a:513; see also Barth 1956a:528). Scripture only becomes a true witness of God's self-revelation 'by the Holy Spirit' (Barth 1956a:457). Barth takes care to keep our attention fixed upon God in the act of revelation, even when we are considering the witness of Scripture to revelation.

Barth regards the Bible as a 'sign', and he is determined to take it seriously as such (Barth 1956a:457-459). Scripture is a sign which points us to the revelation of God and it is this revelation which is authoritative for the church and for theology. We have noted that Barth is trying to do justice to those two opposing ways of understanding the Bible. He wants to take it seriously as a human word written by real people in history he also wants to take it seriously as God's word. According to Barth the Bible is a human word which points beyond itself to God's self-revelation. Barth writes:

when we...take the humanity of the Bible quite seriously, we must also take quite definitely the fact that as a human word it does say something specific, that as a human word it points away from itself, that as a word it points towards a fact, an object (Barth 1956a:464).

Barth treats the Bible as a historical and human text but refuses to treat it in a generic way: it is this particular text with which we have to do because it is this particular text which is the witness to revelation (Webster 2000a:67). We see a clear parallel with Barth's understanding of revelation in Christ, for it is in this particular

historical person, Jesus Christ that God reveals himself; so it is in this particular text, the Bible that God witnesses to that self-revelation.

Barth explores the attitude that this particular text calls for in its readers. He argues: 'What is required of readers is that they be shaped at the most fundamental level by the miracle of divine speech which encounters us through the text' (Webster 2000a:67). We do not master *this* text; rather the text grips us. Barth writes: 'In order to be understood by us, it wants not to be mastered by us, but to lay hold of us' (Barth 1956a:471).

According to Barth the Bible is the historical, human witness of prophets and apostles to God's concrete self-revelation in history. More than this the Bible becomes a witness to the church of divine revelation by the work of the Holy Spirit. This text is one that calls for humility in its readers. Barth's understanding of the nature of Scripture allows him to take it seriously as both the word of God to the church and as a human and historical word, and thus he is able to bring together two conflicting ways of reading the Bible. The final and most important thing to say about Barth's understanding of the nature of Scripture is that he keeps our attention on God, not on the exegete, the church, or even the Bible itself. Barth's understanding of Scripture allows God to remain sovereign, and therefore he retains the gracious nature of God's act of self-revelation.

Thiselton points to a problem with Barth's understanding of the relationship of revelation to Scripture and particularly with the role of the Holy Spirit in revelation. He comments that Barth's emphasis upon the 'sovereign transcendence of God' together with his opposition to the emphasis of Schleiermacher and Ritschl on religious experience has led him to imply 'that the Spirit's communication of the Word of God is somehow independent of all ordinary processes of human understanding' (Thiselton

1980:89). He quotes an essay on Bultmann in which Barth writes: ‘This Word of God can only confront and illuminate man as truth and reality if it is seen to run *counter to his whole natural capacity to understand*’ (Thiselton 1980:89, emphasis Thiselton).⁷³

The assumption which lies behind Barth’s understanding of revelation is that the role of the Spirit will be in some sense diminished if it is regarded as working through the normal human processes of understanding. Barth simply circumvents the whole problem of hermeneutics and is in danger of turning the human authors and readers of Scripture into mere ciphers.

2.2.2 Torrance’s reading of Barth on revelation and Scripture

Torrance formulated his understanding of Scripture early in his academic career while lecturing at Auburn seminary in 1938. His 1938 lectures show the marked influence of Barth on his understanding of revelation in the Bible (McGrath 1999:52).

Torrance notes Barth’s doctrine of the three fold-nature of the word of God in revelation: namely revelation in Christ; revelation in Scripture and revelation in the church’s proclamation (Torrance 1962:109).

Torrance deals in some detail with Barth’s understanding of the relationship of revelation and the written Scriptures in his study of Barth’s early theology (Torrance 1962). Two themes from Barth’s theology emerge as of importance for understanding how he relates the Bible to revelation; these themes are important for understanding Torrance’s own doctrine of Scripture. These are the Bible as witness to revelation and the Bible as a miracle of God’s grace.

One element in Barth that particularly impresses Torrance is his attempt to take seriously the Bible as *Holy* Scripture. It is not only a witness to God’s self-revelation; it

⁷³ Thiselton quotes from Barth’s essay ‘Rudolph Bultmann – An Attempt to Understand Him’ in Bartsch ed. *Kerygma and Myth*, volume 2 London 1962, pages 83-132.

is 'the original and legitimate witness' (Torrance 1962:119). This text and no other is the means which God freely and graciously uses in order to communicate with humanity. Barth treats the Bible as an historical document and as Holy Scripture, as writings that originate in and bear witness to an act of divine self-revelation within history. The biblical texts are themselves a human witness to a divine act. They are not in themselves the revelation of God; instead their role is to point to God and his act of self-revelation in Christ (Torrance 1962:81).

Torrance argues that in Barth's doctrine of Scripture we find a dialectic of revelation and hiddenness. There is both an historical, human element and at the same time a divine element to the Scriptures. The Bible is not revelation; however, it is the gracious and divinely provided witness to revelation; no more but certainly no less.

Torrance writes:

The Church finds in the Bible the primary datum, which is not to be separated from it nor to be confused with it, which is veiled in the Bible as much as it is unveiled through it, which is both hidden and revealed, namely the Word of God in primary form, Revelation (Torrance 1962:119).⁷⁴

The reason for this dialectic in the doctrine of Scripture is the dual origin of the Bible. It is the writing of fallible and sinful people yet through these people and their writings God speaks. God speaks to us in the Scriptures, but not directly. Instead God communicates through 'a transient and imperfect human medium' (Torrance 1962:120). God chooses a very human word as the form in which he communicates his divine word to us. Torrance captures the subtlety of Barth's doctrine of Scripture. The Bible is the divinely appointed means of God's self-revelation, yet by its very nature it also presents a barrier to revelation. Torrance writes of a 'wall' that exists in the Bible between the

⁷⁴ Note that when writing on revelation in the Bible Torrance uses language that is characteristic of Barth on revelation in Christ, namely veiling and unveiling.

reader and revelation (Torrance 1962:121) and this wall is the nature of the Bible itself. Torrance maintains the personal rather than propositional nature of revelation in Scripture no less than in Christ.

In his exposition of Barth's theology Torrance emphasises the sovereign grace of God as he reveals himself through the witness of the Scriptures. When God speaks to us out of Scripture it is not as a result of our wrestling with Scripture; rather it is 'the sovereign mystery, the downright miracle of God's grace' (Torrance 1962:104). When God communicates with us out of the Scriptures he is lord, not only of the Bible's witness, but also of our hearing of that word from Scripture. This point is important in Torrance's dialogue with the evangelical tradition in North America where he takes great care to keep our focus upon God rather than upon the text of Scripture.⁷⁵

Torrance and Barth attempt to hold together an understanding of the Bible as both an historical text and at the same time as the word of God to the church. They both resist treating the Bible as one religious text among many; rather they hold onto the unique place of the Bible in revelation without circumventing the sovereignty and grace of God in his self-revelation. Both emphasise the particularity of the Bible and its unique place in revelation that is analogous to, and derived from, the uniqueness and particularity of Christ in revelation. Torrance is clearly dependent upon Barth for his understanding of the nature and place of the Bible in revelation but he develops Barth's work in new and creative ways.

2.2.3 Discussion

Torrance clearly regards his own understanding of the role of the Bible in God's self-revelation as similar to, if not identical with, Barth's. Each lays stress on the Bible

⁷⁵ See section 2.3.2.

as a divinely provided human text which becomes the vehicle of revelation by which is meant a witness to Christ the living Word of God. Each lays stress on the particularity of the Bible; its place in the scheme of God's self-revelation does not lie in it being an example of religious literature, rather it lies in the divine decision that this text be a witness to the word of God.

Barth has been criticised by Thiselton for circumventing the normal human processes of understanding in his exposition of the place of the Bible as witness to revelation.

For this thesis it is important to note two particular emphases of Torrance's understanding of the place and role of the Bible in revelation. In his debate with evangelical fundamentalism he argues that God always remains sovereign of his revelation (see section 2.3.2); it is not something to be discovered but is the result of a divine decision and act to reveal himself. A second point to note is that when Torrance speaks of the nature of the Scriptures he does so in terms which are similar to those he uses of revelation in Christ, namely when he refers to the transient and imperfect medium that God uses when speaking through the Bible (Torrance 1962:120) it is reminiscent of his insistence that it is fallen and fallible human nature that God the Son assumes at the incarnation.⁷⁶

2.3 Scripture and revelation in Torrance's theology

2.3.1 Torrance's early writing

In Torrance's introduction to the catechisms of the reformed church he presents the reformed understanding of the relationship between Christ and Scripture and this

⁷⁶ See section 1.7.2.

informs his theology. His interpretation of the reformed understanding of the relationship between Christ and Scripture is shaped by Kierkegaard whose existentialist philosophy also influenced Barth. According to Torrance Christian truth is unique in nature because Jesus Christ is himself that truth. Torrance writes:

As Kierkegaard put it, this is Truth in the form of personal being, Truth which is identical with the Person of the Teacher. But we must go further than that. It is Christ clothed with His Gospel who is the Truth, for this is unique Truth in which Christ's person and His Message are inseparably one (Torrance 1959:xxxii).

Torrance takes the phrase 'Christ clothed with His Gospel' from Calvin (Torrance 1959:lxxxix). This is a succinct statement of the reformed doctrine that the Word of God refers primarily to Jesus Christ and only secondarily to the written Scriptures. This doctrine means that we can only know Jesus Christ the Word of God as he meets us in those Scriptures. Torrance argues that the clothing which Calvin refers to is not only Christ's human nature which he assumed at the incarnation (Torrance 1959:lxxxix); it also refers to the gospel which Christ proclaimed in his words and life. Torrance argues:

The only Christ we know is Christ clothed with His Gospel, and that is Christ with all His human life and historical acts and His self-communication to us through them (Torrance 1959: lxxxix).

Torrance cites Kierkegaard again when he writes that in the incarnation of Christ 'the Absolute fact has become a historical Fact' (Torrance 1959:xxxix). The divine truth is communicated by contingent historical and personal means through the words and writings of human beings. We see here in Torrance the same concern that we saw in Barth - a determination to treat the Bible as a historical text while not forgetting that it is also God's word to the church. Torrance, like Barth, attempts to do justice to two ways of reading the Bible that are often set in conflict with one another. There is a parallel

here with the incarnation for just as the particular, fallen human nature of Jesus is the self-revelation of God in history, so the particular, fallible human words of Scripture become the means of God's witness to that self-revelation.

2.3.2 The problem of fundamentalism

In his treatment of revelation and its relation to the written Scriptures of the Old and New Testaments Torrance deals with the issue of fundamentalism in Christian theology. He is particularly concerned with the question of how revelation is mediated by Scripture in fundamentalist approaches to the Bible. For Torrance Christian theology must always be related in some way to the Bible; however this central role of the Scriptures for the church and theology brings with it the danger of focusing on the biblical text instead of God. Gray notes that Torrance criticises fundamentalism for tending to draw doctrines directly from the surface of the text of Scripture and failing to see that the text is supposed to draw the reader into a deeper reality (Gray 1980:304). Fundamentalism tends to treat revelation as primarily propositional or doctrinal rather than personal. In the debate between 'liberal' and 'conservative' understandings of Scripture in Western theology Torrance manages to avoid the pitfalls of both approaches. Against liberal approaches he argues that when theology seeks to address God's self-revelation this revelation is mediated to us by the Bible (Torrance 1999:84, 94). He argues that the word of God comes to us clothed in the written text of the Bible; and so Christian theology cannot avoid a serious engagement with the Scriptures (Torrance 1959:lxxxiii). Against fundamentalism we have already noted that he refuses to allow the text of the Bible to replace personal encounter with the living Word as the primary meaning of revelation, for revelation according to Torrance is a personal self giving of God.

In Torrance's theology there is a real objectivity to revelation because the source of revelation is God, not our religious experience, not something that arises from the human mind; rather it is God revealing himself to us in an intelligible and articulate way (Torrance 1999:85). Fundamentalist traditions within the Christian church affirm the objectivity of God's revelation. In criticising a wrong emphasis on the Bible in fundamentalist theology, Torrance does not vitiate the objectivity of God's self-revelation as mediated in the Scriptures. He writes of God's revelation 'assuming the form of human speech and writing' (Torrance 1999:85). The problem that Torrance identifies in Christian fundamentalism is that it sees revelation as being inherent in the text of the Scriptures rather than being an action of God to whom they point. The fundamentalist understanding of revelation is static and propositional rather than dynamic and personal. In place of God's self-revelation mediated through Scripture evangelical fundamentalism substitutes 'an infallible Bible and a set of rigid evangelical beliefs' (Torrance 1999:17). Torrance's greatest criticism of evangelical fundamentalism is not the doctrines which are held by fundamentalists; rather it is they hold their evangelical beliefs in a manner which is inherently inconsistent with the way that those beliefs originated in God's self-revelation in Jesus Christ who is the incarnate Word (Torrance 1999:16).⁷⁷

Torrance acknowledges that there are strengths in the tradition he criticises; he recognises that evangelical fundamentalism 'is passionately dedicated to preserving the integrity of the biblical faith' (Torrance 1999:16). However, he argues that fundamentalism 'rejects the fact that revelation must be continually given and received in a living relation with God' (Torrance 1999:16). The living God is displaced by a written text and instead of objectivity in revelation we have the objectification of

⁷⁷ Torrance writes: 'revelation must be continually given and received in a living relation with God' (Torrance 1999:16).

revelation. This is not a minor issue; for Torrance what is at stake is the sovereignty and grace of God in his self-revelation. For fundamentalism the source of revelation is not God but a written text whereas for Torrance the source of revelation is always God. Fundamentalism denies the sovereignty of God in his self-revelation (Torrance 1999:17).

Torrance accuses those who hold a static understanding of revelation of epistemological dualism. He writes that:

fundamentalism operates with a rigid framework of beliefs which have a transcendent origin and which are certainly appropriated through encounter with God in his self-revelation and as such have an objective pole of reference and control, but these beliefs are not applied in a manner consistent with their dynamic origin and nature. Instead of being open to the objective pole of their reference in the continual self-giving of God and therefore continually revisable under its control, they are given a finality and rigidity in themselves as evangelical beliefs, and are clamped down upon Christian experience and interpretation of divine revelation through the Holy Scriptures. Thus they are endowed with a fixity at the back of the fundamentalist mind, where they are evidently secure from critical questioning, not only on the part of skeptical liberals and other freethinkers, but on the part of a divine self-revealing which is identical in its content with the very Being of God himself. At this point the epistemological dualism underlying fundamentalism cuts off the revelation of God in the Bible from God himself and his continuous self-giving through Christ and in the Spirit, so that the Bible is treated as a self-contained corpus of divine truths in propositional form endowed with an infallibility of statement which provides the justification felt to be needed for the rigid framework of belief within which fundamentalism barricades itself (Torrance 1999:16f).

Torrance criticises fundamentalism for replacing trust in God with trust in the Bible thereby turning the Bible into a collection of infallible statements and excising God from having a continuing role in the church as the God who constantly reveals himself through the Scriptures. Fundamentalism gives the Bible primacy over God within revelation and therefore within Christian theology (Torrance 1999:18). As Torrance argues fundamentalism sees doctrines as ‘built up from ideas deduced from biblical statements regarded as logical propositions’ (Torrance 1976:7).

Torrance contrasts this propositional understanding of revelation with scientific theology which recognises that the text points the reader to a deeper reality (Gray 1980:304), the reality of God's own person. In Torrance's attempt to penetrate beneath the surface of the text to the reality to which it points we see the influence of the patristic *homoousion*, of Barth's insistence upon the unity of Act and Being in God, and of Michael Polanyi's epistemology.⁷⁸ Torrance argues that:

In a scientific theology, ... we are concerned not with thinking thoughts, far less with thinking statements themselves, but with thinking realities through thoughts and statements, and with developing an understanding of God from his self-revelation mediated to us by the Holy Scriptures in the Church, in which the connections we think are objectively and ontologically controlled by the intrinsic connections of God's *self* – communication as Father, Son and Holy Spirit (Torrance 1976:8, emphasis Torrance).

Torrance argues that fundamentalism's static and dualist understanding of revelation has implications for Christology. He argues that in fundamentalist theology the Bible has precedence over the reality of God's self-revelation in Christ and in the Spirit. This impinges upon one of the key doctrines of the Christian faith, that Jesus Christ is consubstantial with God the Father. At the heart of the Nicene understanding of the Christian faith is the doctrine of the *homoousion*; the implication of which is that God is in himself what he is towards us in his self-revelation in Christ.⁷⁹ Torrance writes that the doctrine of the consubstantiality of the incarnate son with the Father 'was a *hermeneutical* as well as a *theological* instrument' (Torrance 1988a:129, emphasis Torrance); this means not simply that we apply the categories of divinity to Jesus Christ, rather we look to the person of Christ to understand who God is. It is in Jesus Christ the living Word that God has revealed himself to us.

⁷⁸ See for example Michael Polanyi, *The Study of Man* Chicago 1959, cited by Gray 1980:303.

⁷⁹ Torrance writes: 'Everything depends ... on the relation that obtains between Jesus Christ the incarnate Son and God the Father' (Torrance 1988a:111).

Torrance argues that when fundamentalism looks to Scripture instead of to Christ for the source of God's self-revelation it makes the same mistake as theological liberalism; both repudiate the sovereignty of God and his self-revelation; both are unwilling to allow God to be the judge and source 'of human conceptions and statements about him' (Torrance 1999:18). One implication of the epistemological significance of the doctrine of justification by grace is that even the Bible must submit to God. The Bible stands as a witness to revelation because it points those who seek to know God away from itself to Jesus Christ the living Word of God who is himself the truth of God to which the Bible stands as witness.

A further problem with the fundamentalist understanding of Scripture relates to one of the central reformation doctrines, the free grace of God. Torrance draws epistemological conclusions from the reformation principle of justification through Christ alone. To be right before God is an act of pure grace. Torrance argues that this 'means that we and all our vaunted right are utterly called in question before God' (Torrance 1999:18). He draws the epistemological conclusion from this doctrine that truth or orthodoxy is not something that we can possess in and of ourselves. Our carefully and faithfully formulated beliefs are called into question by God's revelation; and the reason for this is that their truth resides not in themselves but in the one to whom they point, therefore they must be continually 'revised in the light of the Truth that Jesus Christ is in himself in God' (Torrance 1999:19). For a fundamentalist reading of the Scriptures the propositions derived from the text of the Bible are not in principle revisable as their truth lies in themselves as statements and not in the God to whom they are supposed to point.

The static understanding of revelation in fundamentalism means that it is the Bible and not the incarnate Son of God which is the ultimate revelation of God; the

Bible replaces Christ instead of witnessing to Christ. For Torrance as for Barth the unique authority and status of the Bible in relation to divine self-revelation is its authority and status as a witness to Jesus Christ. For Torrance the Bible is *Holy Scripture*, not because of what it is in itself, but because of the one to whom it bears witness. Jesus Christ is the Word of God incarnate. He is not a reflection of the divine light; he is not simply the mediator of that light; Jesus Christ is the light and the written Scriptures are only what they are 'as enlightened by him and as they ... bear witness to him beyond themselves' (Torrance 1999:95). If we treat Scripture as the light itself then it loses its status because the light which we find in Scripture is a reflection of the light of Christ. Torrance explains what he means in this way: when we become obsessed with the Bible and lay stress upon the doctrine of inspiration then our attention becomes focused on the Bible instead of that to which the Bible is intended to point (Torrance 1999:96). When we focus our attention on the Scriptures instead of on the incarnate Christ, 'then the light that is in them is turned into a kind of darkness' (Torrance 1999:95).

Torrance argues that we call the Bible *Holy Scripture* because it is the mediator not the originator of the divine light in our world. He writes that 'we rely upon the Bible for its guidance in directing our understanding to the Word of God which sounds through it, or the Truth of God which shines through it' (Torrance 1999:96, 107).

2.3.3 The Bible as witness to the Word

Torrance follows Barth and the reformed tradition in arguing that the Bible, as witness to the Word, is potentially the mediator of God's self-revelation. McGrath writes that 'Torrance follows the general Barthian approach of regarding the Bible as a witness to revelation, *which may become the word of God*' (McGrath 1999:135f,

emphasis added). Torrance compares the role of the Bible in revelation to a sign, for just as a sign performs its semantic function when we attend, not to it, but to the reality signified, so the Bible is only able to fulfil what he calls its 'semantic service' when subordinated to God's self-revelation in Jesus Christ (Torrance 1999:96).⁸⁰ When the Bible intrudes and becomes the immediate object of attention, as in fundamentalism, it loses its proper semantic function. The Bible has authority only as mediator of divine self-revelation and witness to the Word and not in its own right. It is only as the Bible mediates Jesus Christ the Word of God to us that it becomes authoritative in our knowledge of God (Torrance 1999:97). In Torrance's theology the Word of God cannot be equated with the biblical writings, 'because the revealing action of God always transcends its means' (Gray 1980:306). However, the word of God is not entirely distinct from the written Scriptures either. Torrance argues that Scripture in itself is not God's self-revelation; but he argues that it is the graciously provided record of that self-revelation and the means by which God reveals himself.

Torrance argues that God's self-revelation must meet with a faithful response in order to be revelation (Torrance 1999:85). Revelation is only revelation when it is received as such.⁸¹ However, this recognition and reception must not be thought of as something that we can achieve for and of ourselves; this too is God's work and as such is a gift of grace. It is not 'an extension of our natural knowledge' (McGrath

⁸⁰ Kurt Anders Richardson writes of Torrance's approach to the Bible that 'Scripture is inspired, but the knowledge of God cannot be coterminous with a knowledge of Scripture' (Richardson 2001:186).

⁸¹ Torrance writes: 'By revelation is meant... an intelligible, articulate revealing of God by God whom we are enabled to apprehend through the creative power of his Word addressed to us, yet a revealing of God by God which is actualized within the conditions of our creaturely existence and therefore within the medium of our human thought and speech' (Torrance 1999:85).

1999:134f);⁸² here we see an application of Torrance's understanding of the vicarious humanity of Christ (Torrance 1971:145).⁸³

According to Torrance our knowledge of God is always the result of God's creative action (Richardson 2001:185). We know God only from his self-revelation, by his decision that we know him and by his action which enables us to know him. He also argues that we know God in the way that he has chosen to be known (Torrance 1995:5). It was 'in the historical-theological context of the worshipping people of God, the Church of the Old and New Covenants' (Torrance 1995:5) that God chose to reveal himself. This is the situation which gave rise to the writings of the Bible as the divinely provided witness to revelation. As Torrance writes:

They were composed under the inspiration of the Holy Spirit, and in the providence of God have been handed on to us as the written form of the Word of God. They are the Scriptures of the people of Israel, for Israel was the selected medium of God's revelation in which his Word operated prophetically in the life and understanding of a particular historical community in order to provide within mankind a place where divine revelation might be translated appropriately into human speech and where it might be assimilated and understood in a communicable form by all humanity. And they are the Scriptures of the Christian Church, for the Church was the appointed sphere in which the historical self-revelation through Israel, gathered up and transcended and fulfilled in Jesus Christ the Word made flesh, is given an evangelical form in the apostolic witness and tradition, *kerygma* and *didache*, through which the crucified and risen Lord Jesus Christ himself continues to meet men and women as the living Word of God and to impart himself to them as the Way, the Truth and the Life, apart from whom, as our Lord claimed no one has access to the Father (Torrance 1995:5).

For this reason the church must always turn to the Bible for the divinely provided witness to and mediator of revelation; in the Bible we encounter the word of God in the written form in which God has graciously provided it. The fallible human word of Scripture becomes the word of God to us. The Bible is both a product of and a witness

⁸² McGrath is quoting from Torrance's unpublished lectures on the Christian Doctrine of Revelation, delivered at Auburn Seminary in New York State 1938 – 1939.

⁸³ See section 1.5.3.

to God's self disclosure in history. Torrance argues that our doctrine of Scripture is important for our interpretation of Scripture; for although form and content must be distinguished from each other they cannot be separated (Torrance 1995:6). It was God's decision not only that he be known in the life of Israel and the humanity of Jesus but also that there be a witness to that self-revelation in the Bible. In the self-revelation of God in history and in the divinely provided Scriptures we meet the gracious and sovereign God. It is God's sovereign and gracious decision to 'meet' us in the word of the Bible. As the divinely provided witness to revelation the Bible becomes a vehicle of revelation. The Scriptures are the place where the self-revelation of God is properly translated into human language and thought (Torrance 1995:7, Torrance 1999:94).

Torrance often writes of the Bible as a witness to God's self-revelation but he also speaks of the Bible as the place where we continue to be able to meet God (Torrance 1999:5). There is a parallel between the way that Torrance understands the nature of Christ and his understanding of the nature of the Bible. Just as Torrance understands Jesus Christ in his frail, fallible and particular human nature as the place in history where we meet God, so he argues that the Jewish and Christian Scriptures though a frail and fallible human word, are the divinely appointed and provided place where men and women have access to that self-revelation; the place where in fact 'the crucified and risen Lord Jesus Christ himself continues to meet men and women as the living Word of God' (Torrance 1995:5). Thus Torrance works through the phrase from Calvin that Christ comes to us 'clothed in the Gospel' (Torrance 1959: lxxxi).⁸⁴

⁸⁴ See section 2.3.1.

2.3.4 Revelation as divine encounter

As well as being dynamic and personal Torrance argues that revelation is a divine event and never an object. We have seen that he argues that the Scriptures mediate revelation and therefore while the Bible is not itself revelation, nevertheless revelation cannot be separated from Scripture. In this historical human artefact we may hear the word of God. Torrance writes that ‘God’s Word comes to us in a happening which is both divine and human in such a way that we hear the divine and the human at the same time’ (Torrance 1995:7). Although Torrance’s theology is grounded in Scripture there is no danger of the Bible eclipsing or replacing the self revealing God.

Torrance’s model for understanding the relationship that exists between the divine and the human aspects of Scripture is the nature of Christ who, according to the definition of Chalcedon, is both human and divine. However, there is an important difference. In Jesus Christ the human and the divine are united within one person whereas ‘in the Bible the divine Word and the human word are only united through dependence upon and participation in Christ, that is, sacramentally’ (Torrance 1995:7). There is no personal union between the divine and the human in Scripture; instead when God uses this human artefact as a means of revelation it remains outside of God’s person.⁸⁵

In Torrance’s theology the written Scriptures have a paradoxical nature. God is able to take and use the human word of the Bible and in doing so it becomes the vehicle of revelation and reconciliation; however, it originates in and belongs to the human sphere which is in need of Christ’s redemption (Torrance 1995:9). God’s use of Scripture as the instrument of self-revelation is an act of grace; he uses that which is ‘imperfect and inadequate ... faulty and errant’ (Torrance 1995:10) as the means of his

⁸⁵ See Luoma 2002:131.

reconciling revelation. There is a clear parallel with the incarnation where it is in the fallen and sinful human nature assumed by the Son of God that revealing reconciliation occurs. Torrance argues that we truly hear the voice of God in the human word of the Bible and because the Bible is a truly human word we need no special hermeneutics in order to hear God's self-communication (Torrance 1995:12).⁸⁶

Torrance is rightly regarded as a Trinitarian theologian and his understanding of revelation is not only Christologically founded it is thoroughly Trinitarian.⁸⁷ In his understanding of divine self-revelation Father, Son and Holy Spirit all have key roles to play. The role of the Spirit in revelation is not only in the inspiration of the human authors of the biblical texts but also in the subsequent interpretation of those texts. Torrance insists that we can only know God through God. This is a constant theme in his writings and usually refers to God's self-revelation in Christ; however he also considers the role of the Holy Spirit in God's self communication. He writes:

since God has irreversibly incarnated his self-revelation in Jesus Christ, the Word made flesh, there cannot be two ways to knowledge of God, one in Jesus Christ and another behind his back, but only one way, through Christ and in his Spirit (Torrance 1999:34).

In the same work he clarifies the nature of the part played by the Spirit in revelation. He argues that the Spirit has a three-fold role in revelation: in the incarnation of the Word (Torrance 1999:15), in the inspiration of Scripture (Torrance 1999:92f) and in the inspiration of the church as the Scriptures are read (Torrance 1999:119f, 124).

The statement in the Nicene Creed that the Word of God became incarnate 'by the Holy Spirit of the Virgin Mary' is an important part of Torrance's understanding of revelation (see for example Torrance 1988a:61). Similarly, his understanding of the role

⁸⁶ Cf. Einstein's comment that the 'whole of science is nothing more than a refinement of everyday thinking' (Einstein 1982:290).

⁸⁷ See for example Molnar 2002:1.

of the Spirit in the inspiration of the Bible is also uncontroversial. He envisages Christ so inspiring the apostolic witnesses that their proclamation becomes an extension of his own,⁸⁸ and in their testimony Christ testifies to his work of redemption (Torrance 1999:92). Torrance comments that the Scriptures of the New Testament were born within the church through the outpouring of the Holy Spirit and thus they constitute ‘the divinely provided and inspired linguistic medium which remains of authoritative and critical significance for the whole history of the church of Jesus Christ’ (Torrance 1999:93). It is clear then that Torrance holds a very high doctrine of the inspiration of the Bible. He argues that it enables us to ‘stand with the original witnesses under the creative impact of the Word’ (Torrance 1999:93); however, despite his high doctrine of biblical inspiration Torrance does not allow the Bible to become a rival to God in any sense. The Scriptures do not represent an independent source of revelation; rather in the Scriptures God testifies to himself.⁸⁹ We noted that for Torrance as for Barth the source of our knowledge of God is unitary and this is not compromised by his understanding of the place of Scripture in revelation for the Scriptures are not treated as if they contain or embody the truth of God in any abstract form; rather ‘under the leading of the Spirit of Truth’ they point us to Jesus Christ the Word of God (Torrance 1999:119); they are also the divinely appointed place where we are encountered by the Word of God (Torrance 1995:5). The Scriptures *become* a witness to Jesus Christ the Word of God by the operation of the Holy Spirit and it is through the Holy Spirit operating in the life and worship of the church that God reveals himself in the Scriptures (Torrance 1999:120).

⁸⁸ Torrance can even speak of Christ putting his Word into the mouths of the apostles (Torrance 1999:92)

⁸⁹ Torrance writes: ‘All faithful interpretation must allow the Truth to assert itself in its own intrinsic weight and majesty and to maintain its own ground over against us and our prejudices, for in the last resort we have to reckon with the fact that God alone can name himself and bear witness to himself and thus prove himself to us’ (Torrance 1999:119).

Torrance points out that some approaches to the Bible, notably those he calls fundamentalist, place the incarnation of the Word, God's actual self-revelation in time and space in the person of Jesus Christ, in second place to the written Scriptures. That which is supposed to witness to the Word, a sign pointing away from itself to the person of Jesus Christ, has usurped the place of Christ in God's self-revelation. Moreover this approach to Scripture ultimately harbours a false Christology for in its unwillingness 'to acknowledge the identity in being between what God is toward us in his revelation in Jesus Christ and what he is in his living Being and Reality in himself' (Torrance 1999:18); fundamentalism in practice denies the full consubstantiality between the incarnate Son and the Father.

Torrance argues that liberalism and fundamentalism equally refuse to allow God to be the lord of his self-revelation. He writes:

This would mean that the decisive problem of fundamentalism is not so different after all from the problem of liberalism. Both appear to balk at the fact that God himself is the one ultimate Judge of the truth or falsity, the adequacy or inadequacy, of all human conceptions and statements about him. Even the holy Scriptures must submit to his judgement and thus point us away from themselves to the truth as it is in Jesus Christ (Torrance 1999:18).

Torrance's dynamic understanding of revelation in Scripture has two important strengths. The first is that his understanding of the role that Scripture plays in revelation preserves an essential mystery within God's self-revelation. In Torrance's reformed model of revelation in Scripture the Bible does not contain or embody the truth of God. Rather under the operation of the Holy Spirit in the life and worship of the church as it engages with the Scriptures, those Scriptures point to Jesus Christ who is himself the truth of God. The revelation of God to which the Scriptures point cannot simply be reduced to words for Jesus Christ the living Word of God 'infinitely transcends all our human conceptions of him' (Torrance 1999:119). God's self-revelation consists of

much more than a series of propositions. The second strength of Torrance's dynamic understanding of revelation is that although he has a very high view of Scripture he does not allow it to encroach upon that which properly belongs to God. He is never in danger of replacing God with the Scriptures. God is still the one who is completely in control of all of our knowledge of him. Torrance's understanding of the place of the Bible within revelation still allows the sovereign grace of God to operate.

We noted a problem with Barth's interpretation of the place of the Holy Spirit in revelation.⁹⁰ According to Thiselton Barth uses the Holy Spirit as a way of circumventing the problem of hermeneutics, arguing that instead of working through the normal human methods of understanding the Spirit bypasses them. Although Torrance has been influenced by Barth in his understanding of revelation in the Scriptures his doctrine of the Spirit does not simply 'short-circuit the problem of hermeneutics' (Thiselton 1980:91); rather in Torrance's theology the spirit works through human understanding, transforming but never bypassing hermeneutics (Thiselton 1980:92, cf. Torrance 1971:184). As Torrance argues:

the Spirit of God is also the personal presence and action of God to the human creature both to give him rational life in sustained relation to Himself and to open his mind to receive and understand God's self-revelation and so to respond to him in faith and love. ... the Holy Spirit makes use of creaturely realities which God has made the media of divine revelation yet in such a way that in his response to it man's knowledge of God does not terminate on the media but on the Being of God himself (Torrance 1971:183f).

2.3.5 Revelation and reconciliation

The theme of the interrelationship between revelation and reconciliation in Torrance's theology is more fully dealt with in sections 1.6 and 1.7. However, this

⁹⁰ See section 2.2.1.

relationship is an important aspect of how Torrance understands God's use of the Scriptures as a means of his self-revelation.

In Torrance's study of patristic hermeneutics we find a clear expression of how he understands the relationship between the doctrines of revelation and reconciliation in Christian theology. Central to this relationship is Torrance's definition of knowledge of God as personal knowledge rather than propositional knowledge. Torrance sums up the relationship between the Scriptures and revelation/reconciliation in these words:

The Word of God comes to us in the Bible and can be heard as such only within our experience of God's saving activity in the Lord Jesus Christ. He has come to redeem the very humanity to which he addresses himself. Therefore the act of his revelation is inseparable from the act of his reconciliation, and the act of his self-impartation is inseparable from the act of his atoning propitiation (Torrance 1995:9).

We can understand why Torrance insists upon the inseparable nature of the relationship between revelation and reconciliation when we consider how he conceives of the dynamic relationship between Scripture and revelation. Torrance does not consider the text of the Bible to contain revelation. The written Scriptures are not a repository of revelation; rather the text is a record of God's words spoken through the prophets and apostles. God uses this text as a means of speaking to his people and pointing them to Jesus Christ the living Word of God. The Bible is the written word which God sovereignly and graciously uses to draw us into a revealing relationship with himself. For Torrance there is a sense of the Scriptures as the place where God graciously meets us. When God reveals himself in the Scriptures this is in itself an act of reconciliation. For according to Torrance's definition knowledge of God is not knowledge *about* God, it is a personal knowing; it is knowledge that comes from a relationship. Richardson sums up Torrance's position well when he speaks of Torrance

having a doctrine of ‘the mystical communion of the redeemed with the Redeemer’, and notes that:

In this communion, the human knower is raised up through the statements of Scripture to a knowledge of God that grasps the Trinitarian whole ... of that which has been revealed by Christ, elicits a personal knowing that is interpersonal and inclusive of the creature, and results in true *theologia*, real knowledge of God in God’s own Trinitarian reality (Richardson 2001: 193f).

We can see here the influence of Polanyi’s philosophy especially his theory of tacit knowledge. Torrance summarises Polanyi’s theory of the tacit dimension to knowledge as a form of knowing:

in which we come to know more than we can actually tell at the time, but in which we may begin to pass from implicit to explicit awareness through the process which he describes as *indwelling* (Torrance 1984a:93).⁹¹

Torrance finds the concept of personal knowledge in Barth as well as in Polanyi (Torrance 1999:14). Torrance’s argument with evangelical fundamentalism is that it conceives of divine revelation as a set of infallible propositions about God. Whereas for Torrance, following Barth and Polanyi, what God gives to us in his act of revelation is himself.⁹² This understanding of divine revelation as personal revelation also forms the essence of Torrance’s argument with theological liberalism; a tradition which, like fundamentalism rejects the notion of God’s self-revelation, and instead finds the source for theology in the ‘autonomous religious reason’ (Torrance 1999:15).

⁹¹ See also Torrance 1980a:11f.

⁹² Torrance writes that fundamentalism ‘rejects the fact that revelation must be continually given and received in a living relation with God – i.e., it substitutes a static for a dynamic view of revelation’ (Torrance 1999:16).

2.3.6 Discussion

Although Torrance's understanding of the place of the Bible in revelation begins with Barth's definition of Scripture as witness to the Word, he develops his doctrine of scripture in a very different direction to Barth, and this points to his underlying epistemology. It is doubtful that Torrance regards his own position on the place of the Scriptures as being in any important way different from that of Barth. However, a close reading of his understanding of the Scriptures in revelation shows a distinction between them.

Torrance criticises fundamentalism for compromising the sovereignty of God in his self-revelation by holding a static and propositional doctrine of revelation in Scripture. Torrance's emphases on the dynamic and personal aspects of revelation in scripture take him beyond the Bible as witness to revelation. It has been shown that in his writings the Bible, as a graciously provided witness to revelation, becomes itself a mediator of revelation and the place where God meets his creation in active and personal revelation.

There are clear parallels as well as important differences between Torrance's exposition of revelation in Christ and revelation in Scripture. Just as Jesus Christ is the place in the universe of space and time where God is present to his creation, so the particular and human text of the Bible is the place where God meets his people. There is however, no personal union between God and the Scriptures, they are a record, a witness and a meeting place, but there is nothing equivalent to the doctrine of the *homoousion* in the doctrine of scripture. Nor is the Bible a rival or second source of revelation for the God who meets us in Christ is the same God who meets us in Scripture. The consubstantial relation between God and humankind in the incarnate Son means that revelation in Christ will always be normative for Christian theology's

understanding of God, but normative in terms of the content rather than the locus of revelation.⁹³

Torrance's doctrine of Scripture clearly goes beyond the Barthian concept of Bible as witness. The Scriptures are used by God as a means of personal and reconciling revelation within the contingent creation. In Torrance's doctrine of Scripture can be seen something more fundamental even than revelation in Christ, but something which is in no way a rival to revelation in Christ, and that is the principle of the sovereignty of God by whose will and act alone human beings may come to personal and therefore reconciling knowledge of him.

2.4 The Bible as a divine and human word

2.4.1 Theology and the Scriptures

Torrance calls for an 'unashamed theological exegesis' of the Scriptures (Torrance 1999:42). He argues that biblical exegesis has suffered from a separation of empirical and theoretical elements which characterises the historical-critical approach to interpretation. He argues that this separation can be seen in the way that the gospel traditions concerning Jesus are treated. Instead of the Scriptures being the essential source of systematic theology there is a separation between them in the modern academy with the questions directed to the text by exegetes being of little interest to the systematic theologian. Gray writes that 'Torrance finds that the abstraction of Scriptural hermeneutic from the apostolic tradition means that what is being produced is of no value to theology' (Gray 1980:304).⁹⁴

⁹³ See section 1.2.2.

⁹⁴ See section 1.8.

Torrance argues that the fault is with the historical-critical method and its attempt to separate the theoretical and the historical elements within the gospel tradition. The problem with this approach to the Bible is that it is founded upon what he calls ‘post-Newtonian’ and ‘Post-Kantian’ science (Torrance 1999:39f); it is built upon an outdated understanding of the nature of reality which sees interpretation as extrinsic to facts and events rather than intrinsic to them.⁹⁵ Torrance argues that contemporary science has a different understanding of the relation between empirical and theoretical components of knowledge, ‘for they are grounded upon the inherence of empirical and theoretical factors in one another in reality itself’ (Torrance 1999:40). There are no bare facts or uninterpreted events; rather all facts are interpreted facts. Torrance believes that the integration of the empirical and theoretical components in knowledge in the sciences calls for a similar integration in theology. This is what he means when he calls for a ‘genuinely *theological* approach’ to the Scriptures. A theological approach to the Bible would take seriously the historical and occasional nature of these writings but it would take equally seriously the claim that it is in these historical and occasional writings that we have access to God’s self-revelation in history. Historical-critical exegesis takes only one aspect of the Scriptures seriously namely their historical and human origin.

Thiemann criticises Torrance’s theological hermeneutics. He argues that Torrance’s method is out of step with much contemporary theology in that it directly contradicts the modern epistemological ‘turn to the subject’ (Thiemann 1985:34). Torrance’s reply to this criticism would be that he believes that this ‘modern turn’ is a wrong turn based on an outdated and dualist epistemology and that the integration of form and being represents a better understanding and a better way forward for both

⁹⁵ Ricoeur questions the psychological and existential prejudices which characterise much historical-critical exegesis of the Bible (Ricoeur 1976:22f, see also Gray 1980:303).

biblical and systematic theology than Kantian subjectivity (Torrance 1999:39).

Torrance's call for a theological interpretation of the Scriptures complements his call for a Christocentric understanding of revelation and is another element in the argument that his theology can offer a means of rapprochement between biblical and systematic theology.⁹⁶ Furthermore Theimann's argument that Torrance ignores the subjective aspect in the production and reading of the Bible is ungrounded. Mc Call notes that in Torrance's hermeneutics human subjectivity does have an essential role in revelation, however, that role is not 'constitutive' (Mc Call 2004:152). Torrance takes full account of the subjective and human element in both the production of the biblical text and in its interpretation but he refuses to allow this subjective aspect to dominate. He argues that the subjective pole has dominated and the objective aspect has been neglected in much biblical interpretation.

2.4.2 The paradoxical nature of the Scriptures

Torrance attempts to find a proper balance between the subjective and objective elements in the theological interpretation of Scripture. In a 1956 essay he examines the nature of the Christian Scriptures.⁹⁷ He argues the Bible is a human text, the product of human writers and processes; moreover, as a human text the Bible belongs to the realm which is subject to sin and the fall and as such is in need of redemption. However, the Bible is also a vehicle of revelation and redemption. Torrance acknowledges that the Bible is a product of human history, with all that this entails in terms of 'inadequacy ... faultiness and imperfection' (Torrance 1965:139), but it is also the divinely provided

⁹⁶ See section 1.8.

⁹⁷ The article was published in *Essays in Christology for Karl Barth*, ed T. H. L. Parker, Lutterworth Press, 1956, and is reproduced in *Theology in Reconstruction*, Torrance 1965:127–149.

means of God's self-revelation. There is a paradox at the heart of Torrance's doctrine of Scripture which he expresses in this way:

The Bible has to be heard, therefore, as Word of God within the bi-polarity of revelation and reconciliation, in which we acknowledge that in itself, in its human expression, the Bible is word of man with all the limitations and imperfections of human flesh, in order to allow human expression to point us beyond itself, to what it is not in itself, but to what God marvellously makes it to be in the adoption of grace (Torrance 1965:139).

For Torrance the 'limitations and imperfections' of Scripture are not a problem, they do not present a barrier to the Bible's communication of the word of God; rather it is the human, historical and occasional aspects of the Scriptures and their production which enables them to become vehicles of God's self-revelation. The human and historical aspects of the Bible, its very fallibility and fallenness, are essential to our ability to hear the word of God through it. Without that human, indeed fallen, aspect fallen humanity would be unable to encounter the word of God in the Scriptures (Torrance 1965:140). The way that Torrance integrates the subjective and objective elements of Scripture is a good example of his whole approach to theology. He does not ignore the subjective aspect of the production or interpretation of the Scriptures. There is a human component to the Scriptures which Torrance relates to his underlying Calvinist anthropology. Torrance writes that the Bible 'belongs to the sphere where redemption is necessary' (Torrance 1965:138). It is only through a miracle of divine grace that it is able to become for us the word of God. Furthermore Torrance argues that the very ambiguity of the Christian Scriptures are an element used by God in his act of self communication, for God uses this human, fallible and fallen word to communicate his divine word to human, fallible and fallen creatures: in speaking through this ambiguous medium God effects a fully human expression of his word. Torrance argues that:

The Word of God comes to us in the midst of our sin and darkness at once Revealing and reconciling, but it comes with strong crying and tears, pressing its way through the speech of our fallen flesh, graciously assuming it in spite of all its inadequacy and faultiness and imperfection, and giving it a holy perfection in the Word of God (Torrance 1965:139).

Torrance believes that his theological approach to interpreting the Bible provides a necessary corrective to the sort of historical criticism which deliberately avoids the theological questions raised by the person of Jesus Christ and the contents of the gospel (Torrance 1999:41f). Torrance's call for an integration of systematic and biblical theology is entirely characteristic of his approach to theology in general; the themes of integration and the rejection of dualism are found throughout his writings.⁹⁸ Torrance believes that the historical-critical approach to hermeneutics cuts Jesus Christ off from his natural relationships, both his relationships within Israel and in the being of God (Luoma 2002:131). Torrance writes that the effect of the historical-critical method 'has been to detach Jesus Christ from God, to detach Jesus Christ from Israel, and to detach Christianity from Christ himself' (Torrance 1999:1).

That God should choose to reveal himself in the text of the Bible is an example of economic condescension, of God stooping to make himself known. The fullest example of this is the incarnation, for while the incarnation is usually seen as God taking human nature in order to redeem it, it can also be seen as God adapting himself to human understanding. Torrance writes:

'God the Word becoming man in order to adapt himself to man ... and to assimilate human modes of thought and speech to himself, and thereby to effect real communication between God and man and man and God' (Torrance 1999:108).

⁹⁸ See Luoma 2002:131f.

In Jesus Christ God adapts human forms of thought and speech to his self-revelation, and in this way the written Scriptures took shape (Torrance 1999:109). There is a parallel between God's word coming to us through the human words of Scripture and the incarnation. In the Bible the divine and the human belong together so that while we can distinguish them we cannot separate them; so in the incarnation Jesus Christ unites the divine and the human in his own person. Torrance refers to an 'analogical likeness' between revelation in Scripture and the incarnation. However, there is an important distinction between Scripture and the incarnate Son. Torrance argues that:

whereas in Jesus Christ the divine Word and human word are united within one Person, that is hypostatically, in the Bible the divine Word and the human word are only united through dependence upon and participation in Christ, that is, sacramentally (Torrance 1995:7).

There is no personal union between the human and divine components of Scripture as there is with the incarnation; rather God uses the human word which remains external to him.⁹⁹

Ultimately in Torrance's theology there is true revelation in the Bible. Scripture is more than simply a witness to revelation; it is a means by which God effects a personal encounter within the contingent universe. Revelation in Scripture is dependent upon the sovereign and gracious decision of God to reveal himself through this human text. As the God who reveals himself through the Bible is the God who became incarnate in Jesus Christ, adapting human words and thoughts to his self-revelation, there is no possibility of contradiction between revelation in Scripture and revelation in Christ or of the Bible displacing Christ within revelation. Jesus Christ is the primary revelation of God and the Scriptures are so called only in a secondary sense.

⁹⁹ Torrance (1995:7) quotes the words of Darwell Stone in support of his understanding of the union of divine and human in Scripture.

Torrance clearly has a high doctrine of Scripture but he is careful to avoid any hint of a static understanding of God's self-revelation in the Bible. He retains his dynamic understanding of revelation by emphasising that although God in his incarnation has adapted the human thought and speech which we find in the Scriptures to his revelation, yet these words are only able to become a meeting place for humanity and God by divine will and action. God is always lord of his self-revelation. The Scriptures are a divinely provided vehicle for God to address humanity (Torrance 1999:109).

2.5. Conclusion

For Torrance as for Barth the source of revelation is unitary, but there is a subtle though important difference between them. While in Barth revelation in Christ forms the foundation of his theological epistemology, in Torrance it has been shown to be the doctrine of justification by grace. This gracious self-revelation of God within time and space is seen supremely in the incarnation of the Son of God but it is also seen in the Scriptures. In Torrance the Scriptures are not only a graciously provided witness to the Word of God who is Jesus; they become by a sovereign act of divine will a meeting place within the creation where the God who meets us in the person of Jesus Christ encounters us. In Barth revelation in Christ is normative for both the content and the location of divine self revelation, whereas for Torrance it is normative only for the content of revelation.

Following Barth Torrance treats the Bible as a human and historical word and also as the word of God to the church. Like Barth he refuses to identify the word of God

with the text of the Scriptures; instead he develops a dynamic understanding of revelation in the Scriptures. The Bible is the text which God has graciously provided as a record of revelation and it is also the text which God graciously uses to speak to his church. Revelation then is an event, an action of God. Neither Barth nor Torrance allows anything to encroach upon the sovereignty of God in his self-revelation, not even the Bible. For both writers there is a particularity about the text of the Bible; this text and no other becomes by the grace of God and the action of the Holy Spirit the effective witness to the Word. The Bible is both a product of and a witness to God's act of self-revelation. In a striking parallel to his understanding of Christ whose humanity is the place in time and space where God meets his creation, Torrance says that the Bible becomes a place where God meets us. Thiselton argues that Barth attempts to circumvent the normal processes of human understanding in his interpretation of the way in which the Bible becomes a vehicle of divine self-revelation, whereas Torrance argues that God utilises those normal human processes in order to reveal himself through the Scriptures.

Torrance does not regard the frailty and fallibility of the human authors of Scripture to be a barrier to its effective communication of God's word. In using frail, fallible and fallen authors God effectively 'translates' his word into human categories; into a form that can be understood by frail, fallible and fallen men and women. The effective witness to God's self-revelation is a human artefact delivered to human beings which becomes by God's will and action a locus of divine self-revelation. There is further parallel to Torrance's understanding of revelation in Christ, for in assuming our frail and fallen nature God in Christ has revealed himself in human nature and thought forms.

Polanyi has been of influence on Torrance's understanding of revelation. Torrance derives his understanding of personal knowledge from Polanyi and Barth. In Scripture God does not reveal propositions about himself; he reveals himself. This is the essence of Torrance's argument with Christian fundamentalism. He argues that fundamentalism's propositional and static rather than personal and dynamic doctrine of revelation leads to the Bible usurping the place of God in theology and in the church. By making the text itself revelation rather than a witness to and locus of revelation Torrance argues that fundamentalism subverts the sovereignty and grace of God in his self-revelation. In Torrance's theology the written Scriptures are not only the divinely provided witness to revelation, but are also the locus of revelation for the church; as such the Scriptures have an important role to play in the reconciliation of God and humanity. Because revelation is personal rather than propositional an effective revelation of God is also a personal encounter with God. In Torrance's personal and dynamic understanding of revelation in Scripture God is always in control of his revelation, he is not given into our hands as with a fundamentalist approach.

In Torrance the Bible is not a second source of revelation for the God who reveals himself in Christ is the same God who reveals himself in Scripture; however, it has been shown that in his doctrine of revelation the Bible becomes a second locus of divine encounter.

In his understanding of the role of Scripture in revelation Torrance is concerned to bring together areas of theology which are often separated, namely biblical theology and dogmatic theology. Torrance believes that their separation is the result of a distorted understanding of the relationship between form and being which is inherent in western thought. Torrance believes that this distortion has been successfully challenged in theology by Barth and in the natural sciences by Einstein. He is sceptical of the value of

the historical-critical approach to the Bible which has characterised much contemporary biblical exegesis. The historical Jesus to whom the Scriptures point comes with a theological context which cannot simply be removed without doing violence to proper historiography. Torrance's approach to revelation in the Scriptures attempts to avoid the problems of both fundamentalist and theologically liberal understandings of the Bible; for he takes the human and historically situated aspect of the Bible seriously and he argues that it is through this particular text that we meet God in his self-revelation.

For Torrance the Bible is God's gift to the church in three different but related ways; firstly it is the divinely provided human witness to his self-revelation in Christ, secondly it is the witness through which God speaks to his church, and thirdly it is a place where God encounters his people. In all of his self-revelation God is supremely sovereign and revelation is an act of divine grace.

According to Torrance the Scriptures exist to bring us into relationship with God and therefore revelation is always reconciling. The focus in Torrance's theology is never on the Scriptures themselves but on Christ to whom they witness and on the God who meets us through them, therefore knowledge of God and Christ cannot be reduced to knowledge of the text of the Bible. Just as God is always sovereign of his self-revelation so he is always greater than can be expressed or conceived.

3.1 Introduction

In chapter one it was argued that revelation according to Torrance is unitary in its source and Christologically founded; but that underlying this is a more fundamental commitment to the gracious nature of all human knowledge of God. Chapter two demonstrated how this shaped his formulation of the place of the Scriptures in revelation. Chapters three and four will examine Torrance's understanding of natural theology and its place in his doctrine of revelation. Chapter three deals with the importance of Barth's 'no' to natural theology for Torrance's own work on natural theology. We will see that from Barth's rejection of traditional natural theology Torrance derives the basic principles of his theological epistemology. Chapter Four continues by examining Torrance's non-independent natural theology.

Torrance first became acquainted with Barth's theology while a student at New College in Edinburgh from 1934 to 1937 in lectures by Macintosh (McGrath 1999:32f). When he was awarded the Aitken fellowship in 1937 he studied with Barth in Basel (McGrath 1999:42) where he attended Barth's lectures and seminars on dogmatics; he was also selected to be one of a dozen students for a weekly private seminar at Barth's home (McGrath 1999:43f). For his thesis under Barth Torrance wanted to write on 'the scientific structure of Christian dogmatics' (McGrath 1999:45) but Barth told him that he was too young for such a topic. Instead, at Barth's suggestion, he chose the doctrine of grace in the fathers of the second century.¹⁰⁰

It could be argued that Torrance spent the rest of his career working on the topic that he had originally wanted to research for his Basel thesis; his transposition of natural

¹⁰⁰ His doctoral thesis was published in 1948 as *The Doctrine of Grace in the Apostolic Fathers* (Torrance 1948).

theology into the body of dogmatics and his work on theological science, two topics that occupied much of his later writings, together constitute ‘the scientific structure of Christian dogmatics’.

Torrance continued to engage with Barth throughout his career. He wrote in detail on Barth’s theology at different times in his life and regarded some of his own work as a development of Barth’s theology, not least his work on the relationship between theology and the natural sciences. In almost all of his writing there is some reference to Barth and so Torrance can be regarded as holding an ongoing conversation with Barth throughout his career. In Torrance’s assessment Barth is more than an important twentieth century theologian; he is a church father alongside figures such as Calvin and Athanasius (see McKim 1986:54–55).¹⁰¹

The most important areas of Barth’s theology for Torrance are his work on the related areas of revelation in Christ and natural theology. Torrance regards his own theology, especially his engagement and dialogue with the natural sciences, as a development of Barth’s rejection of natural theology in the 1930s. He interprets the Barth – Brunner debate on natural theology as being primarily about theology¹⁰² and holds that the main offence in natural theology for Barth is its independence of special revelation and its speculative nature. Torrance argues that Barth regards natural theology as an attempt to circumvent actual revelation. In this chapter we will examine Torrance’s reading of Barth on natural theology. Torrance’s development of Barth’s work on natural theology is central to his own theology; his development of a non-

¹⁰¹ Torrance writes: ‘Barth must be accorded an honoured position among the greatest theologians of the Church - Athanasius, Augustine, Anselm, Aquinas, Luther and Calvin’ (Torrance 1962:15).

¹⁰² Gorringer emphasises the political aspect of Barth’s thought, and the social and historical context in which it was written. He writes to support the thesis that in Barth we find a source for a new liberation theology (Gorringer 1999:1-5). McCormack (1997) and Hart (Hart 2001:167f) give more balanced readings of Barth, treating his theology as responding to the political context without being determined by it.

independent natural theology is important for his work on epistemology, his account of critical realism and his theological science.

In past centuries natural theology has been regarded as a complement to revealed theology; a book of nature to be studied alongside the book of Scripture. Traditionally natural theology's task has been to establish the knowledge of God, or at least an openness to and capacity for knowledge of God, which is common to all people and independent of special revelation in Scripture or in Christ. Natural theology has been seen as a preparation for revealed theology. The most succinct recent presentation of this position is found in *The Catechism of the Catholic Church* which argues that:

Our holy mother, the Church, holds and teaches that God, the first principle and last end of all things, can be known with certainty from the created world by the natural light of human reason. Without this capacity, man would not be able to welcome God's revelation. Man has this capacity because he is created in the image of God (*Catechism* 1994:16).

This remains the official teaching of the Roman Catholic Church and has three components: that human beings have a natural knowledge of God independent of God's special act of revelation; that human beings have a natural capacity to receive revelation without which we would be unable to receive God's special revelation; finally that this knowledge and capacity are the result of our creation by God in his image. The Catechism goes on to note the 'many difficulties' which human beings face in coming to know God 'by the light of reason alone' (*Catechism* 1994:17). Traditional natural theology assumes that common grace and general revelation make knowledge of God possible and that this is plain to all peoples everywhere. Natural theology is usually portrayed as a preparation for special revelation in which the general knowledge of God is modified and expanded.

Baillie, another of Torrance's Edinburgh teachers, sets out natural theology and revealed theology as they would have been understood prior to the nineteenth century.

He comments that 'any child' would have been able to explain:

that at creation God had endowed man with the power of reason, and that by the 'unaided' exercise of this reason man had been able to find out some things about God; but that, at a later time, God had added to the knowledge thus at man's disposal by communicating to him certain further information which he could not possibly have found out for himself (Baillie 1939:35f).

It is noteworthy that Torrance does not engage with contemporary Roman Catholic theology in which eminent theologians such as Rahner develop traditional accounts of natural theology. He appears not to be interested in debating with Catholic theologians; rather his concern is with the theological liberalism of the western Protestant tradition. Torrance argues that the work of Barth on the unity of act and being in God and the work of Einstein on relativity undermine the philosophy upon which much recent liberal Protestant theology has been built. This chapter will examine Torrance's reading of Barth on natural theology and will then ask whether this reading can be substantiated.

3.2 Torrance's reading of Barth on natural theology

3.2.1 Barth's 'No' to natural theology

Torrance argues that the natural theology rejected by Barth in *No!* (Brunner and Barth 1946) and *Church Dogmatics II/1* (Barth 1957:63-178) is not natural theology *per se* but is independent natural theology which is detached from special revelation. If this reading of Barth can be substantiated it would leave room for the kind of Barthian reworking of natural theology which Torrance pursues. Torrance records meeting Barth

in 1968 to discuss his interpretation; Barth agreed with his reading of his work on natural theology (Torrance 1976: ix–x).

Torrance consistently interprets Barth's rejection of natural theology in the 1930s, which culminated in the final breakdown in relations with Brunner, as being primarily for theological reasons. The debate between Barth and Brunner was conducted both in private correspondence as well as in publications, sermons and addresses. In 1934 the debate came to a climax with the publication by Brunner of *Nature and Grace* and Barth's terse response *No!* (Brunner and Barth 1946).

Barth's break with liberal theology occurred when he was pastor of Safenwil (Busch: 1976:61) and was precipitated by his experiences as a pastor as he grappled with the Bible and also by the outbreak of the First World War. In August 1914 ninety three German scholars proclaimed their support of the war policy of the Kaiser; among these scholars were many of Barth's former university teachers.¹⁰³ McCormack notes that in a letter to Martin Rade written on the 1st October 1914 Barth writes:

Something of the deep respect which I felt within myself for the German character is forever destroyed ... because I see how your philosophy and your Christianity breaks into pieces in this war psychosis (McCormack 1997:114).

At this time Barth's friend Thurneysen introduced him to the theology of the Blumhardts (Busch 1976:84), the central point of which is the victory of Christ. From their writings Barth learned not to approach God from the perspective of the world or humanity but 'to begin with God'.¹⁰⁴ During the summer of 1916 Barth began to study Paul's letter to the Romans. He began to see the Bible in a new way no longer reading it

¹⁰³ On this see Barth 1969a:21f; Torrance 1962:38; Busch 1976:81ff; McCormack 1997:111-125.

¹⁰⁴ Smart, J. D. *The Divided Mind of Modern Theology*. Philadelphia 1967 page 60, quoted in Hart 2001:9.

as a word about ethics or religion but as God's address to humankind.¹⁰⁵

From the second edition of his commentary on Romans onwards Barth finds no place for natural theology. He focuses on what Torrance calls the utter 'godness' of God (Torrance 1962:39); that is, upon the absolute subjectivity of God in his act of revelation, by which Barth means that in the act of revelation God reveals himself not something *about* himself (Torrance 1962:45f).¹⁰⁶ His insistence that any true knowledge of God is a result of divine initiative and grace ensures this personal revelation.

Two events, one internal and theological, the other external and political, led to the publication of *No!* The external events being the rise of National Socialism in Germany from the late 1920's onwards coupled with the inadequate response to these events from the churches and from many theologians; the internal and theological events are what Barth calls the '*deepening* and the *application* of that knowledge which, in its main channels, I had gained before' (Barth 1969a:42, emphasis Barth).

The use made of natural theology by the German Christians led Barth to attack all natural theology as a transgression of the first commandment.¹⁰⁷ According to Barth natural theology is a form of idolatry which, in making human experience the starting point of theology, refuses to allow God to be God and instead displaces God enthroning human nature instead. This is the immediate background to Barth's response to Brunner's *Nature and Grace*. Barth felt that he had no choice but to respond in the

¹⁰⁵ See Barth's address "The Strange New World Within The Bible" delivered in 1916, Barth 1928:28-50; cf. Torrance 1962:49.

¹⁰⁶ Torrance writes: 'Much of the influence of Kierkegaard on him Barth sought later to tone down and sometimes to cut out altogether, but there is one important point which we must not fail to note: Kierkegaard's doctrine of the *Truth in the form of personal being*, Truth as Subject...' (Torrance 1962:45 emphasis Torrance).

¹⁰⁷ Gorringer quotes Barth writing that '[i]t was on the truth that God is one that the 'Third Reich' of Adolf Hitler made shipwreck ... Beside God there are only creatures or false gods, and beside faith in Him there are religions only as religions of superstition, error and finally irreligion', (quoted in Gorringer 1999:117).

strongest terms.¹⁰⁸ Barth argues that revelation, if it is revelation, is always special, is always an act of grace, and is therefore always supernatural and miraculous. God needs no help from our side in order to reveal himself to us. The Holy Spirit has no need of a 'point of contact' naturally or independently found within human beings in order to open to them the living word of God; if any such 'point of contact' is needed then the Spirit is able to establish this in the act of revelation itself. Barth argues that there is no natural point of contact in human nature, nor do we have a natural capacity to receive revelation. Barth compares the idea of human capacity for revelation with the idea of a drowning man's capacity for being rescued. He points out that if the notion of such a capacity is to have any meaning then it must contribute to our actual knowledge of God (Brunner & Barth 1946:79).

The disagreement between Barth and Brunner expressed in *Nature and Grace* and *No!*, was not new. Their theologies diverged before 1934 (see McCormack 1997:399) and continued on their different paths over the years since. The polemic of 1934 is best seen as a clarification of the respective positions of the two theologians expressed at a time of crisis for Western society and church. Hart, in his analysis of the relationship between the two men based on their correspondence, writes that:

Barth did not understand German - Christianity as anything unique; it was simply another form of the error of Neo-Protestantism with which Brunner consistently flirted - the desire to correlate God's revelation with a second criterion (Hart 2001:168).

In the section of the *Church Dogmatics* which deals most fully with natural

¹⁰⁸ For Barth, *Nature and Grace* created a fact to which he felt he must respond, namely, the approval of the German Christians. Barth wrote to Brunner: 'You cannot have ...the approval of these theologians and be my confederate at the same time' (quoted Hart 2001:155).

theology (Barth 1957:63-178)¹⁰⁹ there is no change in Barth's position. The German edition of *Church Dogmatics II/1* was published in 1940, only six years after *No!* For Barth there is not, nor can there be, any knowledge of God apart from his self-revelation. The capacity within human beings to receive God's revelation is not independent nor is it innate; this too is an act of God and a miracle of grace.¹¹⁰ Natural theology makes this capacity for, or readiness to receive, revelation independent of God and his actions. Barth argues that it is impossible for human beings to know God in a direct or unmediated way; to do so would destroy us (Barth 1957:19). God's self-revelation must be mediated and this mediation takes place 'through the human nature of Jesus Christ' (Hunsinger 1991:89).

Barth's theology is Christocentric because he grounds all knowledge of God in the divine initiative and grace in Jesus Christ. Gorringer calls this a 'theological castling move' which 'guards the freedom of God from any hostile human takeover' (Gorringer 1999:140).¹¹¹ Barth understands human nature to be closed and even hostile to grace; this leads to his damning analysis of the position of natural theology in the church (Hunsinger 1991:96). According to Hunsinger Barth regards the persistence of natural theology in the church as a sign of the depth of human sin and rebellion against God. McGrath writes of Barth's concern 'to expose the myth of human autonomy and identify its consequences for theology and ethics' (McGrath 2001:269). In natural

¹⁰⁹ For discussion of this passage of the Dogmatics, see Hunsinger 1991:76 ff; Hart 2001:202; Gorringer 1999:138-140.

¹¹⁰ See Gorringer 1999:139f.

¹¹¹ Cf. Torrance who writes: 'What had to be asserted again was the transcendence of God over all our conceptions and formulations, his freedom from the control of all *our* analogical constructs and arbitrary impositions, his refusal to be bound within any frame of reference we can desire, and his implacable opposition to every form of idolatry' (Torrance 1962:102 emphasis Torrance).

theology we deny and oppose grace and in doing so we deny and oppose God.¹¹²

3.2.2 Torrance: Barth as preacher of the Word

Torrance argues that Barth's theology is primarily a proclamation of the word of God and he resolves to take him seriously as a theologian and preacher of the word. This reflects Barth's own assessment of his work (Barth 1969a:68). While Torrance makes some reference to the context in which Barth's theology was forged¹¹³ his interest in Barth is theological. He points out that Barth's rejection of the liberal theology of his teachers came not only the result of the outbreak of the First World War and their response to it (Torrance 1962:37f) but it was the result of his weekly struggle as a preacher with the Scriptures on the one hand and the life and struggles of the people around him (Torrance 1962:36).

According to Torrance the first great shift in Barth's theology is his break with the theological liberalism of his teachers which had its origins before the outbreak of the war but can be conveniently dated to 1914. This is documented in the first edition of *Romans*. The second shift is Barth's move to dialectics which coincides with the rest of his time in Safenwil and is seen in the second edition of *Romans* in which Barth throws off all philosophy and all positive assessments of religion. The two great influences on Barth in this period are Overbeck and Kierkegaard. The third movement in Barth's theology is the more gradual shift from dialectics to dogmatics (Torrance 1962:37f, 48).

Torrance reminds us that Barth's theology is proclamation. It is not an attempt to respond to the movements in the church and society of his day. Nor is it an attempt to construct an abstract work of theology; nor is it an engagement in apologetics. Rather

¹¹² Torrance's reading of Barth's rejection of natural theology on the grounds of its independence is supported by McGrath (McGrath 2001:269, 281f.).

¹¹³ Torrance acknowledges the importance of the outbreak of the First World War and the rise of National Socialism to Barth's theology.

we find in Barth both a distancing from the world and an engagement with the world so that the gospel can be brought to 'bear upon the world in all the power of its newness as message *from God to men*' (Torrance 1962:47). Torrance reminds us that Barth is above all a preacher and that the whole of his theology is to some extent proclamation (Torrance 1962:47).

3.2.3 Torrance's interpretation of Barth's position

Torrance consistently argues that Barth's rejection of natural theology is on the grounds of its independence of God's actual self-revelation in Christ (Torrance 1980b:87; Torrance 1962:114f). This is not the usual interpretation of Barth, but it is supported by Barth's own comments (Barth 1962b:342). Hauerwas also interprets Barth in this way (Hauerwas 2002:158f), as does McGrath who argues that Barth's 'hostility towards natural theology ... rests on his fundamental belief that it undermines the necessity and uniqueness of God's self-revelation' (McGrath 2001:269).

Luoma argues that Torrance's main objection to independent natural theology is that it attempts to build a logical bridge from humanity to God. This is certainly one factor in Torrance's rejection of traditional natural theology. Torrance rejects independent natural theology for several reasons: it introduces dualism into the being of God, separating the doctrine of God from the doctrine of the Trinity; it attempts to usurp the place of God in revelation; and it violates the sovereignty of God in his self-revelation.

Knowledge of God that is independent of God's act of self-revelation puts God into our hands; it takes from God's control the decision of if, when, where, and under what conditions God is known. Knowledge of God which begins with the *a priori* reasoning of the enquiring subject does not pay attention to external reality, to the actual

revelation of God within the contingent universe. It is the equivalent of a science which rejects empirical methods and instead attempts to come to knowledge of the world by logical reasoning from first principles.

In his time in Basel in the academic year 1937 – 1938 Torrance attended the lectures that make up *Church Dogmatics III/1* which deal with knowledge of God and natural theology (McGrath 1999:45). In his own work on theology and theological epistemology Torrance builds on several areas of Barth's theology which emerged in the debate with Brunner. Like Barth he argues that God's self-revelation is not grounded in anything external to or other than God but is self grounded (Torrance 1962:114f, 137). Torrance, again following Barth, understands the absolutely central place of Christ in God's self-revelation. Christ is the mediator; he is both the revealing God and the human who receives and responds to that self-revelation (Torrance 1992a:77ff; Torrance 1962:115-117). Both Barth and Torrance view revelation as supernatural, as a miracle of grace. Barth and Torrance are both from the reformed tradition and in their understanding of revelation the 'reformation *solas*' are central; revelation is: through Christ alone, in Scripture alone, and above all by grace alone, especially this latter (Torrance 1984a:291). The independent character of natural theology undermines the epistemology of grace and the sovereignty of God in his self-revelation, for if it is possible for humanity to arrive at true knowledge of God in independence of his self-revelation, then it means that human beings are able to determine the conditions upon which they can achieve knowledge of God (See McGrath 2001:269). The notion of independent knowledge of God becomes even more problematic when, with Barth and Torrance, we define knowledge of God in personal rather than propositional terms.

Traditional natural theology begins by establishing the doctrine of the one God

on the grounds of natural theology,¹¹⁴ and then proceeds to the doctrine of the Trinity which is established by special revelation. In this approach there is no intrinsic link between the doctrine of the one God and the doctrine of the Trinity. Torrance regards this as a dualist approach to the knowledge of God which he believes is characteristic of western theology both Protestant and Catholic. The term which Torrance characteristically uses to refer to God is neither Unity nor Trinity but Triunity.¹¹⁵ He defines Triunity as 'Trinity in Unity and Unity in Trinity' (Torrance 1988a:10).

In the Catholic tradition of 'text-book' theology developed under the influence of Aquinas' *Summa* there is what Barth calls a 'split concept of God'.¹¹⁶ Aquinas first establishes the doctrine of the one God in questions 2 to 26 of part one of the *Summa*, and then in questions 27 to 43 he presents the doctrine of the Trinity. This theology arrives at the idea of the oneness of God, and then subsequently gives an account of the Trinity; however, Torrance points out that Aquinas fails to establish any intrinsic connection between these two doctrines (Torrance 1992:100). The effect of this is to isolate the doctrine of the Trinity from the rest of theology. The doctrine of God becomes abstract and detached from the history of salvation (Torrance 1992:100).¹¹⁷

This traditional argument that Aquinas sets forth in the *Summa* natural theology as an antecedent and independent means of establishing the doctrine of the one God has been challenged in recent years (see Hauerwas 2002:22-37). Barth, followed by Torrance, understands the first part of the *Summa* to constitute an independent natural theology, yet Aquinas himself never calls it natural theology. The longstanding

¹¹⁴ John Baillie notes that for over a thousand years in Christian thought, it was accepted that there are 'Two quite distinct avenues to the knowledge of God' (Baillie 1939:36), that is the knowledge of God that human beings are able to discover for themselves, and revealed knowledge.

¹¹⁵ See the introduction to Torrance's work on the Nicene Creed, Torrance 1988a:1-11.

¹¹⁶ Quoted in Torrance 1992:99.

¹¹⁷ See also Rahner 1970:117f who makes the same point.

assumption that Aquinas' 'five ways' are natural philosophical arguments for the existence of God has come under attack in recent years. Citing the work of George Hendry Hauerwas states that 'it is seldom noticed that the so-called proofs for the existence of God were perfected at a time when the existence of God was barely questioned' (Hauerwas 2002:26).¹¹⁸ For Aquinas the existence of God is unproblematic and so he does not attempt to construct proofs for the existence of God. Nevertheless the 'five ways' were regarded and used by later apologists as proofs for God's existence. Aquinas' purpose in the early sections of the *Summa* is to relate God to nature; it is not to ground our knowledge of God in nature. Hauerwas writes:

The existence of God, then, which can be known by natural reason, is rightly understood as a preamble to the articles of faith, but 'preamble' does not mean that the truthfulness of the articles of faith must await for such preambles to be established before their truth can be known (Hauerwas 2002:30).

The problem arises in later centuries when the existence of God is called into question. In this new situation Aquinas' theology is used to independently establish the existence of the one God. When this happens a dualism is introduced into the doctrine of God and the doctrines of the Trinity and the unity of God become separated. While this is a misinterpretation of Aquinas it is how his work has traditionally been interpreted and used. His 'five ways' have been regarded as an independent means for human reason to establish the existence of God and Torrance would have encountered this in Baillie's lectures.¹¹⁹

Torrance notes that the duality in the concept of God which arises in the traditional reading of Aquinas in the Catholic tradition is also found within the Protestant tradition as represented by the Westminster Confession; for the same

¹¹⁸ See George Hendry, *Theology of Nature*, Philadelphia, The Westminster Press, 1980:14, cited by Hauerwas 2002:26.

¹¹⁹ For such a reading of Aquinas, see Baillie 1939, Chapter Nine *passim*.

detachment of the doctrines of God and the Trinity is to be found there (Torrance 1992a:100). Building on his reading of Barth, who insists that the self-revealing God *is* Trinity (Barth 1975:296-304), Torrance's case against traditional natural theology is that it displays both epistemological and ontological dualism. The epistemological dualism arises when the unity of God is derived from natural theology and the doctrine of the Trinity is developed from revealed theology; and the ontological dualism arises when no intrinsic connection is made between the doctrine of the unity and Trinity of God (Torrance 1992a:100f).

The concept of God which emerges from an independent or traditional natural theology is rejected by Torrance as an abstraction which falls short of the reality of God as he has revealed himself in Christ. In independent natural theology God's being becomes separated from his actions and the doctrine of God from the history of salvation. Once we follow the usual western approach to the doctrine of God, then the Trinity becomes a second stage; something 'added on' which is not essential to our understanding of God's being. For Torrance this independent natural theology merely muddies the waters. Instead of providing light in humanity's search for understanding it serves to drive a wedge between the being and the action of God.

3.2.4 The unity of act and being in theology and the sciences

According to Torrance Barth's formulation of the unity of God's act and being is one of his most important contributions to twentieth century theology. Its place in theology is likened by Torrance to the place of Einstein's theory of general relativity in physics (Torrance 1990:129-30, see also page 18). Traditional natural theology does not emerge from an actual revelation or experience of God. It is an *a priori* concept; an abstract notion which asks how God might be known in theory. In his work on

epistemology in theology and in the natural sciences Torrance lays great emphasis on the fact that the natural sciences proceed by *a posteriori* rather than *a priori* means. Scientific method is empirical. Torrance notes that an *a priori* epistemology introduces an element of dualism into scientific method by separating the formal from the empirical components of knowledge; whereas an *a posteriori* epistemology holds these two elements together (see Torrance 1984a:1–59, 61–105). This is one of the key elements in the realist epistemology which emerges from Torrance’s doctrine of revelation.

Barth and Torrance emphasise the importance for theology of holding together God’s act and being; this undergirds their understanding of revelation and prevents a separation of the doctrines of the immanent or ontological Trinity from the economic Trinity. The approach of Torrance and Barth ensures that ‘theoretical’ components of the doctrine of God are properly coordinated with empirical components. An important component of Barth and Torrance’s theology is the argument that what God reveals to humankind in revelation is himself. Torrance writes: ‘The content of Revelation is God, for what God gives is identical with the Giver’ (Torrance 1962:145).¹²⁰ In the contingent historical reality of Jesus Christ the transcendent God is present within his creation (Torrance 1962:146, cf. Barth 1957:257-272).

3.2.5 God’s creative relation to the universe

Torrance rejects all approaches to the knowledge of God which are independent of actual self-revelation in Christ. Athanasius is another important source for Torrance’s doctrine of revelation. According to Torrance Athanasius argues that the Father/Son relationship is intrinsic to God’s being in a way that the creator/creation relationship is

¹²⁰ Cf. Barth 1975:2657, 295ff.

not (Torrance 1988a:49). God is the Father of the Son and this relationship is, according to the Nicene Creed, eternal. God is eternally the Father of the Son; by contrast he is not eternally the creator. The Father/Son relationship not only precedes God's relationship to the creation; it is inherent to the very being of God.¹²¹ Torrance's point is that although God is Father he became creator (Torrance 1988a:87).¹²²

When Torrance discusses the relationship between God and the creation he notes with approval Hilary of Poitiers' argument that time is an element of the created universe (Torrance 1988a:81); however, he also notes that in arguing that while God is eternally Father he was not always creator, the Creed introduces into God's eternal being something akin to temporal relations (Torrance 1988a:87f). Torrance argues that words such as 'before' and 'beginning' are temporally conditioned and must therefore mean something different when applied to God than when applied to events within the universe; however, he argues that God is free to act in a new way, even to 'be other than he was eternally' (Torrance 1988a:89). Torrance therefore grounds the temporal change which characterises creation in the being of God (Torrance 1988a:94).

The inner relationship between the Father and the Son, defined in the Nicene formula that the Son is *homoousios tō patri*, means that we come to knowledge of the Father through the Son in a way which is a more direct and accurate than to approach him through creation and arguing back to the uncreated creator (Torrance 1988a:49). This means that revelation in Christ has precedence over revelation in creation, but only in terms of the content of revelation, that is to say that the God who meets us in Christ is God as he is in himself. The relationship between the Father and the creation is not only of a different scale or magnitude to that between the Father and the Son; it is of a

¹²¹ This is 'what Torrance calls an onto-relation or being-constituting relation which is basic, characteristic or defining of what the realities implicated in the relation really are.' (Colyer 2001a:129).

¹²² See section 5.2.2.

different order. There is no consubstantial relationship between God and creation. The creation is not God, it is not divine; it is external to the being of God and it cannot tell us who God is in himself. When we approach God from the perspective of his relation to the world as its creator we can at best only know of him 'in vague, general, and negative terms' (Torrance 1988a:50) because the distinction between the creator and the creation is infinite. From the relationship of creator to creation we cannot know God as he is in himself but only in his absolute transcendence (Torrance 1988a:50 cf. Torrance 1999:24f). Contrast this approach with that of Bernard Lonergan a contemporary of Torrance's, who writes that human reason aided by creation is able to achieve knowledge of God, however, this knowledge is 'not immediate, face to face, but through a glass darkly' (Lonergan 1974:118).

What is not clear in Torrance's writing is that because Jesus Christ is a contingent fact or event of the created universe through whom the eternal and uncreated God becomes present there is both contingency and absoluteness about revelation in Christ. In terms of the content of revelation the doctrine of the incarnation means that there is no other God than the God who has revealed himself in Jesus Christ. In this sense revelation in Christ is normative for theology, but the God who has fully revealed himself in Jesus is free to reveal himself in other places and events of the contingent creation, such as in Scripture or in the creation itself.

There a stark contrast between knowing God as he has revealed himself in Christ and God as we know him by logical inference from the creation, and however revelation in creation works it is not by human discovery or inference but is an act of revelation and as such originates with God and not with humanity. Torrance argues that:

if we try to reach knowledge of God from some point outside of God, we cannot operate with any point *in God* by reference to which we can test or control our conceptions of him, but are inevitably flung back upon ourselves. Even if we

relate God negatively to what we are in ourselves, we are nevertheless quite unable to escape using ourselves as some sort of measure for what we think or say of him. Thus in the last resort it is with reference to our private opinion... , and what we arbitrarily think up or devise... from ourselves, that we form judgements about both the Son and the Father... (Torrance 1988a:51).

This is not simply seeing ‘through a glass darkly’; for Torrance there is no possibility at all of knowing God apart from his self-revelation but his doctrine of revelation leaves open the possibility of God’s self-revelation in creation.

3.2.6 The ‘unscientific character’ of independent natural theology

Torrance argues that independent natural theology is imprecise and unscientific (Torrance 1988a:51). His definition of ‘scientific’ knowledge is knowledge which results from enquiry which is in accordance with the nature of the reality under investigation (Torrance 1969a: xi).¹²³ This definition of scientific enquiry is important for Torrance’s argument that theology is a scientific discipline in the same way as the natural sciences, Torrance argues that it is the methodology that makes theology a science rather than the matter under investigation. Although he admits that theology differs from the other special sciences he argues that these differences are due to the unique subject matter of theological science and are similar to the ways in which the methodologies of the various natural sciences differ from one another. Torrance writes:

There are of course essential differences between every special science, and it is upon those differences that they depend as separate sciences in their own

¹²³ Barth also calls theology a science for the same reason: ‘Theology is one among those human undertakings traditionally described as ‘sciences’. Not only the natural sciences are ‘sciences’. Humanistic sciences also seek to apprehend a specific *object* and its environment in the manner *directed* by the phenomenon itself; they seek to understand it on its own terms and to speak of it along with all the implications of its *existence*. The word ‘theology’ seems to signify a special science, a very special science, whose task is to apprehend, understand, and speak of ‘God’ (Barth 1979:3); notice, however, that Barth adds the qualifier ‘humanistic’ to ‘science’; cf. Einstein 1982:226.

right.... While this certainly applies to the place of theology among the special sciences, there are differences between theological science and every other science due to the fact that theology has for its proper and primary object God Himself in His speaking and acting. All the other sciences deal with creaturely realities and only with aspects of being, whereas in theology we have to do also with the creative Source of all being (Torrance 1969a:295).

Torrance's case is that in any enterprise that is properly scientific ontology precedes and determines epistemology.

In a review of *Theological Science* Hick questions Torrance's use of the word 'science' to describe the discipline of theology (Hick 1969:57-58). He argues that what Torrance has demonstrated is that theology is scientific in the sense of the German word *wissenschaftlich*; and this is 'at its best an exact and disciplined study' (Hick 1969:57). However, Hick argues that this is not 'science' in the same way that the natural sciences are 'scientific'. Hick is correct in noting that the German term *wissenschaftlich* often has a wider application than the English word 'scientific', nevertheless Torrance is clearly arguing that theology is more than a rigorous discipline in the sense of what Hick means by *wissenschaft*. Torrance clearly argues that theology properly pursued is scientific in exactly the same way that the other special sciences are scientific (Torrance 1969a:286-295). Torrance regards *wissenschaft* as much more than 'an exact and disciplined study'. Torrance argues that to be scientific a discipline must be grounded in the reality of its object of enquiry (Torrance 1969a:279). He argues that:

A scientific theology is what the Germans call *wissenschaftlich*, that is, a rigorous, disciplined, methodical and organized knowledge. It is knowledge that insists upon the truthfulness of its undertaking and is dedicated to the detection of error and the rejection of all that is unreal. It will have nothing to do with a method that is not governed by the material content of its knowledge, or with confused, disorderly or loose thinking, or with hypothetical objects (Torrance 1969a:116).

For Torrance the most important concept is that theology's method is governed by the content of its knowledge; and this is what makes theology a science. Torrance rejects independent natural theology as 'unscientific' because its method is not governed by the nature of its object instead it proceeds by speculation and logical deduction. He regards independent natural theology as speculative and unrelated to God's actual self-revelation in Christ (Torrance 1969a:174f).

According to Torrance the only reliable source of knowledge of God is God in his self-revelation in Christ; in the incarnation God gives us knowledge of himself and he gives more than knowledge. He gives himself.¹²⁴ Torrance is not interested in the possibility of our knowing God, but in actual knowledge which comes from God's self-revelation. This is in part an issue of sovereignty: God as God must remain lord in all of our knowledge of him (Torrance 1969a:299). We can only know God as He has revealed himself to us; and because he is God he remains in control of all of our knowledge of him.¹²⁵ Torrance goes on to argue that because our knowledge of God depends entirely upon God's sovereign act it is also an issue of grace. He writes that God:

gives Himself to our thinking; He objectifies Himself for us, in an act of pure freedom and Grace, and therefore in such a way that He does not resign that freedom and Grace, but remains free to give Himself to us as He pleases, or even to withdraw Himself (Torrance 1969a:37f, cf. Torrance 1962:146f).

Torrance has a strong doctrine of the sovereign and gracious God who in Christ acts to reveal himself to his creatures. This is the reason why he has no time either for

¹²⁴ Torrance writes: 'In grace the Gift which God bestows is identical with himself the Giver – concretely, this meant Jesus Christ, for he is the Deed of God identical with himself, and in him God gives none other than himself to men for their salvation and justification' (Torrance 1962:146).

¹²⁵ Torrance writes: 'Knowledge of this God cannot be moulded according to our plastic ideas or controlling archetypes; that would be idolatry' (Torrance 1969a:37).

traditional natural theology or for approaches which see natural theology as a preamble to theology proper; a preparation for revealed theology.¹²⁶ Our argument is that God can be known apart from revelation *in Christ*, and that this is clear even in Torrance's own writings, however the God who is known is the same God who has supremely revealed himself in Jesus by becoming incarnate, and all knowledge of God, whether in Christ, Scripture or creation is an act of gracious and sovereign self revelation.

3.3 Torrance's explanation of Barth's rejection of natural theology

Torrance does not simply repeat Barth's rejection of natural theology, he develops it extensively according to his own interest in theology as a science¹²⁷ thereby bringing what he believes to be a proper, that is non-independent, natural theology within the scope of dogmatics. This is one of Torrance's major theological achievements and in this work he 'stands on the shoulders' of Barth. Torrance argues that there are two fundamental theological reasons for Barth's unequivocal rejection of natural theology: the first is the doctrine of grace (Torrance 1962:23); the second is the objectivity of God's self-revelation in Christ (Torrance 1962:61).¹²⁸

3.3.1 Natural theology and the doctrine of grace in Barth

When applied to revelation the doctrine of grace tells us that all of our knowledge of God arises from God's decision to reveal himself to us. We do not stumble onto knowledge of God, nor is it the result of an innate ability on our part

¹²⁶ On the implications of Torrance's theological epistemology for all human ways of knowing see section 5.3.2.

¹²⁷ Torrance's interest in theological science was also kindled whilst he was a student in Edinburgh by his teacher Daniel Lamont (McGrath 1999:34).

¹²⁸ Torrance quotes *The Word of God and the Word of Man* in support of this point (Barth 1928:181).

(Torrance 1962:69). This emphasis on grace implies a Calvinist anthropology.¹²⁹ We have seen that Torrance follows Barth in emphasising the total objectivity of God's self-revelation in Christ. In his act of revelation God reveals himself, not something about himself.¹³⁰

Torrance argues that for Barth the decisive factor in rejecting natural theology is God's actual self-revelation in Christ (Torrance 1990:141). He notes that as Barth:

looked out from the perspective of Christian theology upon natural theology he did not reject the existence of natural theology as such or commit himself to any metaphysical refutation of it, but found himself trying to understand it as something that is 'impossible' and nevertheless 'exists', i.e. something that exists in opposition to the actual knowledge of God mediated through his Word, and which must therefore be called in question by it as illegitimate and invalid in so far as it claims to be knowledge of God as he really is (Torrance 1990:141).¹³¹

Torrance notes that in the grace of God which is seen in Christ there is a solid epistemological structure which is integrated with the actual knowledge of God in his self-revelation in Christ; and this structure, which lies at the heart of Barth's theology, gives rise to his rejection of natural theology (Torrance 1990:143). Torrance argues that according to Barth our actual knowledge of God in Christ allows 'no place for an *independent* natural theology in the body of theology proper or even as a preamble to the faith' (Torrance 1990:145, emphasis Torrance). Torrance argues that when Barth rejects all natural theology he stands in the reformed tradition for this is a corollary of the reformation doctrine of *sola gratia* (Torrance 1990:143). As we noted Barth's questioning of the legitimacy of natural theology was reinforced by events in Germany in the 1930's (Torrance 1990:142f). Nevertheless, Torrance contends that Barth's grounds for rejecting natural theology were primarily theological and epistemological

¹²⁹ See section 1.4.

¹³⁰ See section 1.6.1.

¹³¹ Torrance cites Barth 1957:63-254 in support.

(Torrance 1990:144).

Torrance notes that Barth has been accused of stating the case for the distinction between God and humanity in such strong terms that his position has become dualist (Torrance 1990:137f). In Barth's early writings, especially in *Romans*, we see evidence of the influence of Kierkegaard on his dialectical theology. He speaks of the infinite qualitative difference between the transcendent God who is wholly other and humankind. Torrance argues that when Barth uses such absolute language to emphasise the distinction between God and humanity he is reacting against contemporary liberal Protestantism which so blurred the distinction between God and humanity that in its thought God was assimilated to nature, revelation to history, and theology to anthropology (Torrance 1990:137). For Barth it cannot be a case of Christ and something else, for the something else will eventually usurp the place of Christ. This is what Barth saw in the theology of the German Christians and it is why he is so critical of Brunner and the other 'dialectical theologians' Gogarten and Merz. Barth's position was worked out against the German liberal Protestant tradition that he had recently and decisively rejected. For Barth there can be no bridge between earth and heaven based upon nature; there can be no way for human beings to reach God. The bridge between God and humankind was made by 'the invasion of God in his Godness into time and human existence and his activity within them' (Torrance 1990:137), i.e. by Christ who is the bridge between God and creation. Torrance argues that for Barth the difference and distinction between God and his creation is not some sort of deistic dualism in which God and creation do not interact, rather it serves to emphasise that in revelation, as in every other aspect of his relation to the creation, God is sovereign; he is not at our disposal. All revelation is an act of the gracious God and as such it is a gift, not something that can be demanded as a right. Nor is knowledge of God something that

can be achieved by our own efforts. This emphasis upon the utter grace of God which Torrance found in Barth is characteristic of his own theology and theological epistemology.

3.3.2 The objectivity of God's self-revelation and natural theology in Barth

Torrance argues that a second, related, factor in Barth's rejection of natural theology is his emphasis on the objectivity of God's self-revelation. According to Torrance this was a result of Barth's encounter with the Blumhardts and their theology (Torrance 1990:139). The objectivity and realism in Barth's interpretation of the Bible ran counter to the subjectivity of both contemporary liberal theology and pietism. Barth's understanding of the objectivity of revelation is informed by the reformation concept of the word as grounded in God's being;¹³² thus in his Word who is Jesus Christ God communicates himself.¹³³ This self-communication of God invalidates any knowledge of God which may be reached apart from his word (Torrance 1990:139f).

Barth's rejection of natural theology is not, argues Torrance, for abstract or theoretical reasons; it is instead a corollary of the actual knowledge of God in Jesus Christ. The knowledge of God which is based on self-revelation in Christ invalidates and calls into question any other source of theology. However, Torrance notes that Barth's concession that (independent) natural theology does exist as something impossible. For Barth natural theology is:

something that exists in opposition to the actual knowledge of God mediated through his Word, and which must therefore be called in question by it as illegitimate and invalid so long as it claims to be knowledge of God as he really

¹³² See above Chapter One Revelation in Christ.

¹³³ Torrance writes: 'If the incarnation means that the eternal truth of God has entered time and for ever assumed historical form in Jesus Christ, how can we know the truth except by entering ourselves into historical relation to its incarnate reality in time?' (Torrance 1990:140).

is (Torrance 1990:141).

Torrance argues that for Barth natural theology originates in our desire for autonomy from God. It is part of our attempt to justify ourselves 'over against the grace of God' (Torrance 1990:142). The ground upon which Barth, followed by Torrance, takes his stand against natural revelation is the grace of God in Jesus Christ. In Christ, especially in his vicarious self-sacrifice, God has done something for us that we cannot do for ourselves: he has reconciled himself to us. According to Torrance this is not only of importance for our understanding of reconciliation; it is of epistemological significance. It means that we cannot of ourselves by nature achieve the 'cognitive union with God which true knowledge of him requires' (Torrance 1990:143). This principle implies both the fall of humankind and original sin. The fall affects our mental capacity as much as it affects our moral nature, and in order to know God we must be redeemed from our mental alienation;¹³⁴ our minds must be renewed and reconciled by God's grace. In Christ God has acted to reconcile himself to our fallen and alienated human nature which includes our minds and he has done this in his saving death and resurrection in a way that precludes and invalidates any other possible way of reconciliation. We have seen that in Torrance's theology reconciliation and revelation are two sides of the same coin. Revelation is reconciliation because in his act of reconciliation, God in Christ reveals himself to us, not merely something about himself.¹³⁵ Here Torrance agrees with Barth, and writes:

That is why Barth insists that in the face of the cross of Christ we are bound to say that all natural theology perishes at the point where the knowledge of the one and only God is gained in the face of Jesus Christ and by the renewing of

¹³⁴ We saw above in Chapter One that when we look at Torrance's implied theological anthropology, that the theme of our mental alienation is an important one in his theology, see section 1.4.

¹³⁵ See chapter one.

human beings in the Holy Spirit (Torrance 1990:144).

The doctrine of justification by grace alone has profound epistemological significance for Torrance and Barth. It circumvents natural, independent, knowledge of God by arguing that we know God by his act alone and not through our own efforts. It is for this reason that Torrance follows Barth in rejecting any independent source of knowledge of God. This is not simply on the grounds of God's self revelation in Christ; it is on the more basic grounds of the doctrine of justification by grace alone. The actual knowledge of God in Christ, together with the epistemology of grace, renders any independent knowledge of God, or even an independent ground of the knowledge of God, unnecessary, irrelevant, and something which distracts from actual revelation. It is because of the gracious nature of all our knowledge of God, witnessed supremely in the incarnation of the Word in Jesus that the theology of those twentieth century theologians who argue that knowledge of God is founded upon some aspect of human nature, such as we find in Brunner's *eristics* or in Karl Rahner,¹³⁶ runs aground.

¹³⁶ Karl Rahner investigates the possibility of our knowledge of God, and of the possibility of our reception of God's revelation. He argues that there must be something within human nature which makes such knowledge of God possible. Rahner argues that the human mind is structured in such a way that it is by nature directed towards God. Like Brunner, Rahner's theology has been greatly influenced by existentialist philosophy and anthropology. Rahner spent time studying with Martin Heidegger, and we can see his influence on Rahner as he tries to make theology accessible to the modern human mind, especially with his understanding of the pre-apprehension of being. There are parallels with Brunner's *eristics*, which is hardly surprising, as his theology is also rooted in an existentialist anthropology which is derived from his reading of Kierkegaard. In his theology, Brunner tried to account for the existential crisis which arises from what he perceived to be the universally felt contradiction between what we are and what we feel that we ought to be. Rahner sees not so much an existential crisis as a striving towards the infinite which he says is inherent in all of our striving for understanding. In both Brunner and Rahner we find the use of existentialist anthropology to explain what they believe to be a natural openness towards God and his revelation inherent in all people.

3.4 Torrance's development of the critique of natural theology

Torrance follows Barth in insisting that in all our knowledge of God we begin, not with speculation, but with how God has actually revealed himself. It is for this reason that the doctrine of revelation in Christ is so central to his theology and his epistemology. It is also the main reason for his objection to traditional or independent natural theology. The attempt to construct a theory of how one might come to know God apart from the actual knowledge of God given in his self-revelation in Christ is, according to Torrance's definition, unscientific (Torrance 1980b:89; cf. Torrance 1969a:101–105, 339f). Any attempt to impose an *a priori* epistemology on theology in which theory precedes experience is a reversion to idealism, to the days before the empirical sciences. If theology is to be regarded as a science then its method and content must be integrated. Traditional natural theology attempts to develop an account of how we know God independently of our actual knowledge of God, its method and content are not integrated. In support of this point, Torrance often cites the analogy of the relationship of geometry to physics.¹³⁷ Briefly, Torrance argues that before Einstein Euclidean geometry was regarded as a logically necessary science and independent of actual physics. Since Einstein it has come to be realised that geometry is part of physics. Euclidean geometry has its origins in experience, in empirical reality, but it has been abstracted from the empirical realm and is now regarded as an abstract and necessary system which is prior to empirical knowledge.

Torrance argues that Christian theology knows nothing of God in general or in abstract; rather it knows about the God who is Father, Son and Holy Spirit; the creator who in Christ has revealed himself to us. When Christianity speaks of God it does so as

¹³⁷ See Torrance 1980b:91-93; Torrance 1985b:40f; Torrance 1990:148f; Torrance 1976:ixf; Torrance 1999:32f; see section 4.3.

a short-hand for the Trinity and not for some sort of prior non-Trinitarian monotheism or for a divine essence. Torrance cites Athanasius in support of his thesis that the Father's relation to the Son is eternal and intrinsic to his very nature.¹³⁸ God is Father, he *became* creator; therefore his relationship to the creation is of a fundamentally different order.¹³⁹ As we have seen Torrance understands the patristic *homoousion* to imply that in Christ God has revealed himself within the creation to us as he really is; therefore it is hard to see how any theology which is not Trinitarian and Christocentric can be regarded as a *Christian* theology.¹⁴⁰ If God is truly Trinity; if, as Torrance repeatedly asserts, the economic Trinity is the immanent or ontological Trinity (Torrance 1988a:135, c.f. Barth 1957:250) then there could not be a theology independent of God's actual self-revelation. There could not be a legitimate theology which brings us, not to the Trinity, but to some general divinity. The effect of having an independent natural theology and a revealed theology would be to introduce confusion and division into our knowledge of God; we would be left with a natural knowledge of the one God and a revealed knowledge of the Triune God (Torrance 1980b:90f; Torrance 1990:151f). This confusion arises when theology attempts to give an account of how we can know God in isolation from our actual, revealed, knowledge of God (Torrance 1980b:90). Torrance argues that a scientific theology grounded in God's actual self-revelation excludes natural theology 'as a sort of 'foreign body'' because a scientific theology is determined to act 'in strict conformity with the nature of its proper object, and to behave toward God as He has actually chosen to reveal Himself' (Torrance 1969a:103).

Perhaps more than anything else what Torrance has taken and developed from

¹³⁸ See section 3.2.5.

¹³⁹ Torrance's doctrine of creation is both Christologically grounded and integrated with his understanding of redemption see section 4.6.1.

¹⁴⁰ See section 1.2.2.

Barth's approach to theology is the emphasis on the objectivity of God's self-revelation. In *Theological Science* Torrance outlines the necessary conditions of any theology which claims to be Christian (Torrance 1969a:37-43). The influence of Barth is obvious here and we will see from Torrance's approach to all theology why he insists that a proper natural theology is not a prelude to or precondition of dogmatic theology. Rather the only permissible natural theology would be, according to Torrance, an element of Christian dogmatic theology. Moreover as we have seen Torrance claims that this new approach to natural theology is a development of Barth.¹⁴¹ Torrance will not let us forget that in addressing God in his self-revelation theology is dealing with an utterly unique object of enquiry. Therefore, although there are elements of theological science which are analogous to the other special sciences there are necessarily elements which are unique. All branches of the natural sciences differ from one another in their method of investigation as their respective epistemologies arise from their object of enquiry (Torrance 1969a:110-115). One important difference between theology and all other sciences is that in theology the object of our knowledge remains sovereign of all our knowledge of him. As Torrance writes: 'our knowing of God [must] be brought into conformity with what He reveals of Himself, and under the control of what He gives of Himself' (Torrance 1969a:37). This means that there is an essential givenness about our knowledge of God. We do not and we cannot discover God by our own work or effort. True knowledge of God is a gift. In one of his earliest writings on the reformed creeds Torrance states that the founding principle of all theology is the covenant of grace (Torrance 1959:l-lv). Furthermore not only does God never cease to be lord of all our knowledge of him; he also never ceases to be a person. One implication of this is that theology is a mutual relationship and a dialogue. As Torrance writes:

¹⁴¹ On Torrance's new approach to natural theology as an element of dogmatics see section 4.2.

theological knowledge is not reflection upon our rational experience or even upon faith; it is reflection upon the object of faith in direct dialogical relation with that object, and therefore in faith - i.e. in conversation and communion with the living God who communicates Himself to us in acts of revelation and reconciliation and who requires of us an answering relation in receiving, acknowledging, understanding, and in active personal participation in the relationship He establishes between us. (Torrance 1969a:39).

We have seen that Torrance places great emphasis upon the objectivity of God's self-revelation; it is one of the central elements of his theological epistemology. We have also seen that he is careful not to confuse the word of God with the human words which are used to communicate God's self-revelation. The word of God is neither limited nor defined by our words, rather it always transcends them (Torrance 1969a:39f). Finally Torrance reminds us that God is active and that his act of self-revelation is not isolated from the whole of his activity towards us; rather his revelation is part of his act of redemption and reconciliation. There is a purpose in all of God's dealings with humankind including revelation; therefore Torrance can write that the 'truth with which we are concerned in theology is teleological truth ... truth laying hold upon us for a divine end' (Torrance 1969a:41). For Torrance theological truth is saving truth and divine revelation is divine reconciliation.

3.5 Discussion and conclusion

Barth's rejection of natural theology and his subsequent Christological grounding of revelation is of fundamental importance for Torrance's theology and for his theological method. Barth emphasises the unexpected and unnatural nature of revelation. It exists, not as something for which human beings have a natural capacity but as a miracle of grace. Torrance argues that Barth's rejection of natural theology is

primarily for theological reasons. The polemical nature of his writings on natural theology was influenced by events in Germany in the 1930's, but that rejection itself was for predominantly theological principles. Barth's emphasis on the absolute sovereignty of God in his self-revelation supports Torrance's interpretation of Barth, for he has always emphasised that what Barth finds most offensive in natural theology is its independent status. Torrance, following Barth, has always laid great emphasis upon the sovereignty of God and upon the gracious, even miraculous nature of God's self-revelation. Barth's insistence that all revelation is mediated through the Son has led to him being charged with reducing the totality of God to what is revealed in Christ (e.g. in Muller 1990).¹⁴²

Throughout his career Torrance carried on dialogue with Barth and his theology, both in person and through commenting on Barth's writings. From Barth's rejection of natural theology Torrance takes some basic principles which inform his own approach to revelation and knowledge of God. They are that knowledge of God is grounded in God; that Christ has a central place in our knowledge of God; and that revelation is supernatural and a miracle of grace in which God is always in control. The concept of an independent source of knowledge of God is questionable even when applied to propositional knowledge of God. Barth and Torrance, however, conceive of knowledge of God in primarily personal terms which renders the notion of independent knowledge of God meaningless. For Torrance as for Barth a non-independent knowledge of God means knowledge that is Christologically grounded for both argue that it is in Christ that God has actually revealed himself in the universe of space and time.

The actual self-revelation of God in Christ is at the heart of Torrance's argument

¹⁴² Muller notes that this 'Christological reductionism' is sometimes called 'Christomonism' (Muller 1990:690), a view that reduces all that can be known or said of God to what is revealed in Christ.

that Christian theology is to be regarded as a science. However, by Christian theology he means theology which begins with our actual knowledge in God's self revelation in the incarnation of the Word. He argues that the natural sciences follow an *a posteriori* method, that is, ontology precedes epistemology. This means that for Torrance as for Barth, the only reliable source of knowledge of God is his self revelation in Christ. We will see in Chapter Four that Torrance's insistence on the 'thinking after' God's actual revelation of himself allows him to draw together theological and scientific epistemologies.

In his writing on revelation and Scripture Torrance in reality finds in the Bible another source or place of divine self-revelation, one that is not the same as revelation in Christ, but which is not distinct from it either. Our argument is that a close reading of Torrance's theology reveals that there are other loci of revelation than Jesus Christ, namely nature and scripture, but the God who encounters us in the Bible and in the creation is exactly the same God who is revealed in the incarnation of the Word. It is our argument that the content of divine revelation in Christ is normative because, unlike the other loci of revelation, Jesus Christ, a contingent 'event' of the space time universe, is also of one being with the Father. These other loci of revelation pass the test of Barth's rejection of independent sources of knowledge of God because as acts of divine self-revelation they are therefore under the sovereign control of God and do not in any way usurp the central place of Christ in revelation.

In chapter four we will examine how Torrance redefines natural theology to bring it within the body of systematics rather than being a separate entity, and without compromising his Christocentric understanding of divine self-revelation.

Chapter Four Natural theology II: non-independent natural theology

4.1 Introduction

Torrance operates with a Christologically founded epistemology of grace. This leads him to reject traditional natural theology on the grounds that its independent character impinges upon the sovereignty of God in his self-revelation (chapter three). Chapter four considers Torrance's attempt to integrate a re-formulated, non-independent natural theology into the body of Christian doctrine. It was noted in chapter three that Barth's rejection of natural theology is a rejection of its claim to independence of special revelation and that this leaves open the possibility of a non-independent natural theology which Torrance pursues (Torrance 1976:ix f).

Torrance attempts to relocate natural theology within the body of systematics. He then argues that a non-independent natural theology is central to Christian theological epistemology. He finds support for this theological epistemology in the natural sciences, particularly in the work of Einstein and Polanyi. Natural theology is the place in Torrance's work where theology and the natural sciences meet. We will see that he finds in his redefined natural theology the epistemological structure of the knowledge of God and that he argues that this epistemological structure is scientific in the same way that the epistemological structure of physics is scientific. We will also see that he also finds in the epistemology of the natural sciences support for his attack on theological liberalism: he argues that the sciences undermine the dualism which is inherent in liberal theologies. A further reason for the importance of natural theology in Torrance's epistemology is that revelation occurs not in abstraction from reality but within the universe of space and time; and natural theology is the place in Torrance's work where theological science meets the natural sciences. Torrance's redefined natural theology is therefore important for his understanding of divine self-revelation within the creation.

4.2 Torrance's relocation of natural theology within dogmatics

4.2.1 *Natural theology as a dogmatic science*

We have noted that Torrance takes Barth's rejection of natural theology to mean the rejection of the independent character of traditional natural theology. His distinctive reading of Barth's position on natural theology was the subject of his last meeting with Barth in the summer of 1968 when he sought Barth's opinion on the relation of theology and the sciences and of the possibility of a non-independent natural theology. Barth agreed with this interpretation of his writings (Torrance 1976:x). Torrance's argument that Barth in rejecting independent natural theology has left open the possibility of a non-independent natural theology is unusual and questions have been raised about Barth's ability to understand Torrance's point and also about Torrance's memory of the occasion.¹⁴³ However, Torrance is not the only theologian to read Barth in this way: in his Gifford lectures Hauerwas argues that 'Barth is the great "natural theologian" of the Gifford Lectures because he rightly understood that natural theology is impossible abstracted from a full doctrine of God' (Hauerwas 2002:9f).

Torrance's interpretation of Barth on natural theology finds support in Barth's Göttingen lectures on dogmatics. In writing on God as the subject of revelation Barth states that although natural theology has traditionally been regarded as a preliminary to Christian revelation (Barth 1991:91) he rejects natural theology as 'a contradiction in terms, an anthropomorphism, a basic naturalizing of revelation' (Barth 1991:93). He continues by stating that natural theology 'has no *independent* existence' (Barth

¹⁴³ Weightman writes: 'since Barth died only a few weeks after this conversation it does not seem likely that Barth was able to subject Torrance's thinking here to close analysis. ... My own (uncorroborated) feeling is that on further reflection Barth may well have expressed reservations about Torrance's use of Einstein here' (Weightman 1994:177, note 112).

1991:93 emphasis added). Barth's Gifford Lectures of 1937 also show support for Torrance's contention that it is the independence of natural theology which Barth rejects (Barth 1938:3f). Torrance's development of a non-independent natural theology is a legitimate development of Barth's position, albeit one that Barth did not pursue.

According to Torrance when Barth rejects natural theology as an independent or antecedent branch of theology he opens up the way for it to be reinstated as an element of dogmatic theology (Torrance 1980b:89f; 1985b:40f).¹⁴⁴ Torrance defines dogmatic theology, which he argues is a science in the wider sense of the word, as: 'the kind of knowledge we get when we seek to know something in accordance with its own nature and activity' (Torrance 1964:149; see also Torrance 1980b:49–52). According to Torrance there is no single scientific method. In the natural sciences the method of enquiry is developed according to the object under investigation and therefore each science has its own peculiar methodology and what makes a discipline scientific is a commitment to the reality of the object.¹⁴⁵ Torrance argues that dogmatic theology, as developed in the reformed churches, is a science because it is 'bound to its given object, *God's Word addressed to us in Jesus Christ*' (Torrance 1964:150-51, emphasis added). When Torrance relocates natural theology into the body of revealed theology he brings it within the scope of the scientific. According to Torrance dogmatic theology is Christologically grounded and based on God's self-revelation in Christ; it is the theology which this self revelation compels upon us (Torrance 1980b:50). In

¹⁴⁴ Morrison commends 'Torrance's useful Christological interactionist incorporation of natural theology within and under the unique, specific Word of God in Jesus Christ' (Morrison 2001:74).

¹⁴⁵ John Hedley Brooke writes: 'Many refer to some unique 'scientific method' to which exemplary science is supposed to conform. ...as the Cambridge philosopher William Whewell observed... the *history* of science already showed that each new branch of scientific inquiry had required its own distinctive methodology' (Brooke 1991:6f).

transposing natural theology as an element of dogmatics Torrance brings it into correlation with revelation in Christ.

4.2.2 The a posteriori nature of scientific method

Torrance argues that his redefined natural theology is scientific because its methods are developed in response to God's self-revelation. On Torrance's understanding traditional natural theology is neither dogmatic nor scientific because its methods are an *a priori* attempt to know God; it tries to construct a theory of how we could or might know God in abstraction from the actual knowledge of God in Christ. Torrance's criticism of traditional natural theology as unscientific is based upon his interpretation of Barth who insists that we can only know God in his actual self-revelation. When Torrance places theology among the natural sciences he argues that it differs from them in the same way as, for example, chemistry differs from physics.¹⁴⁶ The natural sciences proceed by *a posteriori* method; scientific epistemology is determined to a large extent by its object of enquiry (Torrance 1971:52-54).¹⁴⁷ In this respect theology is no different from the other sciences; however, Torrance argues that the 'object' of theological science is utterly unique and can never be regarded as an object of enquiry. He notes that the:

Special sciences by their very nature deal with multiplicity and are properly separated off from each other in accordance with the particular aspects of being to which they are devoted and the nature of the evidence that obtains in each field of inquiry, so that direct criss-crossing from the one to the other violates

¹⁴⁶ See section 3.2.6.

¹⁴⁷ Torrance's definition of what constitutes a scientific epistemology finds support in Thiselton who argues: 'True "objectivity," if this is the right word at all, depends on the appropriateness of the *methods* of inquiry to the *object* of inquiry. We do not prescribe the same methods in advance for all inquiries, on the assumption that one particular model of the act of knowledge is the only "objective" one' (Thiselton 1980:188, emphasis Thiselton; cf. Torrance 1969a:139).

their scientific procedure. But theological science has for its primary object the one God who is the source of all being and the ground of all truth, and as such it is concerned with a wholeness and unity that does not characterize any other special science. It is only within that wholeness that theology as a science has its right place, but it is no less scientific because it must operate within the total response of the believer to God, for to do anything else would mean a refusal to behave faithfully in terms of the nature of its proper object and therefore a betrayal of its true objectivity. This alone makes theological science unique among the sciences because it is more than a particular science, more than disciplined, controlled, accurate knowledge within some limited field, but it can be scientific knowledge of *God*, only if it is more than scientific knowledge in the ordinary sense. That is to say, theological science is not simply explanatory in terms of itself as a special branch of knowledge among others, but is explanatory only in relation to the one Truth of God in His total claims upon us and in His ultimate purposes for us and all creation (Torrance 1969a: 282f, cf. Torrance 1984a:275f).

When Torrance places natural theology within revealed theology there are two consequences which are important both for Torrance's theology and for our thesis. Natural theology is now correlated with God's actual self revelation and can be regarded as part of a scientific discipline. A second consequence is that natural theology when integrated with revealed theology correlates revealed theology with the creation; it brings theological science into relation with the natural sciences.

According to Torrance, theology is a dogmatic science. All of the disciplines which are rightly called sciences are dogmatic sciences. Although in common use the term dogmatic has negative connotations, for Torrance it means systematic knowledge. He looks at the origins of the word dogmatic in the history of philosophy, and finds it used to refer to non-abstract thinkers, thinkers who ask questions of the world as they find it (Torrance 1980b:50). Torrance notes the irony of the popular use of the word dogmatic today when it refers to ideas which are laid down authoritatively without reference to any supporting evidence. Such use of the term dogmatic is the opposite of its original meaning.

4.2.3 *The unscientific nature of traditional natural theology*

Torrance argues that, in the original sense of the word, the natural sciences are dogmatic (Torrance 1964:150). Scientific method is empirical; it asks questions of the world and in asking such questions ‘nature is allowed to disclose itself and ... science is allowed to discern nature’s inner form and order’ (Torrance 1980b:51). The ‘laws of nature’ can be regarded as dogmas which are disclosed by the universe to scientific enquiry; they are not rules imposed upon the universe in advance of its empirical investigation. Torrance argues that in the empirical investigation of the universe by the natural sciences the ‘immanent rationality of the universe’ is disclosed (Torrance 1980b:51). In terms of Torrance’s definition of science, which is current in the post-Newtonian natural sciences (Thiselton 1980:188), a major problem with traditional natural theology is that it is neither dogmatic nor scientific; it does not arise from the subject under observation. Traditional natural theology is an abstraction which is prior to and independent of God’s act of self-revelation in Christ; it is an *a priori* approach imposed upon its subject.

Torrance argues that traditional natural theologies arise in periods in western thought which are dominated by cosmological and epistemological dualism. There is a counterpart to traditional natural theology in the pre-Einsteinian approach to natural science which divides the world into the real and the phenomenal. There is the abstract and logically necessary realm of the ‘real’ which dominates the actual and occasional world of phenomena. Einstein’s theories of relativity overturned the dominance of the abstract over the empirical and undermined both the cosmological and epistemological dualisms that had previously dominated the natural sciences. Torrance believes that traditional natural theologies are founded upon the same dualisms that dominate the natural sciences in the centuries before Einstein (Torrance 1980b:76) and therefore

these natural theologies are undermined by Einstein's theories. Torrance argues that the criticism of natural theology in Barth prepares the ground for the restoration of natural theology to its proper place within the body of Christian theology.¹⁴⁸

Torrance seeks to put theology on the same epistemological foundation as the natural sciences. We have seen that in his interpretation of revelation in Scripture and in nature ontology is always prior to epistemology; that is his theological method follows and is shaped by God's actual self-revelation in time and space.

4.2.4 The relocation of natural theology within revealed theology

Torrance takes Barth's rejection of independent natural theology as an opportunity to transpose it into the body of dogmatics, rather than being a preamble or a preface to revealed theology (Torrance 1976:ix).¹⁴⁹ Torrance regards his own development of natural theology as a natural continuation of the work of Barth and other great theologians in the history of the church. He argues that in Athanasius we see an example of non-independent natural theology (see Torrance 1980b:76-78). However, Muller argues that Athanasius' writings support a traditional approach to natural theology and he uses his reading of Athanasius as the basis of his critique of Barth and Torrance on natural theology (Muller 1990). It is in those writings in which Athanasius addresses the non-Christian world that support for an independent natural theology has been claimed. For example, Torrance writes that in the *Contra Gentes* Athanasius has shown 'that as we let our minds tune in to the rational order that pervades the universe' (Torrance 1980b:76) they are on a path to the true God. While this may appear to provide support for traditional natural theology Torrance points out that Athanasius

¹⁴⁸ For Torrance's critique of epistemological and cosmological dualism in science and theology, see section 4.5.

¹⁴⁹ See section 4.2.1.

makes no attempt here to reach God by rational means; rather he is showing us ‘a way of communing with the regulative and providential activity of God in the rational order of the universe’ (Torrance 1980b:76). Torrance argues that while Athanasius holds that the relationship between God and creation, including humankind, is real and actual as well as deeply rational being the work of the divine *Logos*, it is not, however, logically necessary.¹⁵⁰ As Torrance argues:

This order pervading the universe does not derive from some immanent cosmological reason, or *logos*, such as the philosophers envisage, but from the uncreated and creative *Logos* of God, in whose image, by the grace of God, we ourselves have been created, so that as we contemplate the rational order in the creation, we are directed above and beyond ourselves to the one God, the Lord of creation (Torrance 1980b:77).

The rational order of the universe, a fundamental belief upon which the natural sciences are founded, is contingent upon the creator and as we seek out the source of the rational order of the creation we are directed to the creator (see section 5.2.9). Torrance argues that Athanasius’ writings do not provide support for independent natural theology; rather they point to a unitary approach in which natural theology is integrated into the body of systematic theology.¹⁵¹ This is what he believes Barth has achieved. Torrance notes that the *Contra Gentes* is ‘a twin’ to the treatise *De Incarnatione* which deals with the incarnation of the *Logos* who gave the creation, including humanity, its rational order, and who became human within the structures of the created universe as redeemer and revealer (Torrance 1980b:77). Instead of providing an example of independent natural theology the writings of Athanasius show us that natural theology is integrated

¹⁵⁰ See the discussion of contingency in Torrance’s theology in section 5.2.

¹⁵¹ Torrance argues that: ‘What [Athanasius] has to say ... of the knowledge of the world in its intrinsic intelligibility and order, within which God is known, cannot be abstracted and made to stand on its own, for it holds good and is consistent only in a deep and unbreakable polarity with our actual knowledge of God revealed in and through Jesus Christ’ (Torrance 1980b:78).

within revealed theology; that our knowledge of God and our knowledge of the creation both derive from the one *Logos* of God (Torrance 1980b:77f). The God who reveals himself in the incarnate Christ reveals himself in and through the creation. The argument that it is possible to know God independently, without God's knowledge or consent finds no support in the writings of Athanasius. The natural world may be a locus of divine self-revelation but not of independent knowledge of God.

Torrance argues that his non-independent natural theology is not novel or innovative; its origins are found in the patristic understanding of natural theology as witnessed by the writings of Athanasius. He argues that traditional approaches to natural theology which are independent *a priori* systems originate in periods when dualism dominated western thought and when, for apologetic reasons, the church tried to establish the existence of God independently of special revelation (Torrance 1985b:37–39). He argues that traditional natural theology is innovative and that Barth, in rejecting natural theology is preparing the way for the restoration of a proper natural theology which is not rooted in dualism but is consonant with the unitary cosmology and epistemology uncovered in the natural sciences.

Torrance lays bare for us exactly what an independent natural theology means; it is to know God without the action of God to reveal himself and without God's knowledge or consent (Torrance 1984a:292, Torrance 1985b:59, c.f. Torrance 1959:lxviii). Even on an understanding of knowledge of God as merely propositional this would be a difficult position to hold; if we accept Torrance's argument that revelation and reconciliation are one and that knowledge of God is personal knowledge, then the concept of independent knowledge of God is meaningless.

4.2.5 *Natural theology and the self-revelation of God*

According to Torrance another problem with independent natural theology is that it abstracts the being of God from the acts of God. If God is known in the economy of salvation as Father, Son and Holy Spirit is this Trinity inherent to God's eternal being or is it merely a phenomenon of God's actions? A natural theology which presupposes that we can know God independently of his acts suggests that God as he is in himself is not necessarily identical with God as he is in his actions. An independent natural theology implies some sort of essential divine nature or abstract divinity which is different from the Trinitarian nature of God as revealed in the economy of salvation (Torrance 1980b:89). Torrance rejects absolutely this cosmological dualism.¹⁵² The doctrine of the *homoousion* is pivotal to Torrance's theology because in asserting that the Son is of one being with the Father any divergence between the act and the being of God is rejected. Torrance argues that the essential unity of the economic and the immanent Trinity belongs to the basic Christian concept of God and makes problematic any doctrine of the one God gained apart from the economy of salvation (Torrance 1980b:89). For Torrance 'God' means 'Trinity'. He believes that his non-independent natural theology is no novelty, rather he regards his reintegration of natural theology within the body of dogmatics as a return to the understanding of the nature of God and the relation of the acts and the being of God which obtained in the early centuries of the church (Torrance 1996a:6–9). The epistemological importance of the *homoousion* is that it forges a link between God in the economy of salvation and God in his essential nature (Torrance 1990:170-174). Torrance argues that:

¹⁵² In the discussion of the integration of form in section 4.5 we will see that Torrance rejects traditional natural theology in large part because of its inherent dualism, both in its content that is its notion of God and in its epistemology. Torrance argues that developments within science and theology (especially the work of Barth, Polanyi and Einstein) undermine such dualisms.

This self-revelation of God in the Gospel amounts to the greatest *revolution in our knowledge of God*. It is precisely when we grasp its truth that we discern the enormous significance of the doctrine of the Holy Trinity. For Judaism as for Greek philosophy, or indeed for every religion apart from Christianity, God remains ultimately incomprehensible to men and women in the bare and unfigured simplicity of his Being – he is the Nameless One who cannot be apprehended in himself or be conceived in the personal relations of his inner life as a Communion of Love. Hence statements made about God, apart from his active personal self-revelation, as many ancient and modern philosophers would have it, are non-cognitive – they are at best of no more than tangential borderline significance. It is quite otherwise in the Gospel when we say that the Father, the Son, and the Holy Spirit are God, the One God whom we know and with whom we have to do as the God of our salvation. The three divine Persons are the Triune Being of God: the Triune Being is three Persons (Torrance 1996a:3, emphasis Torrance).

Independent, abstract knowledge of God which traditional natural theology claims to provide leads not to the God as he has disclosed himself but to an abstract divine essence which is not linked to the economy of God's actual revelation and salvation; it introduces dualism into the being of God.

When we consider the essentially Trinitarian nature of the Christian understanding of God then the traditional approaches to natural theology constitute a return to a pre-Christian understanding of God. This is hardly surprising for, as we have seen, Torrance demonstrates that this approach to natural theology originated in times in the west when the church deliberately sought to ground the existence of God, not in Christian revelation, but in abstract, general, non-Christian philosophy. He argues that in these periods natural theology was valued precisely for its independence of special revelation (Torrance 1985b:37–39).

In contrast to traditional natural theology Torrance argues that Barth's epistemology is a systematic and scientific method. Barth's theology is an *a posteriori* and dogmatic science developed according to the reality of God as disclosed in Christ rather than in independence of God's self-revelation. For this reason Torrance argues

that the doctrine of justification by grace, especially its epistemological significance, is pivotal to Barth's theology (Torrance 1990:146f). We have seen that the epistemology of grace is also fundamental to Torrance's doctrine of revelation because his understanding of revelation is Christologically grounded; and this Christologically grounded epistemology of grace forms the foundation of his particular interpretation of revelation in Scripture and nature. The epistemology of grace in relation to the knowledge of God is a dogmatic and scientific method. We will see in chapter five that Torrance argues that his understanding of scientific method places Christian theology among the special sciences. The doctrine of justification by grace means objectivity in theological method (Thiselton 1980:316), grounding all Christian theology in Christology. It also means a willingness to question all presuppositions and all sources of authority which are external to the object of our enquiry, whether those sources of authority are the rationalism of the enlightenment or the traditions of the church (Torrance 1969a:75; Torrance 1980b:90; Torrance 1964:151-52).¹⁵³ Torrance argues that the epistemological significance of the doctrine of justification by grace is that Christian theology is always founded on the nature and activity of God in his self-revelation (Torrance 1980b:90). God is the only proper or possible source of our knowledge of him and this epistemology of grace is found in all aspects of Torrance's understanding of revelation because the only possible source of divine revelation is God. The problem with traditional natural theology then is its independence from actual self-revelation.¹⁵⁴ An independent theology is the self assertion of humanity over against God. Traditional natural theology develops an approach to God which is separate from the self-revelation of the Trinity within the universe of space and time in

¹⁵³ Torrance writes: 'Expressed theologically, Barth found that to be put right with God through justification by grace alone, meant that he himself with all his ideas and presuppositions was put in the wrong' (Torrance 1990:113).

¹⁵⁴ See section 3.2.3.

Christ and it divides Christian theology into two parts: natural theology which leads to the one God; and revealed theology which leads to the Trinity. Torrance regards such dualism as ‘intolerable’ (Torrance 1980b:91).¹⁵⁵

4.2.6 Natural theology and the rational structure of the knowledge of God

According to Torrance one function of a non-independent natural theology is to establish a rational structure in our knowledge of God. He argues that such a structure is:

No longer extrinsic but intrinsic to actual knowledge of God, it [i.e. a non-independent natural theology] will function as the necessary *intra-structure* of theological science, in which we are concerned to unfold and express the rational forms of our understanding that arise under the compulsion of the intelligible reality of God’s self-revelation (Torrance 1985b:40, emphasis Torrance).

In traditional natural theology this rational structure is independent of the actual knowledge of God which comes from self-revelation; its origins are in an *a priori* philosophical system which is imposed upon the content of theology. Instead of imposing a philosophical system such as existentialism onto theological method Torrance derives his epistemology from the material content of dogmatic theology, namely the doctrines of creation, Christ and the Trinity. Torrance aims to affirm the place within revealed theology for a rational structure in our knowledge of God which is:

grounded in the intelligible relations in God himself, for it is there, under the compulsion of God’s self-disclosure in Being and Act that the rational structure appropriate to him arises in our understanding of him (Torrance 1980b:91).

¹⁵⁵ Torrance’s concern to counter the prevailing dualism of western thought is central to his understanding of theological science and is important for his dialogue with the natural sciences. See section 4.5.

This rational structure is intrinsic to, and emerges from what God has revealed of himself in the economy of salvation.

Theologians may direct their thoughts beyond the created universe towards God its transcendent creator; however, they can only do so from within the universe of space and time. Theologians must not make the unexamined and unspoken assumption of having a standpoint or perspective which is independent of the universe. There is no neutral observation point beyond the universe either for the theologian or the scientist. We are only able to know God from our position within the universe; we can only know him in and from his interaction with the universe that is within space and time (Torrance 1985b:36). For this reason traditional natural theology is seen as a distortion because it seeks to know God in the abstract, apart from his actual interaction within space and time (Torrance 1985b:38, 41). A chief objection raised against independent natural theology is that it assumes an absolute, though illusory, objectivity. Barth makes the same point from a different perspective in his Gifford lectures when he discusses the meaning of natural theology. It is, he comments, a 'science of God' which is to be 'constructed independently of all historical religions and religious bodies... without reference to or reliance upon any supposed special exceptional or so - called miraculous revelation' (Barth 1938:3).¹⁵⁶

Torrance points out a further implication of the fact that we can only know and speak of God from within the universe of space and time even though God transcends the universe; he argues that it means that there must be a close correlation between theological science and the natural sciences (Torrance 1985b:36). This correlation between theology and the natural sciences points to the proper place for a non-independent natural theology because we can only know God as he has actually

¹⁵⁶ Barth is here quoting the terms of reference for the Gifford lectures.

interacted with the material world of space and time (Torrance 1985b:36f). In Torrance's reinterpretation natural theology has come to mean theology that is *natural* to God as he has revealed himself and *natural* to the world in which that self-revelation has occurred; it includes the proper methods of investigation of this world which God has created from nothing (Torrance 1985b:39).

One question raised by Torrance's development of Barth is whether what he proposes is natural theology at all. Torrance writes of a transformed natural theology which is not independent of God's actual revelation. In one of his later writings (Torrance 1989:65-85) he refers to a 'theology of nature' rather than natural theology (Torrance 1989:82) and he does so in a context where we expect him to refer to natural theology. Gunton remarks that Torrance's work is best seen not as a transformed natural theology but as a theology of nature (Gunton 1995:63 note 38). This is more than simply a question of terminology; the very term 'natural theology' is so strongly associated with the tradition of two sources of knowledge of God, nature and revelation, that it implies a notion of independence from God's active self-revelation. It is therefore more appropriate and accurate to speak of Torrance's theology of nature or natural revelation. His use of the phrase 'theology of nature' in later works is evidence that Torrance eventually recognises this. However, since he only uses this phrase in his later work we will continue to use the less adequate phrase 'natural theology'.

4.2.7 Discussion

Torrance's argument that Barth rejects natural theology because of its independence of revealed theology is supported by Barth's own comments and also by Hauerwas' interpretation of Barth. Its importance for Torrance's understanding of revelation and for this thesis is that it allows Torrance to develop a non-independent

natural theology which is fully integrated with revealed or dogmatic theology. This non-independent natural theology is more properly termed a theology of nature.

Torrance seeks to ground all knowledge of God in God's action to make himself known within the universe. For Torrance this means as he has revealed himself in Christ. The abstract and speculative nature of traditional natural theology attempts to circumvent the contingent aspect of all our knowledge of God. In fact human knowledge of God is doubly contingent for the theologian operates from within the universe of space and time and can only come to knowledge of the transcendent God as God has acted to reveal himself within the contingent reality of the universe.

Torrance's relocated natural theology is crucial to his epistemology because it allows him to bring natural theology into the sphere of the sciences by making it an integral element of theological science which is to be regarded as a science so long as it allows the object of enquiry, namely God, to determine the method of enquiry. This has the practical effect of bringing natural theology into relation with the most basic datum of Christian theology, namely, God as he is revealed in Jesus Christ, the Word of God incarnate in the universe of space and time.

More important than bringing natural theology into the scope of revealed theology is that by relocating natural theology into dogmatics theological knowledge of God is brought into correlation with scientific knowledge of reality. Each discipline proceeds by empirical investigation of reality as it discloses itself to investigation. This allows Torrance to argue that the rational order disclosed in nature is no accident but arises from the creative Word of God who is incarnate in Jesus Christ. Theology then needs to engage with the understanding of the universe as disclosed to the natural sciences, and the natural sciences are able to be brought into a mutually fruitful relationship with Christian theology.

4.3 Doing theology in an Einsteinian universe

We can only know God, and God can only make himself known to us, within the universe of space and time, therefore the scientific understanding of the universe is central to a theological epistemology derived from Torrance's doctrine of revelation. The understanding of the universe has undergone a radical change with the advent of Einstein's theories of relativity (see for example Torrance 1985b:45f). Einstein's paradigm of the universe is important for Torrance's transformed natural theology because his natural theology is actually a theology of nature and an understanding of God's self-revelation in and within nature.

Polanyi is another influence on Torrance and on his understanding of post-Einsteinian epistemology. His insight that scientific knowledge is always personal knowledge, i.e. the knowledge of persons who exist within the universe, has been of particular influence (Torrance 1980a:xv). Since we can only know God from within the creation changes in our understanding of the universe, including changes in the way in which the natural world and its processes are investigated by the natural sciences will have implications for theological science. Torrance seeks to expound the implications of Einstein's theories of relativity for theology. He regards Einstein's work as more than just another discovery to add to our understanding of the world; it represents a fundamental shift in our understanding of and approach to the universe (Torrance 1985b:43f). Newton's model of the universe is an essentially different place to that described by Einstein and this shift in scientific worldview has important implications for theological science (Torrance 1984a:264).

Torrance uses Einstein's analogy on the relation of Euclidean geometry to the rest of physics in order to explain what he means by a transformed natural theology and its relation to revealed theology.¹⁵⁷ He argues that what Einstein has done for geometry in relation to the body of physics, Barth has done for natural theology and its relation to revealed theology.¹⁵⁸ Torrance summarises Einstein's critique of Euclidean geometry in this way:

The rise of four-dimensional geometries of space and time has revealed to us that Euclidean geometry is an idealization, a distorting abstraction of geometry from experience or from empirical reality, in which it has been erected into a self-contained conceptual system on its own, pursued as a purely theoretic science antecedent to physics, in which we develop our actual knowledge of the world (Torrance 1980b:91f).

The change in our understanding of the relationship of geometry to the rest of physics occurred because Einstein realised that reality cannot be fitted into the framework provided by Euclidean geometry without distortion. According to Einstein Euclidean geometry is not a logically necessary system though it is traditionally regarded as such. In reality it has empirical foundations. Since Einstein geometry has a new place within the body of physics. It is seen as an essential part of physics, not as something logically prior to or separate from physical reality. Torrance writes that it has become a natural science.¹⁵⁹ Geometry remains but not as something self-consistent; instead it is an element of physics (Torrance 1980b:92).

¹⁵⁷ See Torrance 1976:ixf; Torrance 1980b:91-93; Torrance 1985b:40f; Torrance 1990:148f; Torrance 1999:32f.

¹⁵⁸ Torrance writes: 'I was anxious to get Karl Barth's reaction to the way in which I explained ... his attitude to natural theology by referring to Einstein's account of the relation of geometry to experience, or to physics.... It is in a similar way, I argued, that Karl Barth treats natural theology when he rejects its status as a *praeambula fidei*...' (Torrance 1976:ix).

¹⁵⁹ See for example Torrance 1980b:92.

The relocation of geometry within the body of physics provides Torrance with an analogy for his development of natural theology and its relation to the rest of systematics. He argues that the groundwork for such a relocation of natural theology has been done by Barth in his rejection of independent natural theology (Torrance 1980b:92). He regards traditional natural theology as the same sort of abstraction from reality as Euclidean geometry independent of physics (Torrance 1980b:91). Traditional natural theology distorts theology in terms of its content and its method. In terms of the content of theology Torrance criticises it because it does not lead to knowledge of God as he has revealed himself to be, that is Trinity; instead it leads to an abstract 'deity'.¹⁶⁰ In terms of the method of theology Torrance criticises natural theology for engaging not with God's actual self-revelation in Christ but with abstract notions of how in theory God might be known.¹⁶¹ Torrance argues that Barth has opened the way for a non-independent natural theology to take its proper place within revealed theology (Torrance 1985b:39).

A natural theology which is inherent to dogmatic theology rather than antecedent to it is 'natural' in the sense that it is '*natural* to the material content of theology' (Torrance 1980b:92, emphasis Torrance). This relocated natural theology is not an independent discipline, nor is it under the control of the knowing subject (Barth 1938:4). Torrance argues that this transformed natural theology has an important place within dogmatic theology, for there 'it will function as the essential sub-structure within theological science' (Torrance 1980b:93, Torrance 1985b:60f). Torrance's non-independent natural theology cannot be separated from the content of revealed theology for apart from the body of theology it is incomplete and inconsistent (Torrance 1985b:42).

¹⁶⁰ See section 4.2.5.

¹⁶¹ See section 4.2.2.

4.4 The dialogue between theology and the natural sciences

4.4.1 *Natural theology and belief in the natural sciences*

According to Torrance the proper place for a transformed natural theology within the body of dogmatics is in the common ground that exists between the natural sciences and theological science (Torrance 1999:31).¹⁶² For purposes of clarification only Torrance pursues his redefined natural theology in isolation from the rest of Christian doctrine, but he does not regard it as an independent discipline. His study of natural theology separate from the rest of dogmatics is artificial and is a temporary device. It is not to be inferred that natural theology has any sort of existence isolated from or antecedent to the body of revealed theology; it is a part of God's self-revelation (Torrance 1985b:42f; cf. Torrance 1980b:107).

Torrance pursues his relocated natural theology in the dialogue between theology and post Einsteinian science (Torrance 1999:31).¹⁶³ According to Torrance the natural sciences and Christian theology share a common history which he explores in several places in his writings.¹⁶⁴ Another factor which links theology to the natural sciences is that they are engaged in a common struggle against certain dualisms which Torrance regards as almost endemic in contemporary western thought.¹⁶⁵ A third area of common ground is when contemporary science reaches its natural limits. As

¹⁶² Torrance writes: 'Natural theology then constitutes the epistemological 'geometry', as it were, within the fabric of 'revealed theology' as it is apprehended and articulated within the objectivities and intelligibilities of the space-time medium through which God has made himself known to us' (Torrance 1985b:39).

¹⁶³ Torrance's exposition of his non-independent natural theology is found in: Torrance 1980b:75-109; Torrance 1985b:32-63; Torrance 1990:136-159; and Torrance 1999:30-34.

¹⁶⁴ For example, see Torrance 1980b:44-74.

¹⁶⁵ For Torrance's insight into the effect of this dualism in theology, see Torrance 1971:29-55.

contemporary science understands more and more of the structures of the universe it shows signs of reaching the natural limits of scientific enquiry (Torrance 1985b:51–59).

Torrance demonstrates that the natural sciences constantly throw up questions that they cannot ignore but which they cannot answer either. He refers to the universe silently crying out for an explanation (Torrance 1985b:58). This is more than simply a return to some sort of ‘god of the gaps’ in which theology brings in God as the answer to questions which the sciences are currently unable to answer. Torrance argues that the contingent universe throws up questions that the natural sciences are logically unable to answer for these questions point to the ultimate beliefs which undergird all scientific activity (Torrance 1980c:7). These ultimate beliefs form part of the background assumptions with which the sciences operate. Torrance derives his notion of ultimate beliefs and the role that they play in the natural sciences from Polanyi.¹⁶⁶ Torrance shows that it was from Einstein that Polanyi derived his understanding of the place of belief in scientific activity (Torrance 1980a:9f; cf. Polanyi 1962:3-17). The most fundamental scientific act of faith is in the rational order of the universe and in the possibility of the scientist apprehending that rational order and structure (Torrance 1980a:9f; c.f. Polanyi 1962:264-268).

Torrance is far from introducing a god to fill or explain a gap in scientific knowledge; it is the very success of the empirical sciences which demands an explanation.

Torrance’s transformed natural theology has an important role to play in the dialogue between theology and the natural sciences in the area of the ultimate beliefs of the sciences, for the relationship between the contingent universe and its transcendent

¹⁶⁶ See Torrance’s essay ‘The Framework of Belief’ in Torrance 1980a:1-27.

creator points to God as the ground of the ultimate beliefs with which the sciences operate.¹⁶⁷ Torrance argues:

In all natural science we are concerned to lay bare the intelligible structure of the universe, and try everywhere to grasp reality in its own rational depth, but everywhere we are faced with questions as to the very existence of such a universe, and as to the immanent rationality embedded in that which exists. Why is there a universe and not nothing? What is the reason for this state of affairs, the existence of a universe that is accessible to rational inquiry? Yet the universe does not carry in itself any explanation for this state of affairs, and even the rationality embedded within it is not self-explanatory (Torrance 1985b:52).

At this point in his argument Torrance introduces his new approach to natural theology in order to explore the relationship between natural science and Christian theology. In this discussion of the relationship between theology and science he takes care not to reintroduce the idea of natural theology as a preamble to faith; he is equally careful not to suggest any kind of logical bridge between God and his creation. Although the contingent creation cries silently for a transcendent creator Torrance has no place for a ‘chain of inferential reasoning from the contingent to a ‘necessary’ creator’ (Torrance 1985b:58).

4.4.2 Dualism and natural theology

Torrance notes that traditional natural theology tends to flourish in times which exhibit a dominant cosmological dualism (Torrance 1985b:37); by this he means a complete distinction and distance between both absolute space-time and the empirical universe and also between God and the world. He finds an example of such dualism in the English deism of the eighteenth century which was founded upon the thought of Newton and Locke (Torrance 1985b:37). According to Torrance independent natural theology was also characteristic of the early twelfth century. He argues that it flourished

¹⁶⁷ See section 5.2.9.

in these different ages because of a common desire, for apologetic reasons, to ground the existence of God in something other than special revelation (Torrance 1985b:38). In the eighteenth century it was the independence of natural theology that made it valuable to apologists. Torrance argues that these ages display an attempt to bridge the gulf between God and creation in order to give independent support for belief. Natural theology was thought to provide this bridge (Torrance 1980b:80, Torrance 1985b:38).

Torrance argues that this logical ‘bridge’ from humanity to God is based upon the false assumption of a logical connection between concepts and experience (Torrance 1980b:81f). He argues that underlying this is a form of ‘logical empiricism’ (Torrance 1985b:38f), a theory of how scientific knowledge is arrived at which assumes that theories are deduced logically or by abstraction from empirical data. A natural theology which assumes such an epistemology tries to connect God and the world, not on the basis of God’s actual interaction with the world, but on the basis of abstraction from experience and from *a priori* assumptions. It proceeds by way of inference and deduction from experience. Independent natural theology operates with the assumption of a logically necessary relationship between God and the universe. Independent natural theology’s concept of God is deduced from the data provided by the world rather than from revelation. Torrance argues that there is, in reality, no such logical bridge between ideas and experience either in the way that ideas are discovered or verified¹⁶⁸. The concept of a logical bridge is an illusion and Torrance argues that it collapses with the demise of ‘positivist science’ which also attempts to ‘derive concepts from observations’ (Torrance 1985b:39; c.f. Torrance 1980b:81f). In place of this logical bridge between ideas and experience, Torrance argues for a more complex relationship

¹⁶⁸ In this assertion Torrance is supported by Einstein (Einstein 1982:224-227).

between the two, a 'tacit' knowledge which he believes he finds in the work of Einstein and Polanyi.¹⁶⁹

In his transformed natural theology Torrance does not attempt to build a systematic, causal or logically necessary link between God and humankind. This is one of the most important differences between Torrance's non-independent natural theology and traditional philosophical arguments for the existence of God. The relation of God to the world is not a necessary relation (that is it is not the kind of relation on which a logical argument from humanity to God could be built); nor is it an arbitrary relation. According to Torrance God's relation to the world is contingent and free (Torrance 1981a:21f).¹⁷⁰ Although Torrance's non-independent natural theology is a form of the cosmological argument (Torrance 1980b:106) he assumes a different relationship between concepts and experience and a different relationship between God and the world. He argues that the relationship between God and the universe is real and it is rational because it is based upon the gracious interaction of the free and rational creator with his creation; however, this relationship is not logically necessary. Traditional natural theology attempts to construct an epistemology without reference to the actual knowledge of God in his self-revelation, whereas Torrance's theological epistemology is founded upon God's self-revelation in Christ. Traditional natural theology tries to find a logically necessary relationship between God and creation of which its epistemology is an expression. In rejecting such an epistemology Torrance follows Barth who insists that theology is an *a posteriori* discipline; we can only give an account of how we come to know God based upon our actual knowledge of God and that is by his self-revelation in Christ (Torrance 1990:141-143). This actual knowledge

¹⁶⁹ See section 4.5.4.

¹⁷⁰ The notion of contingency is very important in Torrance's theology and will be explored in section 5.2.

of God undermines and renders irrelevant traditional natural theology (Torrance 1990:139, 144). Torrance argues that a natural theology which is independent of God's actual self-revelation becomes a source of confusion in theology (Torrance 1990:142).

4.4.3 Discussion

One of the great strengths of Torrance's theology is that it is coordinated with the universe disclosed to the post-Einsteinian natural sciences. It allows theology to find support for its rejection of dualist modes of thought in the natural sciences; it also allows theology to enter debate within the sciences as Torrance, by integrating his non-independent natural theology with revealed theology allows for a coordination of theological and scientific thought. Theology must take account of the universe of time and space in which God reveals himself and in which human beings come to knowledge of God. Theology can also be brought into scientific discussion, especially in those areas where empirical science is logically unable to provide explanation, such as the question of why the sciences are so successful at disclosing the rational order of reality. This is not a traditional 'god of the gaps' in which theological answers were brought in to supply gaps in scientific knowledge. It is not deficiency but the success of the natural sciences which demands explanation. The sciences themselves cannot provide this explanation for they can only proceed by assuming that which they would be trying to explain, namely the intelligibility of the universe.

Torrance also operates with an assumption that is common to the natural sciences, and this is that the sciences disclose the rational order of the universe rather than impose a rational order upon the results of empirical investigation.

The epistemological significance of Torrance bringing natural theology within the scope of revealed theology is that it points to the gracing of this component of

theological knowledge no less than revelation in Christ or in the Bible the knowledge of God derived from the creation is an aspect of divine self-revelation. It also coordinates the knowledge of God disclosed in creation with revelation in Christ.

4.5 Epistemological and cosmological dualism in natural and theological science

Torrance's work on the relocation of natural theology is his attempt to restore it to its proper place within revealed theology. One of his arguments is that independent natural theology brings dualism into the understanding of God, separating the Trinity from the unity of God's being. Torrance also notes that traditional natural theologies have flourished in ages dominated by cosmological and epistemological dualism. Torrance's critique of dualism in western thought is an important aspect of his doctrine of revelation. He believes that the epistemological dualisms which have dominated western thought since Descartes have led to the cosmological dualism that we find in much western theology, not least in traditional natural theology where a general divinity is set over against the Trinitarian understanding of God and a dualistic epistemology has taken precedence over ontology within theology (Torrance 1980b:33-34).

4.5.1 The integration of form and being in natural and theological science

Torrance argues that dualism has become 'second nature' in western thought (Torrance 1980b:95). He also argues that although many different kinds of dualism have emerged in western thought in different periods of history and that while these dualisms differ in many details they have some common ground, not least that they display a 'disruption of the unity of form and being' (Torrance 1980b:95). Torrance argues that Einstein challenges the roots of this dualism (Torrance 1980b:23, 30-31); that in

undermining the concept of a supposedly *real* world abstracted from the world of empirical reality Einstein's general theory of relativity has undermined western dualist thought (Torrance 1980b:30). Torrance argues that the theory of relativity compels the unity of form and being on the natural sciences; he further argues that this unity of form and being holds true, not only for the natural sciences, but also for theological science. Torrance argues that this restoration of the unity of form and being in the natural sciences and in theology is a return to the patristic roots of theology, seen for example the doctrine of the *homoousion* (Torrance 1980b:96). Furthermore he argues that Barth's insistence on the unity of God's act and being has anticipated those movements in physics which have undermined western dualism (Torrance 1984a:viii). He argues that what Einstein has done for the sciences with his theory of relativity, eliminating 'an independent conceptual system detached from actual experience' (Torrance 1984a:ix), Barth has done for theology by his rejection of natural theology as an independent source of knowledge of God detached from actual revelation.

Torrance argues that in western thought the disruption of the unity of form and being leads to a split between the empirical and theoretical components of knowledge and also to the precedence of theoretical knowledge, regarded as logically necessary, over empirical knowledge, regarded as occasional, accidental and therefore only an approximation of reality. In support of this assertion Torrance quotes Heidegger who notes in western thought a 'damaging secession of *logos* from being, leading to a logical tyranny of abstract ideas over being' (Torrance 1980b:81).¹⁷¹ This dominance of the abstract and theoretical over the empirical in western thought is due to the implied notion of a logical bridge between concepts and experience. It is a seductively simple notion which asserts that abstract ideas are directly derived from empirical data, and has

¹⁷¹ The actual references to Heidegger's work are not given by Torrance.

led to positivism in philosophy and the sciences. Again Einstein's work on general relativity shows that this idea of a logical bridge is a fallacy; the relationship between concepts and experience, between the theoretical and empirical realms, is much more complex (Torrance 1980b:82).

Torrance argues that the change in scientific epistemology brought about by Einstein is of consequence for natural theology because the precedence of abstract over empirical knowledge was also prevalent in theology and gave rise to a positivist natural theology in which abstract concepts and theories of how God *might* be known came to dominate the *actual* knowledge of God in his interaction with the universe. Independent natural theology follows the scientific method of its day in attempting to 'throw a logical bridge between our knowledge and experience of this world and knowledge of God' (Torrance 1980b:81). Torrance argues that positivist natural theology is undermined on three fronts: by Einstein's work on science and epistemology; by the patristic doctrine that Christ is *homoousios to patri*, that God as he is in the economy of salvation is the same as he is in himself; and by Barth's insistence on the unity of act and being in God. Barth and Einstein both hold that instead of our knowledge being abstracted from reality we can only have knowledge from within reality. Consequently there are no necessary truths, either in theology or in the natural sciences; rather there is empirical and, following Polanyi, *personal* knowledge.

Torrance shows clear correlation between Barth's theology and Einstein's science. He shows that both theology and science have suffered from dualistic patterns of thought and that both have overcome these dualisms by arguing for the unity of form and being. While both theology and the sciences argue for the possibility of knowledge of the reality under investigation they eschew a positivist epistemology and instead pursue a more complex scientific method. Torrance's theological epistemology rests

upon the application of insights from the natural sciences to theology and philosophy. He demonstrates the undermining of dualist traditions in the natural sciences by Einstein's general theory of relativity.

The importance of Torrance's correlation of theology with the natural sciences is not only in his applying the advances in science to theology; it is that implicit in his theology is the justification for so doing. Torrance is able to bring together these two discourses because he has brought natural theology into the body of Christian dogmatics and has argued for a rigorous application of scientific method to theology. It is for this reason that he is able to use arguments based on Einstein's work against philosophical and theological dualism.

4.5.2 Scientific method in theology

We have seen that one of the most fundamental insights of Torrance's theology is his argument that in investigating an object the nature of the object itself must determine the method of investigation (Torrance 1969a:xii). He argues that the grounding of epistemology in being is one of the conditions for a scientific theology (Torrance 1964:149, c.f. Torrance 1959:xxiv). While he draws a distinction between the methods used to investigate an object and the object itself, he does so without separating the two (Colyer 2001a:322). This distinction without separation of ontology and epistemology is fundamental to any understanding of Torrance's work.

The notion that true knowledge of God arises only from self-revelation is one of Torrance's main assertions in support of placing theology among the sciences (Torrance 1969a:203). A second and equally important point that he makes is that objects do not exist in isolation; rather as Clerk Maxwell discovered relationships are intrinsic to all objects; Torrance writes of 'onto-relations' (See Torrance 1984a:229-

234).¹⁷² An object must be investigated by means which are determined by its nature and not in isolation but in its intrinsic relationships; for, he argues, these onto-relations are ‘constitutive’ of objects in space and time (Torrance 1984a:230). Another of Torrance’s working assumptions is that some sort of correlation exists between scientific or objective thinking which ‘enters into a close and active engagement’ with the object of enquiry ‘and lays itself open to the nature and reality of the object in order to take its shape from the structure of the object’ (Torrance 1971:9) and that objective reality itself (Torrance 1971:10). This makes Torrance’s theology and epistemology realist in the sense outlined by Hardy (Hardy 1990:76f) who notes that Torrance ‘sees reality disclosing itself to the various sciences, theological and natural, in such a way as to make human beings capable of understanding’ (Hardy 1990:76). However, Hardy argues that Torrance is a realist in a modified sense, and not if the term:

means a *necessary* correspondence between reality and thought... [Torrance’s] realism suggests that there is an *actual* correspondence between reality and thought or language *if* the thinker is conformed to the mode of rationality afforded by reality (Hardy 1990:77, emphasis Hardy).¹⁷³

Hardy correctly identifies Torrance’s epistemology as realist and then qualifies this by adding that his realism is actual rather than necessary due to the *a posteriori* nature of scientific thought (Torrance 1969a:186). Torrance believes that reality discloses itself to investigation by the sciences, both natural and theological, if the theologian or scientist is ‘conformed to the mode of rationality afforded by reality’ (Hardy 1990:77). Through a disciplined obedience of the mind to reality it is possible to

¹⁷² In his work on field theory, Clerk Maxwell argued that relations within nature are fundamental, and he ‘insisted ... that the relations he referred to were not just imaginary or putative but *real* relations, relations that belong to reality as much as things do, for the inter-relations of things are, in part at least, constitutive of what they are. Being-constituting relations of this kind we may well speak of as “onto-relations”.’ (Torrance 1984a:230).

¹⁷³ On Torrance’s critical realism see section 5.3.7.

grow in our knowledge of that reality (Torrance 1969a:9 cf. Torrance 1984a:275). In this way theory may correspond to reality; however, there is no logically necessary reason why it must do so. In Torrance's thought the relationship between reality and theory is actual rather than necessary; it is rational (Torrance 1969a:11), but it is not logically necessary. Hardy writes of the 'gracing of knowledge' in Torrance's theological epistemology (Hardy 1990:77). He means by this that Torrance is clear that any correspondence between God's reality and theology is always due to the intention, action and therefore grace of God for we do not discover God, rather God gives himself to be known. As Torrance writes: 'in the last resort theology is thrown back wholly upon the nature and activity of God for the justification or verification of our concepts and statements about him' (Torrance 1980b:90). This is the epistemological significance of the reformation doctrine of justification by faith (Torrance 1980b:90).

Torrance's theological epistemology is scientific because it is determined by the reality of the object of enquiry as that object gives itself to be known, and all preconceptions are called into question by that reality. Rather than a simple positivist model of a bridge from reality to our understanding Torrance proposes a complex model of encounter and disclosure which promises the possibility of knowledge of reality; but he insists that this knowledge always comes as a gift. His theological epistemology is therefore profoundly rooted in the incarnation and the doctrine of justification by grace.

4.5.3 The dualist tradition in western thought

We have noted Torrance's argument that independent natural theologies tend to flourish in periods which are dualist in outlook (Torrance 1980b:76; Torrance 1985b:37). He further argues that the prevailing dualism of these ages is reflected in the natural theologies which arose in them (Torrance 1980b:76, 81). Torrance traces the

influence of various forms of dualism on western thought (see for example Torrance 1984a:1-59, 61-105) and notes that although ancient Greek thought is characterized by an epistemological dualism (Torrance 1984a:1) the roots of contemporary dualist thought are found in the writings of Descartes and Newton who introduced both cosmological and epistemological dualism into western thought (Torrance 1984a:6).

Torrance argues that Descartes introduces cosmological dualism into western thought which involves an epistemological disjunction between the inner world of images presented to the mind via sensory perception and the external world of matter which extends in space and time (Torrance 1984a:10-11). He notes that Newton's philosophy of science is influenced by Cartesian dualism (Torrance 1984a:13f). The triumph of Newtonian science led to the extension of this dualism to influence the whole of western thought (Torrance 1980b:95). Torrance writes:

For Newton ... science was composed of laws stating the mathematical behaviour of nature solely - laws clearly deducible from phenomena and exactly verifiable in phenomena - everything further is to be swept out of science, which thus becomes a body of absolutely certain truth about the doings of the physical world.... Science is the exact mathematical formulation of the processes of the natural world (Torrance 1984a:18).

The success of Newton's scientific method led contemporary theology to view the universe as mechanistic, governed by logically necessary laws and closed off from direct interaction with its creator. It also led to the disjunction of necessary truths of reason and accidental truths of history (Torrance 1980b:23). This understanding of reality is implicit in traditional natural theologies which assume a division between God and creation and between the theoretical and empirical components of knowledge; traditional natural theology is an attempt to negotiate these dualisms. We have noted that one reason for Torrance's rejection of independent natural theology is the division it introduces between the Trinity and the unity of God's being. Barth, followed by

Torrance, insists upon the unity of act and being in God; and this presents a challenge, not only to traditional independent natural theology, but also to the dualist understanding of reality in western thought (Torrance 1980b:11-12).

Contemporary philosophical and cosmological dualisms are founded not only on Newton and Descartes but also on the philosophy of Kant. Torrance's purpose in studying the history of epistemology is to support his Christocentric theology as that which is most consonant with scientific method post-Einstein.¹⁷⁴ The place of Torrance's transformed natural theology in this argument is two-fold. First, Torrance argues that his non-independent natural theology conforms more closely with the natural sciences' understanding of the cosmos and of scientific method, whereas traditional natural theology is undermined by the changes in contemporary physics. Second, he argues that this transformed natural theology 'constitutes the epistemological structure of our knowledge of God' (Torrance 1976:x); the epistemology which proves to be appropriate to a natural theology which seeks to know God as he gives himself to be known, and which is faithful to the reality of the universe as disclosed by Einstein and Polanyi provides a model for the rest of theology.

Torrance argues that Kant is aware of the intrinsic deficiency of approaches to knowledge based purely on empiricism (Torrance 1984a:36); he realises that a more adequate epistemology is one in which the theoretical components of knowledge are integrated with empirical data into the basic structure of science and scientific method (Torrance 1980b:26). Kant's solution is to search for a way of bringing theoretical factors which are not derived from sense experience to play a fundamental role in the scientific investigation of the universe (Torrance 1984a:36).

¹⁷⁴ The sub-title of Torrance's *The Ground and Grammar of Theology* (Torrance 1980b) is *Consonance between Theology and Science* (emphasis added).

In his attempt to unite the theoretical *a priori* elements of knowledge with experimental *a posteriori* observations Kant argues for the synthetic *a priori* in which the structures of the human mind bring an interpretative framework to bear on everything perceived by the knowing subject, making it ‘impossible for him ever to penetrate behind his cognitive activity to what things are in themselves’ (Torrance 1980b:26).¹⁷⁵ This brings a radical dualism into all human knowledge (Torrance 1980b:25-27). Torrance argues that in Kant the universe is not so much disclosed to the enquiring mind as it is created by it (Torrance 1984a:36ff).¹⁷⁶ He argues that the problem with Kant’s epistemology is that he treats the theoretical component of knowledge as a necessary structure imposed upon reality in our experience of it (Torrance 1984a:42).

Torrance’s critique of Kant is founded on one of the basic axioms of his theology: that the object of enquiry determines the method of enquiry.¹⁷⁷ He argues that the theoretical structure of our knowledge arises not from the apprehending mind, as with Kant, but is inherent to the object of investigation. However, Torrance notes that such a solution is ruled out by the *a priori* nature of Kant’s theoretical structures (Torrance 1984a:42). Torrance returns to Newton’s epistemology by insisting that the

¹⁷⁵ Torrance writes: ‘when he gave to time and space the status of ‘forms of sensibility’, and to causality as well as to substance the status of ‘categories of the understanding’, he rejected the possibility of any knowledge of things in themselves, limiting knowledge of them to what we can make out of their appearances, (Torrance 1980b:26).

¹⁷⁶ Torrance writes: ‘Kant retained the ‘absolute’ or independent character of Newton’s mathematical time and space, its character as an inertial system for the scientific determination of the atomic structure of nature, but he transferred it to the human understanding, that is, to Locke’s centre of reference in the consciousness of the observer, to constitute the basic ‘forms of sensibility’ which are independent of experience but regulative of our spatio-temporal apprehensions. To these he added substance, relation and causality as formal structures of the mind, called ‘categories of understanding’, likewise independent of experience, through which the observer organises everything apprehended in time and space as objects of human knowledge’ (Torrance 1984a:37).

¹⁷⁷ See section 4.5.2.

theoretical component in our knowledge originates in the object of enquiry itself.¹⁷⁸

According to Torrance the problem of dualist epistemology lies at the heart of Barth's rejection of traditional natural theology and the integration of form is central to his non-independent natural theology (Torrance 1980b:89-90).¹⁷⁹

Torrance's theological and scientific epistemology is a synthesis of some of the insights of Newton and Kant. With Kant he argues that we cannot know things apart from their theoretical structures; with Newton he argues that the structures by which we know things are not arbitrary, or imposed by the observer, but instead arise from the object of enquiry itself. Torrance argues that form must be grounded in the inherent rationality of the object (Torrance 1984a:45). Torrance argues that in the work of Einstein modern thought has returned to the idea of the inherent intelligibility of the objective universe (Torrance 1984a:45).

4.5.4 Einstein and Polanyi

Although he makes use of the theory of relativity in his Christology¹⁸⁰ Torrance's main interest in Einstein is his scientific methods (Kaiser 2001:244). He argues that Einstein's relativity theories, like Barth's Christocentric theology, avoid the epistemological problems of Newton and Kant (Torrance 1985b:77 cf. Torrance 1990:129-130); he therefore finds in Einstein support for his unitary understanding of cosmology and epistemology.¹⁸¹ He argues that Einstein recognised that the positivist epistemology associated with Newton is not how Newton actually developed his understanding of the universe (Torrance 1985b:73). Einstein rejects a positivist model of scientific method and he also rejects Kant's notion that the

¹⁷⁸ See Torrance's quote from Max Planck in Torrance 1984a:45f.

¹⁷⁹ See section 4.6.

¹⁸⁰ See section 1.3.

¹⁸¹ See Torrance 1984a:78.

theoretical structures of scientific knowledge are *a priori* categories imposed upon phenomena by the investigating mind.

In Einstein there is a role for 'intuitive apprehension' in the sciences; yet they are not 'mere fictions or empty fantasies' (Torrance 1985b:77, c.f. Kaiser 2001:243). Einstein describes his scientific theories as free inventions of thought (Torrance 1985b:77, c.f. Einstein 1982:272).¹⁸² Torrance argues that in Einstein theories are not logical rules imposed upon reality nor are they abstractions from reality, rather they arise from a rigorous and sympathetic engagement with reality (Torrance 1985b:77). In Einstein's method there is no disjunction between the theoretical and empirical components of knowledge. Theories arise from the mind of the observer but are not arbitrary impositions (Torrance 1985b:77). In Einstein's method there is no direct or logically necessary link between ideas and reality; however there is, or there may be, an actual link, a harmony, between reality and scientific theory (Torrance 1984a:76-80). The universe exhibits a mysterious comprehensibility (Einstein 1982:292). Torrance shows that in his appropriation of Maxwell's dynamic field theory Einstein derives a non-dualist epistemology in which form is seen as intrinsic to being rather than abstracted from, or imposed upon, being (Torrance 1984a:76). Theories which arise from our encounter with reality are rational and coherent; they are neither arbitrary nor logically necessary (Torrance 1985b:53, c.f. Kaiser 2001:246). As Torrance writes:

There is, and must be, of course, a real harmony between our concepts and experience, and they must be capable of being elaborated in a logically coherent manner in order to serve as the basis for deductive reasoning, otherwise we would never get beyond our immediate observations and no explicatory science would be possible at all. But it is easier to speak of this harmony negatively than positively, for since we are not concerned with a logical but a trans-logical or an extra-logical relation between concepts and experience, it is impossible to say

¹⁸² See Torrance 1985b:94, note 14 for further references in Einstein's writings.

precisely how concepts are correlated with experience, or to devise a clear-cut systematic method for that derivation (Torrance 1984a:77).¹⁸³

Torrance's scientific theology is influenced by Polanyi whose work on epistemology he regards as an advance on Einstein (Torrance 1984a:116). He finds in Polanyi an understanding of how the formal components of knowledge arise from our enquiry into and apprehension of reality. Polanyi relies upon the idea of implicit knowledge, the 'tacit dimension',¹⁸⁴ which enables the enquirer to discern coherent patterns or:

'Gestalten, in the heuristic leap from parts to a whole, comprehending patterns of coherence, and 'in the informal (non-logical) but rational process of integration evident in verification as well as in discovery' (Torrance 1984a:116).

According to Einstein theories arise as 'free creations of thought'.¹⁸⁵ As we have noted the relation of theory to experimental observation is neither formal nor logically necessary. Polanyi speaks of Einstein's method as a process of 'speculative discovery';¹⁸⁶ and Torrance comments that the actual relation between ideas and experience is '*unformalisable*' (Torrance 1985b:77, emphasis Torrance). Newton's mistake is to attempt to reduce the complex relationship between ideas and reality to a simple and logical connection; whereas Polanyi shows that this tacit dimension is an important factor in all scientific knowledge. This tacit dimension to knowledge means that the scientific thinker must have a critical relationship to culture and tradition,

¹⁸³ See Torrance 1984a:103 note 46 for supporting references to Einstein's writings.

¹⁸⁴ Torrance defines the tacit dimension of knowledge in this way: 'In itself it is a non-formal apprehension of reality, but it constitutes the necessary ground or condition for all explicit knowledge such as we develop in the various sciences' (Torrance 1984a:112).

¹⁸⁵ Einstein, A. *The Evolution of Physics*, quoted in Torrance 1985b:77.

¹⁸⁶ Polanyi, M. *Science, Faith and Society*, new edition Chicago 1964:87, quoted in Torrance 1985b:77.

because the tacit dimension to all knowledge is influenced by the culture and language which we inhabit (Torrance 1980c:12f).¹⁸⁷

The concept of the tacit dimension to knowledge holds together form and being as intrinsic to each other. There is no abstraction of form from being as with Newton, nor is form imposed upon being as with Kant. The idea of a tacit dimension also brings a personal component to all knowledge without being entirely subjective. True knowledge in any field arises from personal encounter with reality (Torrance 1971:52); the observer is situated within the universe of space and time and also within culture and history. Torrance does not pretend to an illusory absolute objectivity, nor does he allow the subjective components of knowledge to dominate. In his theological epistemology the relationship between the theoretical and empirical components in knowledge is not abstract, arbitrary, or logically necessary; rather that relationship is actual and is therefore rational. In his integration of the work of Einstein and Polanyi into his theological epistemology he is building the foundation of a critically realist epistemology.¹⁸⁸

4.5.5 Dualism in contemporary theology

Torrance argues that his transformed natural theology ‘constitutes the epistemological structure of our knowledge of God’ (Torrance 1976:x). One implication of this is that a non-dualist epistemology will be central not only to his natural theology but also to the whole of Christian theology. The stance against dualism, cosmological and epistemological, is an important feature of Torrance’s thought.

¹⁸⁷ Torrance writes: ‘We always know more than we can tell, and our implicit thinking is shaped by the world of knowledge embedded in and handed on in the tradition of culture into which we are born’ (Torrance 1980c:13).

¹⁸⁸ See section 5.3.6.

We have seen that epistemological dualism has often been associated with cosmological dualism in western thought.¹⁸⁹ For Torrance, therefore, a properly scientific epistemology not only provides a way beyond the epistemological dualisms associated with Newton, Kant and their successors; it also provides a solution to the associated cosmological dualisms. In ‘The Eclipse of God’,¹⁹⁰ an essay which takes its title from a series of lectures by Buber (Torrance 1971:29), Torrance looks at the outworking of dualist epistemology in terms of the doctrine of God as found in the ‘new theology’ associated with Bultmann, Tillich and John Robinson.

Torrance finds in this ‘new theology’ a prevailing emphasis on the subjective pole of knowledge (Torrance 1971:40) which argues that when the scriptural authors write about God and Christ they are in fact writing about themselves and their own inner states. Torrance argues that they work with an assumption, rooted in Newtonian cosmology, that the universe is a closed system (Torrance 1971: 37f, 49). For these theologians the word ‘God’ becomes a cipher for our relationship with God; and theological statements are transformed into statements about ourselves. God is eclipsed in their theology. Torrance reminds us that an eclipse occurs when something gets in the way of the sun (Torrance 1971:29); the eclipse of God in the new theology occurs when what he calls our ‘bloated selfhood’ (Torrance 1971:29) gets between our existence and God. We have seen that Torrance does not deny that there is a subjective pole in all knowledge, his appropriation of the work of Polanyi emphasises the personal aspect of knowledge; however, his argument is that in the new theologians the study of history, specifically the history of Jesus Christ, and the study of theology have become entirely subjective. He argues that Bultmann ‘reduces the content of revelation to our own self-

¹⁸⁹ See section 4.5.3.

¹⁹⁰ The essay appeared in *The Baptist Quarterly*, Vol. XXII, No4, October 1967, pp 194 – 214. It is reprinted in *God and Rationality* (Torrance 1971:29–55). References are to the 1971 reprint.

understanding' when he argues that in theology 'the only content our statements can have is the determination of our existence by the impact of His 'Word' upon us' (Torrance 1971:40).¹⁹¹ In contrast to the new theology Torrance argues that the New Testament authors write with the intention of bearing witness to the life and history of Jesus, not to tell us about their own souls (Torrance 1971:37f).

Torrance argues that the problem with the new theology is scientific as well as theological (Torrance 1971:50, 52). In the writings of these theologians theological language is divorced from the divine nature; and theology is reduced to anthropology, even psychology and autobiography (Torrance 1971:50). The new theology, even in its interpretation of the historical Jesus, is germane to Torrance's non-independent natural theology for he argues that the radical dualism of the new theologians comes from a distorted understanding of the doctrine of creation and is related to their understanding of nature and its relation to God (Torrance 1971:55). The Christian doctrine of creation means that we study nature out of itself and on its own terms and not from theological first principles (Torrance 1971:39). Torrance argues that the doctrine of *creatio ex nihilo* can have the effect of detaching nature from God. Instead of regarding nature as contingent upon its creator it is perceived as independent of God (Torrance 1971:48), its freedom no longer regarded as originating in God.¹⁹² He argues that the disjunction between God and creation, seen in the cosmological dualism of the new theology, leads to 'something like the old pagan dichotomy between the intelligible and the sensible realms, or the old deistic disjunction between an idle God and a mechanistic universe' (Torrance 1971:49). He argues that this radical dualism is seen in Bultmann's division

¹⁹¹ On Bultmann's programme of demythologization, see Fergusson 1992, Chapter Six, especially pp 108-113.

¹⁹² Torrance argues that in these theologians 'nature is sealed off from any meaning beyond itself in God' (Torrance 1971:49).

of history into *Historie* and *Geschichte*. Torrance argues that in Bultmann history is divided into:

a scientific reconstruction of historical events operating with the principle of a closed continuum of cause and effect, which eliminates the actual historical Jesus almost completely and certainly makes Him of no account for faith; and an interpretative account of history in which Christ stands for the way the Early Church creatively expressed its orientation to 'other-worldly' reality, and so becomes the point at which we in our generation may through 'faith' gain an authentic relation to existence.... And so historic Christianity is reduced to a pietistic individualism in which each man fills the symbol of 'Christ' with his own 'self-understanding' (Torrance 1971:51).

According to Torrance the way forward from the subjectivism and radical dualism of the new theology which he regards as a 'retreat from the truth' (Torrance 1971:52) is to be found in a properly scientific theology which begins with the axiom that you can 'know something only in accordance with its nature, and that you develop your knowledge of it as you allow its nature to prescribe for you the mode of rationality appropriate to it' (Torrance 1971:52).¹⁹³ What this means for theology is the recognition that the kind of question we address determines the sort of answer that we can receive; and so the theologian must ask the questions that are appropriate to God.¹⁹⁴ If theologians ask only anthropological or psychological questions of God then they will receive only anthropological or psychological answers; only a theological question can yield a theological answer. It is difficult to ask appropriate questions about God, because all questions are inadequate to God's reality, however, a question that falls short of God is not necessarily a wrong question. Theology will only progress when theologians ask the right questions (Torrance 1971:53f). Torrance however does not tell us what these appropriate questions are!

¹⁹³ On Torrance's scientific theology, see Chapter Five.

¹⁹⁴ Torrance writes: 'To know God I must enter into the mode of rationality prescribed by the nature of God' (Torrance 1971:52).

Torrance argues that the new theology illustrates the problems of cosmological and epistemological dualism; it rejects *a priori* the idea of God as active and present in the universe and this leads to a subjectivism in which theology is translated into anthropology and psychology (Torrance 1971:55).

In his critique of cosmological and epistemological dualism in theology Torrance returns to the objective self-revelation of God within space and time in Jesus Christ because a scientific theology must be grounded in the being of its object and the being of God is revealed in the incarnate Son. As in his doctrine of revelation in Scripture he focuses upon the Bible as witness to the Word of God in Christ,¹⁹⁵ so a theological-scientific epistemology, while having a subjective pole in the person who seeks to know God, has its objective pole in the doctrines and events of incarnation and creation.

Torrance's theology begins with the presumption (cf. Jüngel 1983:161) that God has spoken in Jesus Christ within history; he assumes that the role of the theologian is to ask the appropriate questions of this event. In this presumption he puts theology on the right track. He draws attention to the danger of assuming that in the event of Jesus Christ and in the witness to that event in Scripture we have not God addressing us but a more familiar voice. If this is our assumption as we approach Jesus and the Scriptures we will certainly not hear in them the word of God, even if it is there to address us. There may be no sun in the sky but we will only discover this by looking for the sun and not by looking at ourselves.

¹⁹⁵ See Chapter Two.

4.5.6 Morrison and dualism in Torrance's scientific theology

We have seen that Torrance is aware of the problems for theology of cosmological and epistemological dualism and that he challenges dualism on theological and scientific grounds. Morrison however, argues that Torrance has failed to eliminate dualism from his own theological epistemology (Morrison 1997a:285). He argues that Torrance's dualism is a remnant inherited from Barth and ultimately from Kierkegaard (Morrison 1997a:285). He accuses Torrance of a 'Barthian "transcendentalism"' which removes 'God's Truth from the present historical situation toward non-objectivity' (Morrison 1997a:286). He argues that this transcendentalism has:

forced a schism within his theological thinking so that a gulf is found finally to exist between divine and human at the point of space-time relation in the world. This demands that existential Word-event ... for theological "knowledge" and faith-ful response in the task of doing what he calls "mystical theology" (Morrison 1997a:319).

According to Morrison, the only point at which humanity can come to knowledge of God is in this 'existential Word-event'; a timeless encounter in which the truth of God is removed 'from the present historical situation toward non-objectivity' (Morrison 1997a:286). Morrison argues that Torrance has abstracted the timeless encounter with the word 'beyond the historical domain of the existing self' (Morrison 1997a:317).

If Morrison's charge that Torrance's is a dualist epistemology is upheld then he has failed in his own terms to offer an adequate theological method in the post-Einstein world. For as Torrance emphasises the theory of relativity does not allow for a timeless, supra-historical, encounter with reality. Truth is situated in time and space. However, a closer reading of Torrance's writings shows that Morrison's charges are not substantiated. Torrance takes care to stress that in all of our encounters with reality,

whether that reality is God or the universe, the observer is not granted a privileged, abstract or ahistorical vantage point (Torrance 1985b:36).

Torrance emphasises the objective pole in the relation of God to the universe of space and time; this is the ‘epistemological significance of the incarnation’ (Torrance 1969a:310) in which God in Christ enters into the contingent reality of time and space (Torrance 1969b:52), but God does not relate to humanity in a spaceless and timeless way (Torrance 1969b:61); rather he chooses to be present in the contingent creation in the life and person of Jesus. In the person of Jesus the absolute truth of God becomes a contingent event in space and time (see Torrance 1969b:67). By placing emphasis on the entry of God into the space and time of creation Torrance affirms the possibility of our actual knowledge of God; nevertheless, he is aware that there is a subjective pole to all knowledge, including our knowledge of God. He quotes Brown who writes:

‘It is part of our situation that we are inevitably and inseparably *inside* the knowing relation, from the start to the end, and so cannot step outside of ourselves to an indifferent standpoint from which to view and adjust the relations of thought and being’ (Torrance 1969a:1, emphasis Brown).

In most of his writings Torrance’s main concern is to establish the incarnation of God as the basic datum of a scientific theology; however, the quotation from Brown is a reminder that just as God enters into space-time reality in order to be known, so theologians are also inevitably bound to their relative place in time and space. While Torrance does not expand upon the theme of the situatedness of all human knowledge, including knowledge of God, he does not ignore it. He writes:

It may also be remarked that since theology, even when properly grounded in God’s self-revealing interaction with the world, remains a human inquiry, operating within the contingent intelligibilities of space and time that it shares with natural science, it is also characterized by ambiguity in its formalized concepts and statements. By their contingent nature they fall short of the divine realities they indicate, pointing far beyond themselves to what is infinitely

greater than we can conceive or express; God cannot be brought into any compulsive relation to our concepts or statements about him (Torrance 1980b:144).

In commenting on the improvement that Torrance makes on Barth's understanding of the role of the Holy Spirit in the interpretation of Scripture Thiselton writes that 'the Holy Spirit does not bypass human rationality, or make questions about the nature of human language irrelevant' (Thiselton 1980:91);¹⁹⁶ he continues: '[t]he epistemological relevance of the Holy Spirit lies not in some esoteric gnostic route to knowledge, but "in the dynamic and transformational aspects of this knowledge"' (Thiselton 1980:92, quoting Torrance 1971:166). Torrance acknowledges not only the reality of the incarnation in time and space but also of the theologian. Far from being guilty of 'Barthian transcendentalism' Torrance acknowledges the relativity of all human theological knowledge and language; he makes no claim for a privileged objectivity for the theologian.

4.5.7 Discussion

The attempt to refute the cosmological and epistemological dualisms associated with Newton and Kant is such a recurring theme of Torrance's theology that Colyer regards it as the central and unifying concept of his theology (Colyer 2001a:57-60). In his criticism of the dualism in western thought Torrance draws on the writings of Einstein, Polanyi and Clerk-Maxwell and draws philosophical and theological conclusions from their scientific writings. The justification for his taking the methods and results of the physical sciences and applying them to theology is his relocation of natural theology within the body of revealed theology, for in doing so he correlates theological science with natural science. Natural theology, or a theology of nature, is

¹⁹⁶ Thiselton here refers to Torrance 1971:146-51 and 183-92 (Thiselton 1980:91, n.38).

concerned with God's self revelation in the universe. This means that the natural sciences and their investigation of reality are an important component of knowledge of God. It is in the contingent events and processes of the universe that God has disclosed himself.

Torrance's rejection of dualism is an important component of his nuanced understanding of realism. Torrance is a realist but his account of realism, which he takes care to correlate with the realism of the natural sciences, comes with no prior philosophical justification. There is no reason why reality should disclose itself to the enquirer, but it does – or at least it may, it has the capacity to do so. Torrance's account of theological epistemology is actualist in its realism rather than necessary; there is what Hardy calls a gracing of theological knowledge. There is also a gracing of scientific knowledge. Human knowing whether of God or of the universe is necessarily contingent and personal, but through the disciplined obedience of the mind to reality true knowledge may arise. From the perspective of the natural sciences the human ability to apprehend reality will always be incomprehensible; from the perspective of theological science which is coordinated to the relation of God to creation as disclosed in the doctrines of incarnation and creation, the comprehensibility of the universe is contingent upon the creative word of God. The importance of Torrance's rejection of dualism for a realist theological epistemology is the implication that there is one world, one reality and so the truth of God, like the truth of the universe, is discovered not by speculation but by attention to actual self revelation.

4.6 Torrance's Transformed Natural Theology

Of his transformed natural theology Torrance writes:

A natural theology in this full sense will have its proper place in the dialogue between theological science and natural science within their common sharing of the rational structures of space and time conferred on this universe by God in his creating of it, and within their common sharing in the basic conceptions of the unitary rationality of the universe, its contingent intelligibility and contingent freedom - which derive ... from a Christian understanding of the relation of God to the universe (Torrance 1980b:94).

There are a number of important differences between Torrance's transformed natural theology and traditional natural theology. The first major difference is that Torrance's natural theology leads us not to a general theism which is distinct from and antecedent to the God of Christian revelation but to the Trinity and the incarnation. A second important difference is that the way that Torrance understands the natural world, science, and scientific method is shaped by his reading of Einstein and Polanyi whose work has transformed our understanding of the natural world and of scientific investigation of that world. This is of significance for all of Torrance's theology, but especially for his transformed natural theology which we have argued is more properly seen as a theology of nature.

4.6.1 The creator's relation to the creation

One of the focal points of Torrance's exposition of the relationship of God to the universe is the doctrine of creation.¹⁹⁷ God is the creator of the universe. The universe

¹⁹⁷ The development of the doctrine of *creatio ex nihilo* is the distinctively Christian contribution to the understanding of creation (Gunton 1997:141). It was developed by the patristic theologians from their interpretation of the biblical material and was the usual Christian understanding of creation until recent years. Some twentieth century movements in theology, such as Process Theology, deny that creation was out of nothing (Griffin 1999:140). Some process theologians interpret creation as the imposition of order on pre-existing chaos (Cobb and Griffin 1977:65). Moltmann and McGrath defend the doctrine (Moltmann 1985:86-93, McGrath 2001:159-166) and although it has been challenged in recent decades the doctrine of *creatio ex nihilo* remains the main Christian understanding of creation (Davies 2004:2).

of space and time is not eternal, it is finite and its origin is in God; its existence is not logically necessary, it is not self-created. God is the transcendent creator. There was a point at which God began to create, a point before which the universe did not exist (Torrance 1988a:84-89); Torrance's point is that God is essentially and in himself Father and Son and Holy Spirit (Torrance 1988a:76,110,193-196). The doctrine of the Trinity gives us more insight into the being of God than does the doctrine of creation (Torrance 1988a:76-80). According to Christian theology God created the universe out of nothing (Torrance 1988a:95-98). The doctrine of *creatio ex nihilo* is important for Torrance's understanding of the relationship of God to the creation. The world is not part of God nor is its existence necessary; it is not eternal. It is a contingent reality (Torrance 1985b:33; c.f. Torrance 1980b:102) and it is finite in the sense that it had a beginning; it is from God but it is not of God. As a contingent reality the universe is relatively free of God but its freedom is contingent upon God. This contingent freedom means that we come to an understanding of the nature of the universe by empirical investigation of nature (Torrance 1985b:33).

Torrance argues that the creation also has a contingent rationality conferred upon it by its creator (Torrance 1980b:53-57). Created rationality is not the same as God's own logos, nor is it independent of God. It is part of God's gift to the universe which he created out of nothing. This Christian understanding of the creation of the universe from nothing, including time and space, also includes the rationality and intelligibility of the universe and means that although the universe has its transcendent ground in God, if we are to understand the universe, then we must attend to the universe and not to God (Torrance 1985b:33). This is one of the ways in which Torrance's non-independent natural theology differs from traditional natural theologies. According to Torrance the Christian doctrine of *creatio ex nihilo* compels such an empirical approach

upon us. In order to investigate the universe we must study the universe and not begin with the necessary truths of reason. In the west with its 'context of powerful cosmological and epistemological dualisms' (Torrance 1980b:104)¹⁹⁸ the universe's contingent and gifted independence has led to what Torrance calls a 'dogmatic secularisation in life and in thought' (Torrance 1980b:104). However this secular approach to the universe involves a loss of meaning;¹⁹⁹ this is important to Torrance as he develops his non-independent natural theology. He speaks of the 'silent cry' of the universe for a sufficient ground (Torrance 1985b:58). According to Torrance, the universe itself provides no explanation of its existence, of its rationality, or of its comprehensibility; an entirely secular understanding of the universe leaves important questions not only unanswered; it renders them unanswerable. If we are to recover the meaning of the world we must look beyond to its transcendent ground and creator (Torrance 1980b:104). As a contingent reality the world cannot provide an explanation for its own existence. However, scientific exploration of the world can tell us a great deal about the contingent creation.

Another focal point of Torrance's understanding of the relation of the creation to the creator is that it is Christologically grounded. Christ is the creative logos through whom all things were made. The Christological foundations of the relationship of God to the universe preclude any sort of deistic disjunction between God and the creation; it also means that redemption is also related to creation as the affirmation and renewal of the created order (Torrance 1976:87f, 66). Torrance's understanding of nature is important not only for his understanding of the place of a transformed natural theology;

¹⁹⁸ See sections 4.5.3, 4.5.4.

¹⁹⁹ In support, Torrance cites Polanyi 1969:146, see Torrance 1985b:34, 61 note 2.

it also forms the basis of his attempt to correlate theology and the sciences as well as of his epistemology.²⁰⁰

4.6.2 God, Einstein's universe and natural theology

Torrance argues that the paradigm shift in our understanding of the nature of reality brought about by Einstein achieved a 'unification of ontology and intelligibility in scientific knowledge' (Torrance 1985b:44). This paradigm shift is of fundamental importance for Torrance's theology. The Newtonian worldview replaced by Einstein's was characterised by 'dualist and abstractive modes of thought' (Torrance 1985b:44); it formed the basic understanding of the universe until the early twentieth century.

Torrance argues that a God who 'contains and regulates' (Torrance 1980b:68) the universe without being affected or changed by it cannot actively relate to the world in the way that the Scriptures and the patristic writers understand; much less could such a God become incarnate in the world of relative space and time. It is for this reason that Newton was unable to accept the doctrine of the incarnation (Torrance 1980b:68).

According to Torrance this deistic model of God formed the foundation of Newton's cosmology; he understood the laws of nature as eternal and unchangeable, founded upon an eternal and unchangeable God (Torrance 1980b:68f). Torrance claims that the deistic God of natural theology has had an impact on the development of western science and that the dualism inherent in the concept of God derived from traditional natural theology has left its mark upon pre-Einsteinian science.²⁰¹ Another source of dualism in western thought is Kant whose worldview separates the real from

²⁰⁰ See chapter Five.

²⁰¹ Torrance writes: 'Newton's God was so transcendently related to the universe that he was deistically detached from it through his immutability and impassibility. It was, then, on this deeply dualist basis that Newton developed his grand synthesis of God and the universe that allowed him to explain the immutable, eternal laws of nature as they are grounded objectively in the immutability and eternity of God' (Torrance 1980b:68).

the experienced in what Torrance calls the dualism between 'ontology and intelligibility in scientific knowledge' (Torrance 1985b:44). This dualistic worldview was the basic scientific paradigm which existed before Einstein; in it reality is distinct from experience and from empirical knowledge. However, according to Einstein the empirical world is the real world; there is no noumenal realm abstracted from the world of experience. In Einstein's paradigm there is no dualism between ontology and epistemology, between reality and experience. In Einstein's model when the natural sciences investigate the universe they address reality and not merely phenomena which are given form by the observer. What is at stake in these two different models of reality is whether meaning is inherent in the universe or created by the observer (Torrance 1985b:32-33). He argues that the dualisms of Newton and Kant, though different in detail, imply that meaning is imposed by the observing mind upon the world. Epistemological dualism, he claims, still prevails in western society and thought except in what Torrance calls 'pure science and rigorous theology'; these operate with a working assumption that the world possesses rational structures which are inherent to it and not created by the observer (Torrance 1985b:32). Torrance argues that the paradigm shift associated with Einstein is as important for theology as for the natural sciences because we can only know God as he has revealed himself within the universe of space and time (Torrance 1980b:72).

Torrance operates with a disclosure model of reality. He holds that proper scientific enquiry allows reality to disclose itself to investigation 'in accordance with its own inherent structures' (Torrance 1985b:45). In investigating the universe we meet reality, being itself and not merely a world of phenomena divorced from being. The structures of reality are inherent to it and not imposed upon it by the human mind. Torrance writes that 'what we apprehend like this in the truth of its own being *proves*

itself to us by bringing our minds under an imperative obligation which we cannot rationally resist' (Torrance 1985b:48, emphasis Torrance).

Having argued for realism in his approach to the universe, Torrance asks about the meaning of the universe as a whole. He regards the centuries before Einstein as 'centuries of deism and secularism' (Torrance 1985b:44) which led to a short sighted view of the universe; a 'habit of looking at the universe in such a way as to cut off its signitive or referential relations beyond itself' (Torrance 1985b:44). Torrance calls for a way of looking at the universe which also looks beyond the world to its ultimate ground in the transcendent rationality of God (Torrance 1985b:44). This change in perspective originates in the incarnation of the Word of God whose person is the very place where the creation and the creator meet. From the perspective of natural theology the universe, contingent in its being and rationality, points beyond itself to a sufficient cause (Torrance 1985b:44). In support of this, Torrance quotes Wittgenstein who writes:

The meaning of the world must lie outside the world. In the world everything is as it is, and everything happens as it does happen: *in* it no value exists - and if it did exist, it would have no value. If there is any value that does have value, it must lie outside the sphere of what happens and is the case. For all that happens and is the case is contingent (*zufällig*). What makes it non - contingent (*nichtzufällig*) cannot lie *within* the world, since if it did it would itself be contingent (*zufällig*). It must lie outside the world. Wittgenstein, L. *Logico Tractatus - Philosophicus*, 6.41. (London 1961, quoted in Torrance 1985b:62, note 9).²⁰²

Torrance argues that the very nature of the universe in its contingency poses a 'question' which demands an answer; however, the nature of the question posed is beyond the scope of scientific enquiry.

²⁰² Note that Torrance replaces 'accidental' and 'non-accidental' in the English translation with 'contingent' and 'non-contingent', which he argues is 'truer to Wittgenstein's thought'. Torrance 1985b:62, note 9.

The natural sciences in their investigation of the universe try to ‘lay bare the intelligible structure of the universe, and try everywhere to grasp reality in its own rational depth’ (Torrance 1985b:52). However, as the natural sciences investigate the universe and try to answer questions about it deeper questions are raised; questions which scientific investigation of the universe cannot answer. Torrance lists some of these fundamental questions: ‘Why is there a universe and not nothing? ... What is the reason for ... the existence of a universe that is accessible to rational inquiry?’ (Torrance 1985b:52). The universe is not self-explanatory,²⁰³ nor is its inherent rationality; they are given as far as scientific enquiry is concerned. This lack of explanation is a problem for the natural sciences and, according to Torrance, the problematic nature of the universe ‘points beyond itself with a mute cry for sufficient reason’ (Torrance 1985b:52f). Torrance claims that it is the inexplicable comprehensibility of the universe which points towards a ‘transcendent ground of rationality as its explanation. ... To be inherently reasonable the universe requires a sufficient reason for being what it is as an intelligible whole’ (Torrance 1985b:53).

The universe as investigated by the natural sciences points us to the existence of an active agency which is the ground of the universe’s being and which is the source of the universe’s unity and structure which persist despite its constantly changing processes (Torrance 1985b:56, 58). This is where a transformed, non independent, natural theology finds its place. It is very similar to the place which traditional natural theology occupies in the cosmological argument. However, Torrance emphasises that he is not suggesting any sort of ‘logical bridge’ or ‘chain of inferential reasoning from the contingent to a “necessary” Creator’ (Torrance 1985b:58). He argues that the movement of thought from the contingent universe to its transcendent creator is a fully rational

²⁰³ Indeed if the universe were self - explanatory it would not be contingent.

movement but it is not a logically necessary movement. Should anyone read Torrance and suppose that the type of natural theology he is proposing here is in any sense independent, he is at pains to point out that we come to know God through the universe not because we trap him by our logic (Torrance 1985b:59); rather God:

interacts with us and the universe, ... and discloses himself in a positive way to us. ...it is not with *discovery* that we have to do here, as in our inquiries into mute and determinate realities when we seek to let them 'disclose' themselves to our questioning, but with *revelation* in which our seeking and inquiring are anticipated, prompted and supported by creative activity on God's part (Torrance 1985b:59).

Here again Torrance goes beyond revelation in Christ. Just as a close reading of his doctrine of revelation in Scripture pointed to the Bible as more than a witness to the Word but as a locus of divine self-revelation, so too his transposed natural theology and points to the creation as a place of revelation. Again because the creative word of God became incarnate in Jesus Christ there is no possible contradiction between revelation in Christ and revelation in nature.

4.6.3 Discussion

The universe disclosed to the natural sciences is not self explanatory. It is the very success of the natural sciences in investigating reality that highlights this. The rational order and comprehensibility of the universe raise questions that are unanswered and from the perspective of the natural sciences are unanswerable. It is here that Torrance's transposed natural theology is important. From the Christian doctrines of creation and incarnation he argues that the universe is created by God to be free, and this contingent freedom is the ground of the empirical method which has been so successful in providing explanations of the universe. Natural theology points, not to God in general but to the God revealed in Christ and in the scriptures as the ground of

rationality and being in the universe. In the creation of the universe God has conferred a relative freedom on his creation which means for the natural sciences that knowledge progresses by attention to the universe itself rather than by abstraction and speculation.

The empirical method in general and Einstein's theories of relativity in particular point to the inherence of meaning in the universe. Meaning is discovered or disclosed, it is not imposed by the observer. When this is applied to theology it points us to the places and events whereby God has acted to disclose himself within the universe as the only source of knowledge of God. It points to revelation in Christ, in Scripture and in the creation, but underlying all of this it points to the gracing of all knowledge of God; that it is his self-gift. This leads to the doctrine of justification by grace in its epistemological significance – for theological science and also for the natural sciences.

4.7 Conclusion

Torrance has two clear aims in his approach to natural theology. He wants to develop from Barth's rejection of independent natural theology his own non-independent natural theology which is better seen as a theology of nature. His second aim is to correlate this non-independent natural theology with the understanding of the universe and of scientific method post-Einstein.

Torrance begins with Barth's rejection of natural theology and develops a new account of natural theology that is not independent of revealed theology. He argues forcefully that Barth's objection to natural theology is its independence of God's actual revelation. He is not alone in reading Barth on natural theology in this way, Stanley Hauerwas in his Gifford lectures also portrays Barth as a great natural theologian (Hauerwas 2002:9f). Further support is found in Barth's own work on natural theology.

Torrance argues that 'instead of rejecting natural theology *per se*, Barth has transposed it into the material content of theology where in a changed form it constitutes the epistemological structure of our knowledge of God' (Torrance 1976:ix f). Torrance's aim is to relocate natural theology within dogmatics, where one of its key roles will be to establish a rational structure in our knowledge of God. It has been demonstrated that the rejection of epistemological and cosmological dualism in theology informs Torrance's criticism of some of his theological contemporaries.

Torrance's rejection of traditional approaches to natural theology is on both theological and scientific grounds. Torrance applies the insights in scientific method associated with Einstein and Polanyi to theology. He believes that the epistemological dualism of traditional approaches to natural theology is undermined by Einstein's work. Torrance learns from the natural sciences that an *a posteriori* epistemology entails a rejection of dualism, not only in his transformed natural theology, but in all theology. When Torrance's development of natural theology is examined an emphasis on the self-revelation of God in Jesus Christ as the place in time and space where God encounters his creation is seen. Here the theologian comes up against the reality of God. Torrance's theological science rests on his application of the insights of the natural sciences to theology. He is able to apply the work of Einstein on the unity of formal and empirical components of knowledge to theology because he makes a strong case for the correlation of the understanding of the universe disclosed to the natural sciences with that derived from the Christian doctrines of creation and incarnation.

Torrance's transposed natural theology points to a gracious self revelation of God in the creation. This revelation is independent of revelation in Christ only in terms of the locus of revelation for the transcendent creative Word is the same Word of God who became incarnate in Jesus Christ. This supports the argument that there is a

fundamental gracing of theological knowledge in Torrance's thought that is more basic even than revelation in Christ and is constitutive of his realist theological epistemology.

Theology, like all knowledge, is always personal; it is the knowledge of persons within the space time universe. There is no abstract or neutral vantage point from which the theologian works and therefore a non-independent natural theology will seek consonance with the natural sciences in terms of their common understanding of the creation and in terms of how the universe is to be understood by the scientist, whether a natural or a theological scientist, and so we will see in chapter five how Torrance develops his non-independent natural theology into Theological Science. Chapter five will examine the central place of contingency in Torrance's thought, and his correlation of scientific and theological epistemologies.

Chapter Five **Natural theology III: theological science**

5.1 **Introduction**

Torrance's doctrine of revelation is founded on his conviction that we can only know God as he has actually given himself to be known to us. For him this means in Christ. This forms the basis of his understanding of revelation in Scripture and of his transposed natural theology; however, a close reading of Torrance's writings on revelation reveals an understanding of revelation in nature and Scripture. From this doctrine of revelation there emerges an understanding of the gracing of all human knowledge of God. Foundational to Torrance's theological epistemology is the reformed doctrine of justification by grace alone.

Torrance takes account of the locus of both revelation and of the recipients of revelation within the created universe. Jesus Christ is God's revelation within the universe of space and time,²⁰⁴ and those who interpret the Scriptures do so from a position within space and time. It is for this reason that dialogue with the natural sciences is important for an account of Torrance's theological epistemology. If God is known within space and time then the nature of the universe is important for Christian theology. He argues that a Christologically founded theology is scientific in that it is founded upon the actual self-revelation of God within the creation.

In his dialogue with the natural sciences Torrance does not attempt to place theology into a philosophy derived from his understanding of the sciences, nor does he attempt to place the sciences within a philosophy derived from Christian theology. Instead he situates his theological understanding of the universe alongside the understanding of the universe found in post-Einsteinian science. In Torrance's theology the two accounts of the universe are arrived at separately in accordance with the two distinct disciplines each with their own appropriate methods of enquiry. What Torrance finds when he places these two understandings of the universe together is a

²⁰⁴ See section 1.3.1.

correlation and congruence between them.

In chapter four it was noted that the shift in contemporary accounts of the natural sciences from a dualist to a unitary outlook is central to Torrance's attempted rapprochement between theology and the sciences. Torrance's unitary understanding of reality 'makes it possible again to see how one and the same reality is invoked when the scientist speaks of the world and when the theologian speaks of God's creation' (Scharlemann 1983:198). This correlation or congruence between Christian theology and the natural sciences is central to Torrance's development of a theology of nature and to his dialogue with the sciences. This dialogue is two way and each discipline benefits from the engagement.

Having examined the relationship between theology and the sciences we critically examine Torrance's account of theological science and in particular his argument that theology is a scientific endeavour in the same way as physics. He argues that in contemporary accounts of human knowing theology is to be grouped with what the exact sciences rather than with the humanities or the human sciences. He argues that both Christian theology and the natural sciences give support to a critical realist understanding of the universe and that each provides support for the other in debate with non-realist traditions; however Torrance's account of critical realism is arrived at *a-posteriori*; it is an actual realism, based on experience, rather than an *a-priori* logically necessary realism. Finally it will be argued that his scientific epistemology has an application wider than theology and the natural sciences.

5.2 Theology and Science

5.2.1 God and the creation: introduction

The doctrine of creation is important for Torrance's theology and epistemology for two reasons: first, it has a direct bearing upon the relationship between theology and the natural sciences; second, the nature of creation has implications for how God relates to and communicates with and within it. Torrance believes that the relative nature of

space and time as disclosed in the natural sciences is crucial to our understanding of God's relationship to creation. This is especially so for the doctrine of the incarnation whereby God does not simply relate to the creation but becomes part of the universe of space and time. The doctrine of the *homoousion* implies that the absolute truth of God becomes a contingent and historical event. Torrance finds significant parallels between the understanding of the nature of the universe in the patristic writers and that developed by Einstein.

God's contingent relationship to the creation is important in Torrance's theology. He uses the term *contingent* in two different but related ways. The universe is contingent rather than necessary because it could have been other than it is (Torrance 1981a:vii). Its laws and its inherent rationality could have been different from how they are.²⁰⁵ The second sense in which Torrance uses the term is when he conceives of the universe as being contingent upon its creator. He argues that God's existence, being necessary, is of a different order from the creation²⁰⁶ which depends upon its creator for its existence and its nature (Torrance 1988a:78f, Torrance 1981a:26). The universe is as it is because of the decision and gift of God. Torrance's two uses of contingency are related for if the universe's existence was necessary then it could not be dependent on God for its nature.²⁰⁷

5.2.2 Torrance's Christocentric doctrine of creation

According to Torrance the doctrine of creation is Christologically founded for he argues that the incarnation impacts upon our understanding of creation and its relationship to God (Torrance 1996a:213-216, and Torrance 1988a:155, 183). He correlates this theological understanding of creation with the natural sciences. He is

²⁰⁵ Torrance writes: 'Regarded in itself the universe is what it is, this one and only universe which has come into being, but considered from the side of God's free creation it is only one of all possible universes since it might have been very different' (Torrance 1981a:22).

²⁰⁶ The necessity of God's existence is contested by some theologians and philosophers of religion, notably in process theology (Griffin 1999:141).

²⁰⁷ See Mann 1999:264-270.

unusual, but not unique, among Barthians for his interest in the doctrine of creation and the relation of theology to the natural sciences. Luoma notes that due to the Christocentric nature of Barth's theology Barthians are supposed to be 'politely indifferent' toward these areas of theology (Luoma 2002:18).²⁰⁸ Barth argued that the natural sciences have little to contribute to a theological understanding of creation (Barth 1958b:ix). However, Torrance's work demonstrates that there is no dichotomy between a Christocentric theology and an interest in the natural sciences; rather he argues that the two disciplines can learn from each another. In fact, according to Torrance's understanding of what constitutes a scientific discipline, only a Christocentric theology can enter into meaningful dialogue with the natural sciences for only a Christocentric theology can claim to be scientific.

Torrance's Christocentric approach to the doctrine of creation is not simply that Christ is the creative *logos*; more significantly he understands the incarnation as forging an unbreakable link between the universe and the incarnate Son. This makes revelation in Christ normative for the content of Christian theology, whatever its origin. He does not use the concept of the relation of the creator to creation as the basis of a general revelation. His formulation of the doctrine of creation is firmly rooted in his understanding of divine grace and the centrality of Christ in the economy of revelation.

Torrance argues that in Christian theology God is primarily Father and only secondarily creator (Torrance 1988a:6). He argues that:

In contrast with Judaism and its stress on the innumerability of God, the Christian Faith is concerned with God as he has named himself in Jesus Christ, and incarnated in him his own Word, so that in Christ we know God as he is in his own inner being, as Father, Son and Holy Spirit. Jesus Christ is the *arche* ..., the Origin or Principle, of all our knowledge of God, and of what he has done and continues to do in the universe, so that it is in terms of the relation of Jesus the incarnate Son to the Father, that we have to work out a Christian understanding of the creation. It is the Fatherhood of God, revealed in the Son, that determines how we are to understand God as Almighty Creator, and not the other way round. It was through thinking out the inner relation of the incarnation to the creation that early Christian theology so transformed the foundations of

²⁰⁸ See also Webster 2000a:110.

Greek philosophy, science and culture, that it laid the original basis on which the great enterprise of empirico-theoretical science now rests (Torrance 1988a:7).

The understanding of God derived from the patristic doctrine of the *homoousion* is a controlling factor in Torrance's theology (Torrance 1988a:77).²⁰⁹

Torrance articulates his understanding of God as creator from within the perspective of the relation of the Father and the Son (Torrance 1988a:78). He argues that we can only know who God is, even as creator, from his self-revelation in Christ (Torrance 1988a:76). He argues that the unity of being between the Father and the Son implies a unity of action between them. The Nicene Creed names God as 'the Father, the Almighty, maker of heaven and earth', and goes on to say that the Son is 'eternally begotten of the Father'.²¹⁰ Torrance cites Athanasius who writes that when we call God 'Father' we do not refer to some quality or attribute of God, but signify 'his very being' (quoted in Torrance 1988a:79). When Torrance derives his understanding of God as creator from a prior understanding of God as the eternal Father of the Son this implies that God is essentially creative. He argues that God is able to be the creator of heaven and earth because, as Father of the Son, he is in himself essentially productive (Torrance 1988a:79); and as the transcendent, Triune creator, God is totally other than the creation (Torrance 1988a:80f).²¹¹

According to Torrance this Christocentric approach to the doctrine of God tells us that although God was not always creator he is eternally the Father of the Son and the

²⁰⁹ See also Seng 1992:341, 366

²¹⁰ For a contemporary translation of the Nicene Creed, see *Common Worship. Services and Prayers for the Church of England*. Church House Publishing, London. 2000, page 173.

²¹¹ Torrance writes: 'He the eternal Father, with the eternal Son and the eternal Spirit who are consubstantial and co-equal with himself, is the transcendent Origin (*αρχη*) of all created things, visible and invisible alike, whose transitory natures are utterly different from his own' (Torrance 1988a:80f).

fount of all being;²¹² (Torrance 1988a:84). He argues that the generation of the Son is unlike the creation of the universe for the Son is eternally begotten of the Father that is before the beginning of time; whereas the creation of the universe is within time in the sense that time is itself an element of the universe. Another significant difference is that the Son is begotten of the Father ‘within the one being of God, as God of God’ (Torrance 1988a:84); whereas the universe is created not *of* God but *by* God out of nothing and is external to the being of God.²¹³ The distinction between the generation of the Son and the creation of the universe is that it is in the nature of the Father to beget the Son but it is in the will of God to create the world. The generation of the Son flows from God’s being; the creation of the universe flows from God’s decision.²¹⁴ The Son is eternal in the same way as the Father, however, the creation is not eternal (Torrance 1988a:87).²¹⁵ The implication of the doctrine of *creatio ex nihilo* is that the existence of the universe is contingent upon the will and act of God.

The created universe has a definite beginning. It may have been in God’s mind to create before he in fact did so (Torrance 1988a:87), but when God brought the universe into being by the act of his will he gave it an origin. Torrance acknowledges

²¹² Here of course language begins to become less than adequate, as Torrance, following the Nicene Creed, speaks of events within God which occurred ‘before’ the creation of the space-time universe.

²¹³ Torrance writes: ‘The Son is begotten of God’s nature and is without beginning ... like the Father and without any interval between him and the Father, for he is one and the same being and nature as the Father. Creatures, on the other hand, are freely brought into being from non-being by the will of God and have an absolute beginning, for they utterly different in being and nature from God’ (Torrance 1988a:84).

²¹⁴ Torrance writes: ‘Athanasius argued [against the Arians] ... that there is no likeness between a son and a created thing which might equate the function of a father and of a maker, for there is a vast disparity between a created thing brought into being from nothing by the will of God as ‘a work external to his nature’, and the Son who is ‘the proper offspring of the being of God’ and is internal to his nature’ (Torrance 1988a:86).

²¹⁵ Torrance writes: ‘In answer to the question why God, though always with the power to make, does not always make, Athanasius pointed to the fact that owing to their intrinsic nature created things could not have existed eternally, for they were created out of nothing, (Torrance 1988a:87).

that there is problem of language when speaking of God. He uses words such as 'before' and 'beginning' which imply temporal relations which are only proper when speaking of events within the universe as time itself is a component of the universe. Torrance is stretching language beyond its everyday use, he is not reading back temporal relations into God (Torrance 1988a:87f). However, he draws a parallel between the decision of God to create and the decision of God to become incarnate and argues that they are both new actions which flow from God's will (Torrance 1988a:88f). These new actions have implications for our understanding of God. In the incarnation and creation God is free to do and to be what he did not and what he was not eternally. Torrance argues that the idea of something new happening in God is at odds with the Hellenistic understanding of the divine nature which holds that God is impassive (Torrance 1988a:89). While the Hellenistic understanding of divine nature has been influential upon western philosophy and theology the biblical and patristic understanding of God is different. Torrance argues that the patristic doctrines of incarnation and creation introduce change in the will and even in the being of God. He refers to the '*Self-moved God*' (Torrance 1996a:239, emphasis Torrance) of biblical revelation which he contrasts with the immutable Unmoved Mover of scholastic theology who does not personally interact with the world of space and time and with the Moved Unmover of Whitehead's process theology who is inextricably attached to the world (Torrance 1996a:239).

In place of the God of the scholastics and the God of the process theologians Torrance writes of the paradox of the constancy and freedom of God 'who is eternally new and constantly surpasses himself in all that he does' (Torrance 1996a:239).²¹⁶ Thus

²¹⁶ C.f. Barth 1957:502f.

in creation God who is eternally Father becomes creator,²¹⁷ and in the incarnation God the creator becomes a creature. God's life is not limited or characterised by time; yet there is a purpose which gives direction to God's eternal life (Torrance 1996a:241). Torrance argues that although God relates to time in a non-temporal way (Torrance 1988a:90) in creation and incarnation he conceives of purpose and direction in God's eternal life. This direction is characterised by 'distinct *moments*' in God's eternal life such as before and after creation and incarnation (Torrance 1996a:241, emphasis Torrance). He grounds the change and temporality which characterises creation in the direction and in these 'moments' of God's eternal life.

5.2.3 *God the transcendent creator*

Torrance depicts creation, like revelation, as an act of absolute grace (Torrance 1996a:208, 239-40).²¹⁸ The creator's relation to creation is neither necessary nor arbitrary but is grounded in God's own decision and purpose (Torrance 1988a:93).²¹⁹ Just as God is free to reveal or not to reveal himself in and to his creation, so he is free to create or not to create. Torrance, citing Athanasius, argues that the existence of the universe is not a random event, rather God created through his Word; therefore its rational ground is in God, specifically in Jesus Christ, the Word of God incarnate (Torrance 1988a:92f). God's freedom with respect to creation rules out both pantheism and panentheism.²²⁰ Torrance argues that the universe is not divine, it is external to God; a 'temporal analogue, taking place outside of God, of that event in God himself by

²¹⁷ Torrance writes: 'the creation registered a distinct 'moment' in the eternal life of God' (Torrance 1996a:241).

²¹⁸ Torrance refers the Barth 1957:491-522.

²¹⁹ Torrance writes about the '*Self-moved God* who is transcendentally and majestically free' (Torrance 1996a:239, emphasis Torrance).

²²⁰ Moltmann defines panentheism as the doctrine that space is 'an attribute of the eternal, divine Being. As a dimension of the divine omnipresence' (Moltmann 1985:154).

which God is Father of the Son' (Torrance 1988a:93).²²¹ Torrance notes that while it is usually Augustine who is credited with the notion that *creatio ex nihilo* includes the creation of space and time, the idea had been around in Christian theology since the second century (Torrance 1988a:104).

As he develops his understanding of the nature of time and space Torrance argues that the doctrine of the incarnation put Christian theology at odds with the 'container' understanding of space which prevailed in the patristic period (Torrance 1969b:4).²²² By the container or receptacle view of space he means the idea that space is an inert or passive vessel in which things simply exist or happen (Torrance 1969b:4f). He notes that although this model of space originates in early Greek philosophy it has continued in western thought until Einstein's theory of relative space-time.²²³ Prior to Einstein's general theory of relativity space and time were regarded as the forms under which knowledge was attained. Newton regarded space and time as 'an inertial system independent of material events contained within them but acting on them and conditioning our knowledge of the universe' (Torrance 1969b:58). Einstein's theory points to a relational understanding of space-time in which both space and time are bound up with the events of the universe. Space is understood as space to be; space for event. Torrance explores what this relational understanding of the spatio-temporal structures of the universe means for Christology. He argues that the hypostatic union of human and divine nature in the one person of Jesus Christ establishes him as the place in the universe of space and time where God and humanity meet. Jesus Christ is the place where human nature is open to God and where 'the infinite Being of God

²²¹ In support Torrance quotes Barth, *Dogmatics in Outline* page 52, and *Church Dogmatics* III.1.13ff.

²²² See the whole of Torrance 1969b chapter 1, pages 1 - 21.

²²³ Torrance writes: 'In modern as in ancient thought some form of the receptacle notion of space seems to have been predominant. Only in comparatively recent science have we departed from it' (Torrance 1969b:22).

penetrates into our existence and creates room for Himself within the horizontal dimensions of finite being in space and time' (Torrance 1969b:75).²²⁴ However we have seen that Torrance is not consistent in his Christocentric understanding of revelation. We noted in chapter two that he clearly conceives of God acting through the Scriptures to effect revelation, a personal encounter within space and time. This revelation in scripture remains under God's sovereign control and is Christologically founded in the sense that it is the same God who becomes part of the contingent universe in Christ who reveals himself in scripture. Similarly he conceives of the creation as a place where we are encountered by God (Torrance 1980b:1), but again this is not separate from revelation in Christ for Jesus Christ is the creator: 'the ultimate Ground and Source of all being, order and rationality, the Creator Word of God who is God' (Torrance 1996a:213).

Torrance argues that the idea of God becoming human rather than entering into a human as some sort of vessel to be filled militates against the understanding of the nature of space which dominated Greek science and philosophy and prompted the patristic theologians to develop relational concepts of space and time (Torrance 1988a:104). Torrance finds significant congruence between the concepts of space and time developed by the patristic theologians in response to the doctrines of *creatio ex nihilo* and incarnation and that developed by Einstein in his theories of relativity.²²⁵ The nature of the universe is central to Torrance's doctrine of revelation because it is within the universe that God reveals himself and is known by humanity.

In his discussion of the relation of God to the universe Torrance turns from the

²²⁴ In his Gifford lectures of 1984–1985 Moltmann discusses the idea of space and its relation to God (Moltmann 1985:140-157). His understanding of relative space is similar to that of Torrance, he rejects the notion of absolute space and instead relates it to being and action.

²²⁵ Torrance gives a summary of the contingent nature of the universe as outlined in Einstein's scientific theories in Torrance 1981a:11.

incarnation to the doctrine of *creatio ex nihilo*.²²⁶ He argues that this doctrine implies that the nature and being of the universe are completely other than God (Torrance 1996a:207); it is fundamental to his understanding of the contingency of creation (Torrance 1996a:217) and the justification of empirical method. He argues that the doctrine of *creatio ex nihilo* is founded upon the Old Testament but is not explicitly mentioned there (Torrance 1988a:95). Later Jewish and Christian readings of Genesis take the notion of *creatio ex nihilo* to be implied in the biblical text (Torrance 1988a:95-98).²²⁷ He notes that the Hebrew term *bara* is used exclusively in Scripture to speak divine action ‘in bringing about something utterly new’ (Torrance 1988a:95).²²⁸ He argues that the patristic theologians founded their understanding of creation on the resurrection of Christ rather than on Genesis, for in the resurrection we see the power of God over life and death, over being and non-being (Torrance 1988a:97). The incarnation forced the theologians of the early church to reflect upon the nature of created existence (Torrance 1988a:97). According to Torrance it was Athanasius who best understood the issues at stake and pioneered the church’s understanding of the contingency of creation (Torrance 1988a:98).

²²⁶ The doctrine of *creatio ex nihilo*, criticised by some theologians, is defended by Barth in Volume 3/I of the *Church Dogmatics* (1958b:16ff). Moltmann also notes that there is a consensus from the patristic period through to the reformation and beyond that the creation was *ex nihilo*. See Moltmann 1985:72-79, especially page 74 and also 332-333, note 3. Process theology is one important tradition which denies *creatio ex nihilo* (Griffin 1999:140).

²²⁷ Westermann comments that whether or not God creates out of nothing is irrelevant to the biblical text (Westermann 1984:108f).

²²⁸ See Westermann 1984:98ff for a discussion of the use of the verb *bara* in the Hebrew Bible. Westermann notes that *bara* is used only of God in the Hebrew Scriptures, and that in the Priestly source of the Pentateuch (P) *bara* is used of God’s creative action. This interpretation of *bara* in the Bible is supported by the patristic commentators (Torrance 1988a:95f, note 86)

5.2.4 The contingent creation

Torrance builds his understanding of the contingency of creation on the doctrines of *creatio ex nihilo* and incarnation. The contingent nature of the relation of God to creation is central to Torrance's doctrine of revelation because, as we have noted, revelation occurs within the universe of time and space to creatures bound by that universe. Torrance argues that the universe is neither necessary nor accidental (Torrance 1988a:105) but has a complex relationship of dependence and independence to its creator. In Torrance's understanding the universe is doubly contingent: it is neither logically necessary nor accidental but depends on God for its actual form; it also depends on the grace and will of God for its existence and continuation.

The contingent nature of the universe in its gifted and relative independence from its creator has important implications for the development of scientific, empirical, method (Brooke and Cantor 2000:19-20). If the universe is truly independent of its creator, even if that independence is given by the creator, then we can only come to knowledge of the universe by investigating the universe in itself and on its own terms and not by extrapolating from first principles from our understanding of divine nature. This means that the natural sciences must operate without reference to theological science. Torrance writes that:

The universe is not self-supporting or self-explaining as though it had an interior principle of its own, but neither is it mere appearance for it is ontologically grounded beyond itself on God who has given it an authentic reality and lawfulness of its own which he unceasingly sustains through the presence of his Creator Word and Spirit (Torrance 1988a:101).

Torrance argues that while the meaning of and within the universe is ultimately contingent upon its creator whose being undergirds creation the natural sciences must progress without reference to the creator. This means that while the natural sciences are

able to investigate the universe from within there are larger questions of the purpose and meaning as well as the origin of the universe which by their very nature the sciences are unable to answer.

5.2.5 The contingent creation and the incarnation

The incarnation is fundamental to Torrance's understanding of how God relates to the universe. He argues that the incarnation by which God the Son unites himself to the universe in order to save it reveals the instability and corruption of creation (Torrance 1988a:101). The instability of creation has a moral and ontological dimension for Torrance; therefore the salvation wrought by the incarnate Word also has an ontological and ethical nature. He argues that the incarnation reveals that humanity, in turning from God, has gone beyond the corruption natural to the rest of creation having also the corruption of evil which stands under divine condemnation (Torrance 1988a:101); only God can now redeem humanity. According to Torrance:

Christian theology recognised that the contingency of creation was corrupted by an inherent being-destroying (*meonic*) tendency that had to be overcome if the creation were to be saved and directed toward the end for which it had been designed by its Creator. However, by transferring our contingent existence into himself, in whom ... divine and human, uncreated and created, realities and natures are indissolubly united, Jesus Christ has secured its origin and end in his own eternal being. Regarded in this way, the incarnation is to be understood as completing the work of creation and of consummating its contingent relation to God. Thus in a certain sense the creation is to be thought of as proleptically conditioned by redemption (Torrance 1988a:102).

Although he does not develop this argument there is a moral dimension to the contingency of creation in Torrance's thought, an implied relationship between sin and non-being, between ontological and moral corruption. Torrance comments that in Calvin the fall, which results from the human desire for independence of its creator, 'tears down the order of creation' (Torrance 1952:49). The fall has implications for the

whole of creation as has Christ's (Torrance 1952:50).

Torrance takes the understanding of the contingency of the universe in the natural sciences to illuminate his theological understanding of the ontological implications of the fall for the creation (Torrance 1981a:120). He argues that in Christian theology 'evil and the menace of nothingness' are not limited to the human or moral sphere, 'for in Jesus Christ God has shown that his saving and recreating work comprehends all creation' (Torrance 1981a:120). Torrance's understanding of the ontological and cosmological implications of the fall is founded upon his commitment to the universal extent of salvation in Christ. From theological reasons he expects to find signs of corruption and evil in the creation and he turns to the natural sciences to see if there is any evidence of this in the universe; thus he considers decay and entropy in the universe to be related to the fall. However, he notes that:

if we did not believe that God is good and that the temporal order of things he has conferred upon the universe serves his good will, we would have no problem with decay, decomposition, and death, or with entropy, nor would we find affliction and suffering intolerable for they would be treated merely as part of the natural process of things (Torrance 1981a:120).

Torrance does not contend that the natural sciences in any sense 'prove' Christian doctrine; rather, when theological science and the natural sciences independently investigate reality according to their own proper methods, he finds correlation between them. These two independent disciplines display complementary understandings of the universe. Torrance does not interpret theology through philosophy; philosophy and science in his writings are a development or illustration of a prior theological principle.²²⁹

²²⁹ Luoma makes essentially the same point when discussing the realist nature of Torrance's theology. He argues that the reason why Torrance's realism is so hard to

5.2.6 *The contingent necessity of the universe*

Torrance's understanding of the free and dependent nature of the universe, for which he believes he has support in Einstein,²³⁰ replaces an older, dualist understanding of the world 'in which a God of inertial motion and a determinate universe governed by necessary relations are correlated with each other' (Torrance 1981a:21). The patristic doctrine of *creatio ex nihilo*, developed from the biblical accounts of creation and resurrection, leads Torrance to posit a free and dependent relationship between God and creation instead of a necessary and determined relation.²³¹ Nevertheless, he argues that there is a contingent necessity to the universe.

God created the universe out of nothing without compulsion to create at all or in any particular way; therefore the universe could have been different. However, once God has created the universe has a contingent necessity; it cannot be other than it actually is (Torrance 1981a:22). God remains free in his relationship to creation even though, by bringing into being one particular universe, a type of necessity has been introduced into creation. The necessity of the actual universe is grounded in the unlimited freedom of God and therefore it is a type of necessity which is perfectly consistent with the contingent nature of reality. Torrance is not introducing determinism into his model of creation. Because of its contingent necessity we can only come to knowledge of the universe by investigating it on its own terms and not from some sort of *a priori* argument based either in the nature of God or on any predetermined

categorise is that it is a *theological* realism, and not a philosophical realism (Luoma 2002:64f). See section 5.3.6.

²³⁰ See section 5.3.1.

²³¹ Torrance writes: 'far from there being a necessary relation between God and the universe and the universe and God, God remains utterly free and is not at the disposal of the conceptions and necessities of any deductive argumentation or logical compulsion on our part (Torrance 1981a:21).

understanding of reality, for the contingency of the universe precludes any necessity in its nature.²³² The sciences can only progress by interpreting the universe as it actually is.

5.2.7 *The contingent intelligibility of the universe*

A further implication of the doctrine of *creatio ex nihilo* is that the rational order which is intrinsic to the universe is contingent in two different but related ways: the rational order inherent in the universe is not logically necessary, it could have been other than it actually is; further this rational order has its origin and ground not in itself but in its creator.

Torrance argues that in the act of creation God brought into being not only the physical matter of the universe but also its ‘rational form and order’ (Torrance 1988a:102f). That the universe is both rational and intelligible is a fundamental assumption of the natural sciences (Torrance 1980b:131) and, because it is an axiom, the source of this rational order is not a question that can be answered by the sciences (Torrance 1981a:58ff, especially pp 60f).²³³ In fact without the basic assumption of the rational order and comprehensibility of the universe there can be no science. The rational order of the universe is not predictable but can only be disclosed by empirical investigation into the universe and its systems and processes.²³⁴

Just as there is a clear distinction between the being of God and the being of

²³² Torrance writes: ‘It is because this freedom and rationality within the universe are contingent upon the infinite freedom and inexhaustible rationality of God that the universe meets our inquiries with an indefinite capacity for disclosing itself to us in ways which we could not suspect, manifesting structures or patterns which we are quite unable to anticipate *a priori*’ (Torrance 1981b:22).

²³³ Note Einstein’s comment: ‘The fact that it [the creation] is comprehensible is a miracle’ (Einstein 1982:292).

²³⁴ Torrance defines empirical science as a ‘respect for the objectivity of facts’ which proceeds by reference to an ‘externally given reality’ (Torrance 1969a:288). This understanding is applicable to theological science, whose given external reality is the self-revelation of God, as much as to the natural sciences.

creation; so there is a clear distinction between the rationality of God and that of his creation. God's being is uncreated and necessary, the universe's being is created and contingent; God's rationality is uncreated, the universe's rational form and order are created by and contingent on God (Torrance 1988a:103). Far from being overwhelmed or undermined by divine rationality the rational order of creation is sustained by God in its contingent existence. The work of the Word of God within the universe means that the whole of creation is filled with a single rational order which is contingent upon divine rationality. Torrance follows Athanasius who upheld the biblical notion of the distinction between the creator and his creation, and who also claimed that all rational order within creation is derived from the divine Word of God (Torrance 1988a:102-104).

Torrance's contribution is to demonstrate that the traditional Christian understanding of the relation between the creator and the creation correlates with post-Einsteinian understanding of the universe and that these two understandings, while independent of each another (Torrance 1981a:35, 82ff), provide mutual support. He argues that the Einsteinian paradigm of reality correlates well with the traditional Christian understanding of creation (Torrance 1980b:73f) and could form the basis of a mutually beneficial dialogue. Torrance notes Einstein's comment on the 'incomprehensible comprehensibility' of the universe; that the intelligibility of the universe is not self explanatory (Torrance 1981a:35; c.f. Torrance 1980b:105). The fact that the universe is not only rational but is also intelligible to finite creatures cries out for explanation and sufficient cause, however, the natural sciences are unable to provide an explanation of that which is a fundamental assumption of their operation; so the comprehensibility of the universe becomes a pointer to a rational creator. Torrance argues that the contingent universe as disclosed by Einsteinian physics points beyond

itself to the ultimate ground on which the universe and our comprehension of it rest (Torrance 1981a:28, 61).

5.2.8 The contingent freedom of the universe

Having explored the implications of *creatio ex nihilo* for the rational order of the universe Torrance turns to the freedom of creation. He argues that the universe which depends upon God for its existence and nature has a freedom with respect to God. However, this freedom is limited because it is conferred on creation by its creator (Torrance 1988a:105). The created universe is truly free with respect to its maker in spite of the fact that its freedom is limited. Torrance argues that creation's relation to God exhibits simultaneously both dependence and independence (Torrance 1988a:107); this is inherent in the concept of contingency. However, Torrance argues that although the universe enjoys a limited freedom, if this freedom is correlated to the unlimited freedom of God, then the freedom enjoyed by the creation must be in its own way unlimited also. He argues that 'owing to its contingent relation to God, there are unlimited and inexhaustible possibilities in the created universe' (Torrance 1988a:107).

Torrance regards the relationship between God and the creation as 'elusive' and 'indeterminate' (Torrance 1988a:107). This dependent relationship between the creation and its creator means that a scientific understanding of the universe comes from empirical investigation because the gifted freedom of the universe means that its laws are fundamentally unpredictable; they can be uncovered by scientific investigation but not deduced from a prior doctrine of God.

From his theological perspective Torrance argues that the universe has been given a true independence by its creator but that everything depends on the truth of God's self-revelation in Christ, for it is from this self-revelation that Torrance derives

his understanding of creation (Torrance 1988a:108). Torrance argues that a theological understanding of creation correlates well with the understanding of the universe disclosed by the natural sciences (Torrance 1981a:73).

In Torrance's doctrine of creation there are two constant and interrelated elements. Firstly there is an emphasis upon the self-revelation of God in Jesus Christ. This is the foundation upon which Torrance builds his theology. We have seen that what Torrance calls the 'contingent freedom' of the creation with respect to its creator is rooted in the grace of God which is supremely disclosed in Jesus Christ. Secondly, we also see that Torrance operates with an epistemology of grace. Anything that we can truly know of God is first God's gift to us; it is never our independent discovery. In Christ, in the economy of redemption and reconciliation, God reveals himself to be the gracious and the faithful God.²³⁵ Torrance argues that Jesus Christ is God's 'pledge' for our understanding of the 'freedom, integrity and reliability' of the created universe, and this includes even its 'physical order and behaviour' (Torrance 1988a:108f).

Torrance argues that in the Christian understanding of the relation of God to the universe there is a 'double contingency'²³⁶ operating as we consider the contingency of the world from the side of God as well as from the side of the creation. The creation is independent in the sense of being free from its creator while at the same time and in a deeper way it is completely dependent upon him (Torrance 1988a:105); its very freedom is gifted by God. Torrance argues that God's decision to create at all is free, God did not have to create, nor did he have to create in the way that he in fact did. However, the contingency of creation does not mean that the universe either irrational or

²³⁵ In support of this, Torrance draws attention to the point made by Athanasius that Christ himself is the will of God. See Torrance 1988a:105, note 127.

²³⁶ Torrance cites Georges Florovsky, "The Concept of Creation in Saint Athanasius", *Studia Patristica*, 1962, p. 37; *Collected Works*, Vol II, pp. 48f, 57ff, quoted in Torrance 1988a:105.

arbitrary, for the whole of the creation is grounded in divine rationality through the creative logos. We have seen in the discussion of relative space that God gives the universe space to *be*;²³⁷ we now see that in giving the universe contingent freedom God gives it space to be *itself*.

The idea of creation being free from God even though that freedom is a gift of God is a novel element in early Christian thought. Torrance writes that by contrast the ancient world was dominated by ideas of the eternity and immutability of the world. He argues that this was in part this is due to the pantheism of the ancient world which conceived of a synthesis of God and nature (Torrance 1988a:106).²³⁸ The linking of the universe to divine being led to determinism and fatalism in ancient thought and, he argues, is responsible for the linking of rationality and necessity in ancient philosophy and science. He notes that the early apologists made much of the notion of freedom from the control of fate which is inherent in the Christian understanding with its correlation of creation to the freedom of God (Torrance 1988a:107f). He argues that Christian theology's understanding of the freedom of creation arose from doctrines of *creatio ex nihilo* and redemption. In the incarnation God the creator enters the creation in order to redeem it from sin and corruption. Christ's redemption and liberation applies not only to humanity but to the whole of creation, 'for Christ is the Head of the whole creation, its Origin and its End' (Torrance 1988a:106). In the incarnation God establishes a new relation with his creation giving the universe a freedom 'grounded in the transcendent and unlimited freedom of God' (Torrance 1988a:106).²³⁹

Torrance argues that the contingent nature of the universe upon which scientific

²³⁷ See section 1.3.2.

²³⁸ See Torrance 1988a:106, note 131 for references.

²³⁹ Although the understanding of Christ as the redeemer of creation is rooted in Scripture Torrance comments that it was more prevalent in the Greek rather than the Latin church (Torrance 1988a:107).

enquiry is founded originates in the understanding of creation in Judaeo-Christian theology. This understanding of the contingent freedom of the universe was assumed by natural scientists in the west, and explains why in western Europe the empirical sciences rose to such prominence (Torrance 1981a:26). The doctrine of *creatio ex nihilo* led theologians to posit both the orderliness and contingency of the creation; and this is presupposed by the natural sciences. Nevertheless there is a paradox at the heart of the natural sciences for although they are founded upon an understanding of reality which is derived from Christian theology, yet the contingent freedom of the universe means that the sciences must progress by referring only to the universe itself and not by reference to the creator.

5.2.9 Theology and the natural sciences

Torrance argues that the relationship between theological science and the natural sciences is a reciprocal relationship and although the two disciplines have their own integrity there is a correlation between them. We have touched on one area of correlation, in which the value of theological science to the natural sciences can be seen, namely the presuppositions with which the natural sciences operate.

Torrance calls scientists who seek to understand the reality of the universe ‘priests of creation’ (Torrance 1980b:5-6, 111). He regards the work of the natural scientist through which the universe discloses its ‘harmonies and regularities and symmetries in its contingent intelligibility’ (Torrance 1980b:111) as a religious exercise (Torrance 1980b:112). Note the language of revelation he uses with respect to scientific knowledge of the world. There is in Torrance’s account of the natural sciences an understanding of revelation in nature and in the natural processes of the universe.

Torrance argues that in any account of the universe the human mind whose place

in the universe is to investigate and interpret reality must be part of the picture (Torrance 1980b:4f). As scientists investigate the universe in its own contingent rational order the scientist encounters what Torrance calls a ‘depth of intelligibility that reaches indefinitely beyond what our finite minds can comprehend’ (Torrance 1980b:4).²⁴⁰ However the rational order of the universe which is disclosed to human enquiry points us not to some transcendent mind, nor to some abstract and general divinity but to the creative Word of God who became human in Jesus Christ (Torrance 1988a:104, Torrance 1996a:213). Torrance gives an account of the natural sciences which points to real knowledge of God arising from our encounter with the universe, but one which is not in any sense independent of God’s self-revelation nor separate from revelation in Christ.

Torrance is aware that the natural scientist is forced to operate with certain basic assumptions about the nature of the universe. The universe disclosed to the natural sciences is not self-explanatory; its rational order and comprehensibility raise questions which the sciences are unable to answer. By definition the axioms on which all scientific activity is based cannot be proven by the natural sciences. The universe silently cries out ‘for a transcendent agency in its explanation and understanding’ (Torrance 1985b:58), and this is found in theological science. Torrance writes that:

the fact that the intelligibility of the universe is not self-explanatory and the fact that its astonishing unity and self-identity persist through all its changing processes, would seem to *suggest* that there is an *active agency* other than the inherent intelligibility and harmony of the universe, unifying and structuring it, and providing it with its ground of being (Torrance 1985b:56, emphasis Torrance).

Torrance argues that the contingent nature of the universe points beyond itself to the ‘ultimate intelligible ground upon which the universe and our knowledge of it finally

²⁴⁰ See Einstein 2005:27.

rest' (Torrance 1981a:28). Torrance argues that the alternative to positing a transcendent rational ground of the universe is to affirm that it is ultimately incomprehensible (Torrance 1981a:28). Torrance demonstrates an external consistency between theology and the natural sciences: neither depends on the other; neither proves the truth of the other, but the understanding of the universe which emerges from Christian theology correlates well with that which emerges from the natural sciences. This area of correlation between theological science and the natural sciences is part of Torrance's understanding of the place of a transformed natural theology.²⁴¹

Torrance argues that the rise of empirical science was founded on ideas of contingency developed within the early church as theologians responded to the doctrines of *creatio ex nihilo* and incarnation (Torrance 1981a:viii). He further argues that these ideas of contingency are an essential component of contemporary science, yet they are not, nor can they be, demonstrated by science as they form the basic assumptions on which the sciences rest (Torrance 1981a:ix).

Torrance notes that the understanding of the contingent relation between God and creation which characterised the theologians of the fourth century was superseded as the dualism of the surrounding culture came to dominate theology (Torrance 1981a:5). God came to be regarded as the unmoved mover, the first cause who is immutable and impassible and whose relation to the universe is logically necessary.²⁴² This shift in the understanding of God led to a change in the understanding of the universe. Torrance argues that the notion of God as first cause led to an understanding of the creation as 'a system of necessary and causal relations in which it was difficult to

²⁴¹ See section 4.4.1.

²⁴² Torrance writes: 'the God who has revealed himself in Jesus as sharing our lot is the God who is free to make himself poor, that we through his poverty might be made rich, the God invariant in love but not impassible, constant in faithfulness but not immutable' (Torrance 1981a:7).

find room for any genuine contingency' (Torrance 1981a:6). This understanding of God and his relation to the universe continued to be influential from the middle ages until the time of Newton. Torrance comments that

Newton's God is inertially attached to the universe in a grand synthesis which makes him through absolute time and space the supreme regulative principle by which the whole system of the world is held together, while on the other hand he is so transcendently related to the universe that he is deistically detached from it in his eternal impassibility and immutability (Torrance 1981a:8).

Newton's God serves to fill in the gaps left by mechanistic models of the universe; he regulates the system as needed, however, this God's place in the understanding of the universe is diminished as better theories fill in the gaps in scientific knowledge until eventually the hypothesis of God is no longer required. This understanding of the relationship of God to the universe evolves into a model of the universe as a closed universe of cause and effect which is mechanistic and determined. On this model the biblical God becomes a deistic God who is unable to interact with creation. Torrance rejects this understanding of the universe and the deity implied by it not only on theological grounds but also for scientific reasons. This model of the universe is also challenged by Einstein (Torrance 1981a:11).

Torrance argues that just as Newton's model of the universe rules out the traditional Christian understanding of God so Einstein's leaves room for a Christian doctrine of God. Torrance argues that Einstein's theory of relativity shows that the universe is not a 'closed deterministic system' but rather a 'continuous and open system of contingent realities and events with an inherent unifying order' (Torrance 1981a:11). The universe described by Newton is not simply discarded; it is seen to be, not a description of the world, but an abstraction from reality. This model of the universe is useful in understanding the universe so long as we realise its true nature and limitations.

Torrance describes the universe uncovered by Einstein as ‘a finite but unbounded universe with open, dynamic structures grounded in a depth of objectivity and intelligibility which commands and transcends our comprehension’ (Torrance 1981a:11). One of the basic assumptions of Einstein’s work is that the rational order of the universe is not imposed by the observer but that there is one rational order inherent in the universe which may be disclosed to investigation (see Torrance 1981a:17).

Torrance argues that in Einstein he finds support for his understanding of the nature of reality which he derives from his patristic and reformed theology.

Torrance does not argue that the natural sciences in any sense prove the truth of Christian theology; rather he attempts to demonstrate an external consistency and coherence between the two disciplines. He argues for a significant consonance and correlation between theological science and the natural sciences which serves to show the reasonableness of belief in the God that we meet in the incarnation and creation given the nature of the universe. He argues that both theology and the natural sciences have arrived at a point where they each need to adopt a ‘fundamental attitude to the universe as a whole’ (Torrance 1981a:62). He notes that the fact that there have been occasions in the past when theology and the natural sciences have come into conflict indicates that theology has a basic understanding of reality (Torrance 1981a:63f). In particular he argues that the Newtonian model of the universe, a closed and mechanistic system, conflicts with the understanding of reality disclosed by the theological concept of *creatio ex nihilo* which points to an open ended universe which shows an ‘astonishing combination of unpredictability and lawfulness’ (Torrance 1981a:71). He notes that the Einsteinian model of the universe, a unitary and open system, promotes exactly the contingent understanding of reality which is pointed to by the core Christian doctrines of incarnation and *creatio ex nihilo* (Torrance 1981a:76, 82).

5.2.10 Discussion

Torrance's discussion of the relation of Christian theology to the natural sciences is focused on the nature of reality as disclosed to scientific investigation and the nature of reality disclosed to theology through the core concepts of incarnation and *creatio ex nihilo*. His thesis is that there is a close correlation between the two descriptions of reality. The importance of this for theology's dialogue with the natural sciences is twofold. Firstly as a closely argued account of a common understanding of the universe it represents a further justification of applying the findings of one field to the other, as Torrance does with the work of Clerk Maxwell, Einstein and Polanyi. Secondly Torrance presents a well argued case for his thesis that the world disclosed to scientific enquiry is founded on and points us to God as the source of its being, freedom and rational order.

In his exposition of the work of natural scientists in uncovering the meaning and order inherent in the universe Torrance points to an understanding of the significance of their work which is at odds with his oft repeated assertion that it is only in Jesus Christ that God reveals himself. It was argued in chapter two that he conceives of Scripture as more than merely a witness to Christ but as a vehicle of divine self revelation – the God who has become incarnate in Jesus Christ meets us, or at least may meet us, in the scriptures which witness to Christ. So in his theology of nature he writes of human beings, particularly the scientist, as 'priest of creation' (Torrance 1980b:111f). Through the investigation of creation human beings are brought into relationship with the creative reason which fashioned and ordered the universe. Part of the task of the scientist is to explore the design and meaning inherent in the universe, and to articulate what is uncovered. This articulation 'constitutes a great hymn of praise and adoration to God the Creator' (Torrance 1980b:111f, cf. Torrance 1996a:213). Torrance's point is

that the investigation of the universe in its own terms brings the scientist into relation with the creator. Knowledge of God in the creation is not uncovered; rather it is part of God's self revelation. However, as with revelation in Scripture so with revelation in creation, the God we meet is identical with God as he has supremely revealed himself in the incarnation for the creative Word who is the source of order and meaning in the universe is the Word who became incarnate in Jesus Christ (Torrance 1996a:213). What we find in Torrance is not so much a natural theology as an articulation of natural revelation.

5.3 Theological science

5.3.1 Einstein and the overcoming of western dualism

Torrance believes that the understanding of the universe which is grounded in the Christian doctrines of *creatio ex nihilo* and incarnation correlates well with Einstein's model. One aspect of their respective models of reality which is important for Torrance is their rejection of dualism. Kaiser comments that the reason for Einstein's importance for Torrance is his championing of a non dualist epistemology (Kaiser 2001:242). Torrance often compares Einstein with Barth whose challenge to the western dualist tradition is crucial for Torrance's epistemology.²⁴³ Torrance even refers to Einstein's work as 'the *homoousion* of Physics' (Torrance 1980b:162). According to Torrance Einstein undermines the grounds upon which a phenomenalist approach to knowledge stands (Torrance 1980b:162, see Einstein 1982:291). We have already noted Torrance's argument that Einstein broke through the form-being dualism which has

²⁴³ See, for example, Torrance 1990:18; Torrance 1984a:280.

characterised western thought for centuries.²⁴⁴ He argues that Einstein's importance for epistemology is his insight that our knowledge of reality is more than merely knowledge of appearances or phenomena but 'is a grasping of reality in its ontological depth' (Torrance 1980b:162). The universe apprehended by the natural sciences is the real universe; there is no abstraction from the universe which is more real than that uncovered by empirical investigation, nor is there an ideal reality of which this world is but a shadow. There is a parallel between Torrance's interpretation of the importance of Einstein for scientific epistemology and his understanding of the significance of the patristic *homoousion* for the Christian doctrine of revelation. On Einstein's model of scientific epistemology what the empirical sciences uncover is the reality of the world (Torrance 1980b:162); and in Christ who is of one being with the Father are encountered by the reality of God (Torrance 1988a:130). Torrance argues that in the natural sciences we operate with an objective comprehensibility of the nature of reality that is independent of our perception (Torrance 1984a:265).²⁴⁵ Torrance is interested in the implications of the Einstein's revolution for theological science.

Torrance is not surprised that theological science should be supported by the natural sciences; he traces the roots of Einstein's theory of relativity to the origins of empirical science at the Renaissance where there was a rejection of medieval scholasticism which imposed its philosophical presuppositions on attempts to understand and interpret the natural world. With the Renaissance, argues Torrance, science attempted to understand the world 'on its own evidential basis and in accordance with its own interior principles' (Torrance 1984a:267). He notes a parallel with the approach to theology found in reformers such as Calvin. As with the emerging empirical approach to science associated with the Renaissance we find an empirical

²⁴⁴ See section 4.5.4.

²⁴⁵ See section 5.2.7 on the contingent rationality and intelligibility of the universe.

approach in the reformers as they attempt to throw off scholastic theology and understand God solely from his self-revelation. Torrance's work on the doctrine of revelation and the epistemology that emerges from it are a continuation of this reformation project.

He comments that in both scientific theology and natural science there is an attempt to allow reality to disclose itself to the enquirer. Both disciplines reject prescriptive patterns of thought in order to enable reality to disclose itself (Torrance 1984a:268). The empirical method which characterises post-renaissance natural science and reformation theology (Torrance 1969a:288), while increasingly at odds with Newton's model of the universe, is fully accommodated into Einstein's theory of relativity with its rejection of dualism and move towards a unitary understanding of reality (Torrance 1984a:273). In the theory of relativity we find a revised understanding of theory which better correlates with the results of empirical investigation. Torrance writes that in Einstein:

'Theory' is no longer to be understood, as with the positivists, as a convenient arrangement of our observational concepts for certain pragmatic or technological ends, involving an economy of cognitive organisation that has no 'metaphysical relation' to any order inhering in nature; that is to say, it is not simply a provisional 'working hypothesis'. On the contrary, 'theory' is now understood in its original sense as *theoria*, a 'speculative' penetration into the structure of things, a refined 'lens' through which we see into the underlying order of nature or rather allow it to disclose itself to us.... What we have here are open flexible structures used postulationally, and therefore with fluid revision the further they penetrate into and lay bare the 'inner logic' of the field under investigation. And in so far as they succeed in revealing basic rational structures in the universe, they force upon us claims as to their validity, and we realise that we 'invented' or came upon them because they came at us from the side of the universe itself, compelling us to formulate them as 'laws' through the astonishing correlation between our human thinking and empirical reality (Torrance 1984a:273f).

In Einstein's paradigm theories emerge from an intelligible order within the universe itself so there is no longer a dualism between form and being, or between the empirical

and theoretical components of knowledge.

The unitary approach to reality which is characteristic of the theory of relativity is as important for Torrance's theological science as it is for the natural sciences. One of Torrance's fundamental assumptions is that it is possible to take theories and paradigms from the natural sciences and draw out from them implications for our understanding of reality in general and for theology in particular. He assumes that there is one reality, and his reasons for this assumption are historical and practical. He argues that the empirical sciences are rooted in the understanding of reality associated with the patristic theologians; he also argues that we find empiricism in the natural sciences and in reformed theology as they each emerge from scholasticism. His practical reasons for assuming that the universe of the natural sciences and the creation of Christian theology are one reality is that he believes that there is a close correlation between the contingent universe disclosed in Christian theology and the Einsteinian model of the universe.

In discussing the importance of the theory of relativity for theology Torrance contrasts relativity and relativism. He argues that the theory of relativity operates with a 'disclosure model', whereas relativism works with what he calls 'an epistemology of perception' (Torrance 1984a:275). According to the theory of relativity there is an inherent relationship between the objective structures of the universe and our representation of them. This relationship is not symbolic or a 'provisional arrangement of our ideas' (Torrance 1984a:274); that would be relativism. Torrance argues that:

There is an invariance in the universe which we are forced to affirm with an exclusiveness and a universality, which does not allow it any provisional character, but there are various ways of representing that invariance, and therefore various points at which axiomatic penetration into that invariance can be achieved. It is because we are concerned here not with the kind of picturing model thrown up by an epistemology of perception but with a disclosure model, that the cognitive instrument we use precisely in so far as it is appropriate directs us away from its own representation to the objective invariance we discern through it. The model and its representation will always be open to further and

further refinement, and in that sense are of a provisional character, but they are what they are through their coordination to an invariance that is not of a provisional kind (Torrance 1984a:274f).

With relativism all models of the universe are models of our perception of reality; whereas with the theory of relativity our models of the universe emerge from how the universe is objectively disclosed to us in our investigation into its inherent structures at our point in time and space. All knowledge is relative because it is inherent to concrete being; that is all knowledge is the knowledge of an actual person within time and space. We perceive the objective universe from our relative position in time and space. This is not, however, the same as the doctrine that in our knowledge of the universe it is not reality that we apprehend but our perception of reality onto which our minds have imposed structure and form.

We can extrapolate from Torrance's writings to arrive at the foundations of a theory of knowledge which allows us to draw a distinction between exhaustive knowledge, true but partial knowledge, and mere appearance. Exhaustive knowledge is not possible for beings with finite minds that are part of the universe of space and time; but this does not mean that true knowledge is not possible. Exhaustive knowledge is possible only for one who is both infinite and who exists outside of relative space-time; that is, only God can have exhaustive knowledge. We can have knowledge of the universe which is true but partial or incomplete. This true but partial knowledge is not the same as the mere appearance of reality. It is, despite its relativity and partiality, true knowledge of the objective world; it corresponds to reality as it is disclosed to the perception of the enquirer and it is capable of being refined by closer attention to the object. However, human knowledge can never be exhaustive. Torrance argues that objective knowledge is possible as we allow reality to determine our epistemology; and yet all objective knowledge must have an inherent subjectivity as it is the knowledge of

actual persons in time and space.

We can understand why Torrance believes that in Einstein he has found an ally in his struggle against epistemological dualism. He regards Einstein's theory of relativity as the overcoming of the epistemological dualism between phenomena and noumena which we find in Kant. According to Einstein empirical science impinges upon reality, not merely the scientist's subjective experience of reality. This understanding of science and scientific method is very important for Torrance's argument that theology is a science.

Torrance's theological epistemology operates with a correspondence theory of truth. The truth of a theory is determined by its relationship to the world and the closeness of its description to reality. Einstein's writings on the relationship of theory to reality also presuppose a correspondence theory of truth.²⁴⁶ Einstein offers no explanation of how theory corresponds to reality. It is a working presupposition of his epistemology. He writes of the scientist's faith that the universe is rational and comprehensible to reason (Einstein 1982:48) but the rational order of the universe and its accessibility to human reason remains a mystery to Einstein, yet to deny it is to undermine the whole scientific endeavour. We have seen that for Torrance the universe including human beings within the universe is the creation of God who is the transcendent ground of the rationality of his creation, both the rational order of the universe and the imminent rationality of humankind.

5.3.2 Theology among the sciences

Torrance writes that theology is a science in the same sense as the natural sciences. He uses the phrase 'exact science' (Torrance 1962:179) to characterise a

²⁴⁶ For a discussion of correspondence theory see Kirkham 1992:119-140.

discipline ‘which restricts its activities to the limits laid down by the nature of its concrete object, and develops a method in accordance with the nature of its object’ (Torrance 1962:179). Torrance’s argument is that theology, or at least those theologies which allow the self-revelation of God to determine their method of enquiry, do this and are rightly termed scientific (Torrance 1980b:112). Traditional natural theology does not allow actual self-revelation to determine its method, therefore Torrance regards it as unscientific (Torrance 1985b:38f). Scientific theology is determined by the object of its enquiry, namely God in his self-revelation in Christ.

Torrance argues that scientific theology follows the natural sciences in rejecting what he calls ‘logico-deductive argumentation from fixed *principia*’ (Torrance 1984a:275). By this he means that the exact sciences, including theological science, reject *a priori* argumentation (Torrance 1980b:90) and instead proceed by *a posteriori* method. In the sciences theory arises from observation. The object of enquiry determines the method of enquiry. He argues that theological science, like the natural sciences, rejects epistemological and cosmological dualism and instead works on the principle of the unity of form and being (Torrance 1980b:89f). Both the natural sciences after Einstein and Christian theology following Barth display a fundamentally unitary approach to reality. Torrance places theology among the special sciences not because he imposes scientific method onto theology, but because he finds the same approach to the object of enquiry in the natural sciences as he finds in the theology of Barth as well as in the reformers and the patristic theologians. There is a methodological convergence between theology and the natural sciences and this causes Torrance to regard them as natural allies against dualist and unscientific thought.

Torrance consistently argues that scientific method is *a posteriori* (Torrance 1971:89, 91). The scientist submits to the demands of the object under investigation

(Torrance 1971:95). Failure to submit to the object of enquiry renders the investigation unscientific. Torrance makes the point that what makes a discipline scientific is its submission to the demands of its own subject matter, that it operates ‘in terms of the inner law of its own being’ (Torrance 1971:91). To impose the methods associated with one discipline upon another is unscientific. For example it is unscientific to impose upon theology a method of investigation derived from physics or from the social sciences; according to Torrance this wrong ‘dogmatizing’ is often encountered by theology ‘from “scientism” and from philosophical “empiricism”’ (Torrance 1971:91). The triumph of the exact sciences has sometimes led to their methods being improperly imposed on other disciplines. Torrance argues that this problem is particularly acute in the social sciences (Torrance 1971:105). According to Torrance this dualism has been overcome in the natural sciences by Einstein and in theology by Barth;²⁴⁷ he argues that in order for the social sciences to be truly scientific they must undergo the same process of overcoming dualism and allowing the proper object of enquiry to determine their method of enquiry. Torrance criticises the social sciences for imposing foreign methods derived from the physical sciences upon the human and social objects.

Despite criticising the actual practice of the social sciences (Torrance 1971:105ff), Torrance argues that they can become scientific in the proper rather than the narrow and doctrinaire sense by becoming more objective, by allowing the object of investigation to determine their method. Torrance’s work on scientific method has greater epistemological implications than he often indicates. One of the arguments of this thesis is that Torrance has introduced an epistemology which can be applied to any discipline, to any human form of knowing, not just to the sciences among which he situates theology. Torrance’s objective epistemology has the potential to unite the

²⁴⁷ See sections 4.5.4 and 4.5.5.

sciences, the social sciences and the humanities.²⁴⁸

5.3.3 Objectivity in theological and natural sciences

Torrance's case for placing theology among the sciences is its approach to reality, its objective method. He argues that every form of human knowing that can be regarded as a science allows 'its own subject-matter to determine how knowledge of it is to be developed' (Torrance 1971:91). He demonstrates that this scientific method in theology is not new by citing examples from the history of Christian thought. He gives examples from the patristic period and from the reformers and from Barth to show that some theologians have always allowed the material content of theology to determine the method of enquiry; that in certain theologians ontology has had precedence over epistemology. One of his objectives is to return the contemporary practice of theology to its scientific roots. Apart from Barth, Torrance gives sketches from Christian history of examples of theologians pursuing scientific method, namely Athanasius, Anselm and Kierkegaard. Each develop their theological method in response to divine reality; and in each we see an understanding of the unity of form and being which is, according to Torrance, an essential component of scientific theology. Another aim is to show that empirical method which today characterises the natural sciences has its origins in patristic theology.

Torrance argues that it was Athanasius who gave Christian theology its scientific basis by arguing against the cosmological dualism of the surrounding Greek culture and placing the unity of form and being at the heart of Christian theology. In writing on creation and redemption Athanasius rejects a necessary connection between them and instead speaks of the 'structure of grace' (Torrance 1984a:277) which is revealed in the

²⁴⁸ Torrance is aware of the potential universal implications of his work; he refers to it once briefly (Torrance 1971:91f) but does not develop this insight.

Christian concept of the divine Word by whom God created the universe and through whom he interacts with the creation. Torrance argues that the 'logic of grace' (Torrance 1984a:277) in Athanasius' theology enables him to relate the doctrines of creation, incarnation and redemption in a way that thinks through Christian doctrine in its unity of form and being. This emphasis upon grace as theological method becomes the foundation upon which the Christian faith has been built. What this epistemology of grace does is make theology respond to God's actual revelation rather than being based on a speculative metaphysic.

Torrance next considers Anselm in the eleventh century. He argues that Anselm's contribution to theology is his refusal to found the Christian faith upon any fixed premise. Anselm held that 'even Jesus Christ must not be treated like a fixed principle ... from which to extend formal logical connections and thus to build up a system of necessary truth' (Torrance 1984a:277). Anselm instead deals with incarnation and atonement, the actual ways in which God has acted in revelation and redemption. Torrance speaks of the 'rational compulsion' upon our minds when they are open to the truth or reality itself which is a different form of compulsion from that which derives from a logical or formal necessity (Torrance 1984a:278). Anselm's theological method of faith seeking understanding is important for any interpretation of Barth and his method which was in turn of foundational importance for Torrance.

A third example of scientific method in Christian thought is Kierkegaard who also influenced Barth. Torrance notes that in *The Philosophical Fragments* Kierkegaard, like Athanasius and Anselm before him, rejects attempts to reason from fixed axioms. In drawing a contrast between Christ and Socrates Kierkegaard looks at the 'movement of the eternal in time' (Torrance 1984a:278). Torrance notes that in turning to the temporal component of the incarnation Kierkegaard makes up for a weakness in

Anselm. He writes:

a hundred years ahead of his time Kierkegaard devised a way of thinking by abandoning a point of absolute rest and moving kinetically along with the truth in order to understand it (Torrance 1984a:278).

Kierkegaard is striving to do justice to God's actions within the universe by devising a way of thinking and understanding which is appropriate to God's actual involvement. He is an example of a thinker whose approach is *a posteriori* and therefore scientific. In order to understand God's involvement with the creation Kierkegaard does not make it fit into any philosophical frame or scheme. Instead he follows God's action and allows the inner logic of creation and redemption to be disclosed. Torrance draws a direct parallel between Kierkegaard's attempts to understand the temporal aspect of divine action with the way in which physicists try to comprehend the quantum world (Torrance 1984a:278).

Torrance aims to demonstrate that the 'thinking after God' that he proposes as a scientific method in theology, a method which allows the inner logic of God's interaction with creation to be disclosed to the enquirer, is found in the great theologians of the past. For Torrance scientific, i.e. empirical, method originates with the Nicene theologians and not the natural scientist. He argues that much in contemporary theology is problematic because it is unscientific and when it is unscientific it betrays its origins. Barth however, has returned theology to its patristic and reformed roots and has set it back on track as a scientific discipline.

Torrance argues that just as there has been a paradigm shift from Newton to Einstein in physics, so in theology there needs to be a corresponding paradigm shift away from an abstractive theological method to a unitary framework (Torrance 1984a:279). It is to Barth that Torrance looks for the basis of a scientific theological

method. He argues that the unity of act and being makes Barth's theology important, and that following this will set Christian theology upon its proper, patristic and reformed, foundations (Torrance 1984a:280). According to Torrance Barth has advanced theology in the same way that Einstein and Clerk-Maxwell have advanced science. He proposes two means by which theology can build on Barth's work. First it must take seriously the relation between incarnation and creation; thereby establishing a closer relation between natural theology and revealed theology. This is what Torrance is trying to achieve in his work on natural theology when he transposes natural theology into the body of dogmatics.²⁴⁹ The second area of development is in the area of epistemology, and the development of:

the appropriate cognitive instrument or instruments through which we may bring to light and represent for ourselves the profound harmonies and symmetries of the divine grace in which is enshrined the inner logic of God's creative and redemptive operations in the universe (Torrance 1984a:281f).

This corresponds to what Torrance is trying to achieve with his 'theological science' in which he focuses on creation and incarnation, the two foundational aspects of God's interaction with the universe.

5.3.4 The distinction between theology and the other sciences

Theology's place among the sciences depends on its method. Only those theologies which allow the material content of God's self-revelation to determine the method of enquiry can be regarded as scientific. However, despite its objective grounding in revelation even scientific theology remains a human science. It is an attempt to understand and express the truth of God but its nature as a science limits the endeavour (Torrance 1969a:282). Torrance is aware that like all other scientists the

²⁴⁹ See section 4.2.4.

theologian does not have a privileged or neutral point of observation abstracted from the universe of space and time but occupies a position within the universe. Theological knowing, like all scientific knowing is personal; it is the knowing of persons within creation. God's relationship to space is non-spatial (Torrance 1969a:2); the scientist, whether theological or natural, is part of the relative universe (Torrance 1984a:274). Torrance rejects relativism but acknowledges the subjective aspect of all human knowledge including scientific knowledge. The theological scientist is in the same relative relationship to the objective reality of the object of her enquiry as is any other scientist.

God, however, is not simply an object within the universe like any other object to be investigated. Torrance argues that God's existence and relationship to the universe are unique; and this is reflected in his theological science. Each science is unique in the sense that each object or area of enquiry has to be investigated according to its own inherent structure and nature; there is no single scientific method which can be applied to all the sciences. Indeed the imposition of a method of enquiry appropriate to one particular field upon another is unscientific or pseudo-scientific (Torrance 1971:91). The unique nature of each branch of science is due to the scientific or objective method of allowing the object of enquiry to determine the method of investigation. There is no science in the singular; there are sciences (Torrance 1969a:106). Similarly there is no universal scientific method; instead there are the methods appropriate to each science developed in pursuit of its own proper object or objects. Torrance disputes the bracketing off of scientific method from other human ways of knowing and argues that 'science' is rather the 'rigorous extension of our basic rationality' (Torrance 1969a:107) applied in an appropriate way to some field of enquiry.²⁵⁰ Appropriate application in

²⁵⁰ See Einstein's comments in Einstein 1982:290.

this case means matching the method to the subject matter. This applies to all sciences including theological science.

Torrance argues that God, as transcendent creator of the contingent universe, is unlike any other object investigated by any of the other sciences; indeed God cannot properly be regarded as an object at all. Torrance's case is that the unique nature of God makes theology unique among the sciences (Torrance 1969a:282f). The object of theological science remains supremely subject in all human knowledge of him. Knowledge of God arises always and only from self-revelation; we have seen throughout that this is Torrance's understanding of theological epistemology (Torrance 1969a:299,307f). In Torrance's understanding knowledge of God, theological science, unlike the other sciences is not entirely separate from other areas of knowledge. The special sciences are separated from one another 'in accordance with the particular aspects of being to which they are devoted' (Torrance 1969a:282). Indeed, Torrance argues that a 'criss-crossing' from one to another violates their scientific status (Torrance 1969a:282). Apart from devotion only to its own proper object there is no common scientific method.²⁵¹ However, this is not the case for theological science because theology deals not with limited aspects of creation but with the source of all created being (Torrance 1969a:295). This is a further implication of Torrance's work on the contingency of creation²⁵² not only for the dialogue with the natural sciences, but also for a proper understanding of the scope of theological science as it strives for objective knowledge of the self-revealing God who is the transcendent creator of the universe (see Torrance 1971:96f).

Klinefelter raises a concern about Torrance's theological epistemology. He

²⁵¹ As Torrance writes: 'In all the sciences we refer our thought to what is external to ourselves and are devoted to objectivity: scientific knowledge and objective knowledge are one and the same thing' (Torrance 1969a:295).

²⁵² See above 5.2.

argues that when Torrance makes a distinction between theology and all other sciences he places an unbridgeable gulf between them. He argues that Torrance's theological epistemology, derived from the absolutely unique nature of the object of theology, is doing no more than 'protecting a sophisticated Barthian fideism' (Klinefelter 1973:128). He argues that Torrance's theological science is almost completely disconnected from ordinary rationality; so much so that when Torrance speaks of theological rationality it is so distinct from other uses of the word that it may be better called something else (Klinefelter 1973:128). The irony of Klinefelter's critique of Torrance is that he argues that a theologian who has done so much to refute dualism in theological method has inadvertently introduced a gulf between theology and other human ways of knowing.

Klinefelter is correct when he draws attention to the differences between theological science and other human ways of knowing in Torrance; in fact Torrance points to this as an attribute of theological science.²⁵³ He draws attention to a difference in objectivity that makes theological science distinct from the natural sciences. In all other sciences both the knower and the object of knowledge are part of the relative space time universe. God, however, belongs to a different order of rationality to humankind (Torrance 1969a:298) because God is of a different order of being. God infinitely transcends created being and is not bound by the relative universe of space time. This means that we can come to knowledge of God only as he has given himself to be known (Torrance 1969a:299). Again we see that Torrance's theological epistemology is an epistemology of grace, but even this is not an absolute distinction between theological science and the other sciences, for as we shall see Torrance's epistemology, founded on the doctrine of justification by grace, is applicable to other human ways of knowing besides theology (see section 5.3.7) and points to a

²⁵³ See Torrance 1969a:295-313, Torrance 1971:95-99)

fundamental gracing of all human knowledge.

Torrance draws attention to a second fundamental distinction between theology and the natural sciences, a difference of subjectivity. He notes that all knowledge is subjective because it is human knowledge; even objective and scientific knowledge has a 'personal co-efficient' (Torrance 1969a:303). Objective knowledge strives to remove unwarranted subjectivity, but it remains a personal activity. The object of theological science is God who is Lord and sovereign of all our knowledge of him (Torrance 1969a:308) and who calls us into a reciprocal relation to himself. Torrance argues that in theological science there takes place an inversion of the usual subject-object relation that pertains to other human ways of knowing (Torrance 1969a:308). The nature of the divine object of knowledge means that as we come to know him, God retains primacy in the knowing relationship and is never a mere object of our knowledge.²⁵⁴ Regarding knowledge of God true objectivity is found only in personal relationship with God (Torrance 1969a:309).

Despite these distinctions between theological science and the natural sciences in Torrance's theology we do not find, as Klinefelter argues, an unbridgeable gulf between knowledge of God and all other human ways of knowing. Every human way of knowing is unique because it is determined by the object of its knowledge; theology is 'uniquely unique' due to the nature of God. Torrance argues that God is totally unlike any other object of human knowledge; he is 'the Lordly Object over whom we have no power but who we may know only through humble service and love' (Torrance 1969a:300). Torrance is well aware that this makes theological science profoundly different from all other sciences; however, the fact that he is able to draw analogies

²⁵⁴ Torrance writes that with respect to knowledge of God 'a merely objectivist approach could not be properly objective for it could not do justice to the divine Reality: it could only abstract from it' (Torrance 1969a:309).

from among the natural sciences indicates that there is no absolute gulf between theological science and other human ways of knowing. He draws an important analogy with biology in which the object of knowledge is a living being. Living beings can be analysed in terms of physical and chemical processes, but for a full account of a living organism we must go beyond physics and chemistry and take account of their organic and mental nature. In order to achieve objective knowledge of a living organism the laws and processes of physics and chemistry must be transcended. This provides us with an analogy for the way in which theological science differs from the natural sciences. Torrance notes in particular that the natural sciences progress by drawing comparisons, by generalising and grouping objects and experiences into classes; that is the natural sciences are adapted to multiplicity (Torrance 1969a:301, c.f. 302). God, on the other hand, is unique and incomparable. Furthermore Torrance is not only able to demonstrate the internal coherence of theological science (see 5.3.5), he also shows its external coherence; he demonstrates its correlation or consonance with the natural sciences.²⁵⁵ If it is possible to draw meaningful analogies between theology and the exact sciences, further, if it is possible to see a correlation between these disciplines, then it cannot be maintained that there is dualism at the heart of Torrance's epistemology which absolutely cuts it off from all other sciences. The difference between Torrance's theological epistemology and that associated with the natural sciences is one of degree not kind. Rather in correlating theological and scientific epistemology Torrance points towards an epistemology which is appropriate and applicable to every human way of knowing.

5.3.5 Torrance's 'disclosure model'

Torrance's epistemology is a disclosure model; he begins not with the question

²⁵⁵ E.g. see 5.2 above on contingency in theology and the natural sciences.

of how God may be known, but of how God is known and how God has disclosed himself (Torrance 1969a:9). He argues that this disclosure model is characteristic of both theological and scientific epistemology (Torrance 1969a:130f). Reality and not just God discloses itself to enquiry.²⁵⁶ Torrance argues that in the natural sciences a 'conceptual construct' is forced upon the scientist by the 'intrinsic intelligibility' of the object or field under examination (Torrance 1980b:125). Science progresses by theories which are proposed, developed and refined in the light of what is disclosed of the nature of the object of enquiry to scientific investigation. According to Torrance a scientific theory is 'a sort of lens through which we allow nature in its intrinsic patterns to reveal itself to our apprehension' (Torrance 1980b:125. C.f. Torrance 1969a:318). He applies this disclosure model from the natural sciences to theology, particularly to Christology; for, as we have seen, he argues that it is in Jesus Christ that God meets us within the space and time of the universe. Despite our argument that against himself Torrance introduces the notion of revelation in Scripture and in nature into his Barthian theology, this does not undermine his argument in favour of a disclosure model, for in the articulation of revelation in scripture and nature found in his theology the emphasis remains on the self disclosure of God no less than with revelation in Christ. In theological science theories are refined as the self-revealing Christ is encountered in his own inherent rationality (see Torrance 1980b:126), just as the natural sciences theories are refined and modified by the scientist's encounter with the reality of the object of enquiry.

We see both the force and the limit of Torrance's disclosure model for theology when he writes that:

²⁵⁶ Cf. Einstein's comment: 'The supreme task of the physicist is to arrive at those universal elementary laws from which the cosmos can be built up by pure deduction. There is no logical path to these laws; only intuition, resting on sympathetic understanding of experience can reach them' (Einstein 1982:226).

Far from being a theoretic model, the disclosure model of Christ does not seek to explain, for example, *how* he is constituted in the hypostatic union of his divine and human natures, but serves as a theological instrument through which we allow Christ in his own mystery and reality to impose himself upon our apprehension of him, so that we know him more and more out of himself and in his intrinsic significance (Torrance 1980b:126, emphasis Torrance).

Torrance's disclosure model offers no proof or evidence of the self-revelation of God instead it functions more like the five ways of Aquinas which were traditionally viewed as arguments for the existence of God but are now seen rather as evidence of the coherence or inner consistency of belief.

When we add Torrance's argument for the inner coherence of Christian theology to his arguments for an external correlation with the natural sciences we can understand why he gave one of his works on the relationship between theology and science the subtitle *Consonance between Theology and Science* (Torrance 1980b). Torrance's argument is that the two disciplines, theological science and natural science, not only share a common approach to knowledge, an *a posteriori* thinking after the object of enquiry which allows the object to shape the method of enquiry; he also argues that they have complementary ways of understanding the nature of the universe.

5.3.6 Torrance's actualist account of critical realism

Torrance clearly stands within the tradition of epistemological realism. We see this when he writes:

We know things in accordance with their natures, or what they are in themselves; and so we let the nature of what we know determine for us the content and form of our knowledge. This is what happens in our ordinary, everyday experience and knowledge ... Science, in every field of our human experience, is only the rigorous extension of that basic way of thinking and behaving. This is a way of understanding scientific activity that is much more appropriate to the complexity and richness of nature as it becomes disclosed to us through the great advances of the special sciences than is that way to which

we have become accustomed within the compass of a mechanistic universe and its rigid instrumentalism (Torrance 1980b:8).

He positions himself within the Scottish realist tradition (Torrance 1981a:x) and commentators agree that his theology is realist.²⁵⁷ There is though debate as to exactly what sort of realist Torrance is. The question of whether Torrance is best categorised as a realist, a critical realist or a post-critical realist is largely a problem of terminology for there is no generally agreed definition of these terms. Hardy writes that Torrance's 'is the most highly developed version of realism ... which is available in (and perhaps outside) modern theology' (Hardy 1990:86). However, Hardy qualifies his designation of Torrance's theology as realist when he writes that if realism means a necessary correspondence between reality and theory then Torrance is not a realist; but if it means the possibility of an actual correspondence between the theory and reality then Torrance is a realist. Achtemeier calls him a critical realist (Achtemeier 2001:272) while Patterson calls him as a 'post critical realist' because he argues that rationality is not only inherent in the human mind but that it is a component of reality (Patterson 1999:13f),²⁵⁸ this is precisely why Achtemeier refers to him as a critical realist (Achtemeier 2001:272). Luoma notes an element of compulsion in Torrance's realism which also makes him difficult to categorise (Luoma 2002:66). All commentators agree that Torrance is some sort of realist and that his account of realist epistemology is distinctive. It is also commonly agreed that his is a correspondence realism, but that he avoids what McGrath calls 'naïve realism' which 'argues for a direct correspondence between concepts and experience' (McGrath 1999: 217). We will see that those elements which make Torrance's realist epistemology distinctive originate from his early encounter with Barth and are refined by his study of Einstein.

²⁵⁷ See also for example McGrath 1999:217; Achtemeier 1994:355.

²⁵⁸ See Torrance 1985b:3.

We have noted throughout that Barth's emphasis on the unity of act and being in God have been of formative influence on Torrance, as is Barth's Christocentrism which points to Jesus Christ as the place in creation where God encounters his people.

Einstein, another influence on Torrance, can also be designated as an epistemological realist. He regards it as a fundamental belief of the natural sciences that the universe is comprehensible (Einstein 1982:46) and that our understanding of it corresponds to reality (Einstein 1982:291). He argues that our theoretical apprehension of the universe is a free creation of the human mind and that there is no logically necessary bridge between reality and theory; there is, however, an actual correspondence between them (Einstein 1982:226). For Einstein the universe is comprehensible but this comprehensibility is not logically necessary nor is it imposed upon reality by the mind of the scientist. Comprehensibility is inherent in reality itself (Einstein 1982:291). The laws of the universe arise in part from the scientist's engagement with reality and in part at least from the scientist's intuition (Einstein 1982:272, 226). Einstein regards the comprehensibility of the universe as mysterious and even miraculous (Einstein 1982:292). This makes Einstein, in Achtemeier's terms, a critical realist for as we have seen he rejects the notion of 'logically determinate paths connecting empirical apprehension to theoretical construct' (Achtemeier 2001:272).

Torrance's epistemology is an actualist rather than a necessary account of realism. By this is meant that, like Einstein, he denies any necessary link or bridge between reality and our comprehension of it, for if there were such a link, then science would progress by logical deduction from first principles rather than by empirical means (Torrance 1985b:76f). Torrance argues that it is logical positivism which asserts a necessary and logical link between reality and human perception of reality. However there is an actual correspondence between reality and theory (Torrance 1985b:76) which

because it is not logically necessary cannot be anticipated or predicted.²⁵⁹ Torrance cites the example of Einstein whose ideas were not the result of abstraction from his observations nor did they come from logical deduction, rather they ‘arose out of an intimacy with and a sympathetic understanding of experience, under the belief in the intelligibility or comprehensibility ... of the world external, to the percipient (Torrance 1985b:77). Hardy writes that in Torrance’s understanding ‘there is an *actual* correspondence between reality and thought or language *if* the thinker is conformed to the mode of rationality afforded by reality’ (Hardy 2005b:169, emphasis Hardy). Torrance rejects ideas of truth which involve a simple one to one correspondence between reality and idea; rather the correspondence is complex. Achtemeier writes that Torrance has a ‘robust conception of truth ... as a holistic notion of *mind adequate to its object* (Achtemeier 1994:364, emphasis Achtemeier).²⁶⁰

Despite his realism Torrance does not deny the subjective pole in human knowledge but he refuses to allow it to dominate the objective aspect. The knowing subject enters into a close engagement with the object of enquiry and strives not to ‘impose upon it a structure of its own prescription’ (Torrance 1971:9f). He accepts that we are inside a knowing relationship and that we cannot step outside of ourselves to some objective point as a neutral observer; though he does deny that this entails scepticism (Torrance 1969a:1). Torrance’s case is that ordinary experience and the practice of the natural sciences assume that in some sense reality is capable of rational apprehension and exposition. He notes that an extreme turn to the subjective pole in the natural sciences associated with Ernst Mach and the Vienna Circle was challenged by

²⁵⁹ Cf. Einstein 1982:272.

²⁶⁰ Achtemeier refers to Torrance 1985b:15 where Torrance writes that in Calvin knowledge arises by ‘fidelity ... to what we seek to know... The kingdom of nature or the dominion of science is not entered by dictating to nature but by following its own leading’.

Planck and Einstein. Mach and his associates claimed that scientific theories have no bearing upon reality but are simply conventions used to organise observational data (Torrance 1982b:175). Planck and Einstein however ‘insisted that in science we are concerned to *grasp reality in its depth* (Torrance 1982b:175, emphasis Torrance).²⁶¹

Torrance’s actualist account of critical realism is an extension of his understanding of scientific that is, objective, method and it is developed from his encounter with Einstein. Torrance takes Einstein’s account of the epistemology of the natural sciences and applies it to the field of theology, but he does so without reducing theology to science or science to theology.²⁶² Ultimately however his realism is founded on his Barthian Christology, for it is Torrance’s conviction that in Jesus Christ we encounter the reality of God within space and time and that the theologies that emerge from this encounter are able, however inadequately, to grasp and express something of this reality. In his earliest lectures on Christology delivered at Auburn Seminary in New York State from 1938 to 1939 Torrance reflects upon the gracing of all authentic knowledge of God (Torrance 2002a:80). He notes that the incarnation indicates that God is revealed rather than discovered (Torrance 2002a:96). He argues that whether we are investigating the nature of the world or of God true understanding comes by a thinking after the object of our enquiry (Torrance 2002a:97). Even at an early stage Torrance’s reflections on theological epistemology lead him in the same direction as his mature thought. His encounter with the work of Polanyi and Einstein deepen and broaden his reflections as he begins to see that a similar thinking after the object of enquiry is characteristic of Einstein’s scientific method. As with his reflections on the correlation of a theological understanding of creation with the scientific understanding of the nature of the universe, so in his reflections on the nature of the methods of

²⁶¹ See also Torrance 1985b:54f.

²⁶² See Kaiser 2001:242.

enquiry proper to a Barthian theology and post-Einsteinian science, we see in Torrance a unifying of knowledge and of two distinct disciplines without in any way reducing one to the other.

5.3.7 Theology as a scientific discipline

Torrance's claim that theology is best placed among the exact sciences and that it bears comparison in particular to physics is counter-intuitive. We expect it to be placed among the humanities or the social sciences. Torrance's argument rests on changes in the understanding of the nature and methods of science in the twentieth century and on his development of Barth's Christocentric theology. Louth notes the importance of Barth's 1929 lectures on 'Fate and Idea in Theology' for Torrance, in particular the idea that God is not simply to be discovered but is one who reveals himself in Christ (Louth 1983:49).²⁶³ He notes that when Torrance argues that theology bears comparison with physics he is not simply attempting to assimilate theology to science; instead his argument is that the contemporary sciences, particularly post-Einsteinian physics, have struggled with the problem of epistemology in a similar way to Barth. Torrance's study of the sciences has illuminated his search for a theological epistemology (Louth 1983:52). Louth accepts Torrance's argument that scientific knowledge is objective in the sense that Torrance uses the word but he argues that what Torrance has demonstrated is not that theology is a science, rather that the sciences are 'less unlike' the humanities than has been thought (Louth 1983:52). Louth argues that

²⁶³ Louth quotes Torrance's comment on Barth's lecture and its importance for epistemology: 'As it has turned out, does not theology bear a closer comparison with an *exact science*, such as physics, which restricts its activities to the limits laid down by the nature of its concrete object, and develops a method in accordance with the nature of its object, bracketing it off from every world-view (either as an *a priori* condition or as an *a posteriori* product), and invoking an open mind about what may be beyond the limits of its own area of knowledge' (Louth 1983:50f, quoting Torrance 1962:179f, emphasis Torrance).

Torrance is fundamentally mistaken when he places theology among the sciences; instead he argues that because theology does not involve experiment it is one of the humanities (Louth 1983:52f). Louth's case rests upon whether or not experiment is fundamental to science. He notes that Torrance is aware that theological method does not involve experiment, noting Torrance's comment that experimental investigation is inappropriate as well as impossible to God for scientific as well as theological reasons: only an idol and not the living God could be manipulated by an experimenter (Torrance 1969a:299, quoted in Louth 1983:52).

Louth's argument that theology is not to be counted among the sciences rests upon the definition of science, in particular on whether or not experiment is so essential to scientific activity that its absence from theology means that Torrance is mistaken (Louth 1983:53). Louth acknowledges that some areas of science engage in very little actual experiment (Louth 1983:52). Torrance's case is that it is objectivity and not experimental method that makes a science. The argument rests upon the definition of science, with Louth arguing for a narrow definition and Torrance arguing for a broader definition. Stenmark notes there is no universally agreed definition of exactly what constitutes a science or a scientific method even among scientists and philosophers of science. There are several rival definitions (Stenmark 2001:5). Torrance agrees that the nature of God separates theology off from the other sciences but he has argued that the sciences are separated off from each other (see 5.3.4) in a similar manner; he argues that there is not one scientific method but that each science is determined by its object.

Louth is right to point out that Torrance has demonstrated that science is a human endeavour and as such it is closer to other human ways of knowing than has sometimes been thought (Louth 1983:52). He is also right when he points out that theology has much in common with the humanities (Louth 1983:53f), but as we have

seen, Torrance has not only argued for objectivity as the key element in a scientific discipline, he has also demonstrated correlation between theology and the natural sciences.

We have arrived at an impasse which can only be solved by an agreed definition of what constitutes scientific activity, unfortunately, there is no agreed definition. However, there is a way beyond the impasse. Torrance has demonstrated the consonance between theology and the natural sciences both in terms of their understandings of the nature of the universe and in terms of their epistemology; Louth has argued for placing theology among the humanities, but he agrees that the sciences are not as distinct from other human ways of knowing than has often been thought. By combining the insights of Torrance and Louth we argue not that there are different human ways of knowing and that theology is to be placed among the sciences, but that there is one appropriate human way of knowing; this Torrance calls the objective method and this is applicable to all disciplines, to the sciences, to theology, to the humanities and to the social sciences. Torrance's insight that ontology is prior to and has precedence over epistemology in human knowledge is applicable to all human ways of knowing.

Torrance has done more than demonstrate a rapprochement between theology and the natural sciences; he has pointed the way to an epistemology which unites the diverse human ways of knowing, one which while giving prominence to the objective pole in knowledge, does not ignore the subjective elements.

Torrance is aware that his development of theological epistemology has implications far beyond the relationship between theology and the natural sciences. The first hint of this comes when he comments that scientific (that is in Torrance's terms objective) rationality is not separated from other human ways of knowing by an

impassable gulf; rather it is no more than ‘the rigorous extension of our basic rationality.... Scientific activity ... is essentially open and flexible through fidelity to the manifold character of reality and is therefore universally applicable...’ (Torrance 1969a:107; cf. Torrance 1971:94f). From Torrance’s epistemology we can make the case for a universal method of knowing which is founded upon the developments in epistemology in the natural sciences and in Christian theology when both disciplines independently allow ontology to have precedence over epistemology and allow the appropriate method to be developed by the enquirer’s faithfulness to the reality of the object of investigation. Torrance comments:

It is more and more clear to me that, under the providence of God, owing to these changes in the very foundations of knowledge in which natural and theological science alike have been sharing, the damaging cultural splits between the sciences and the humanities and between both of these and theology, are in the process of being overcome, that the destructive and divisive forces too long rampant in world-wide human life and thought are being undermined, and that a massive new synthesis will emerge in which man, humbled and awed by the mysterious intelligibility of the universe that reaches far beyond his powers, will learn to fulfil his destined role as the servant of divine love and the priest of creation (Torrance 1980b:14).

Norris points to a further potential problem with Torrance’s theology. He argues that Torrance’s definition of what constitutes theology is narrow in the extreme (Norris 1984:465f). Norris, like Ford, commends Torrance for attempting to think through the implications of contemporary physics for theology (Norris 1984:465; Ford 1988:277). He further comments that Torrance’s work on epistemology ‘is itself an epistemology which is consistent with the major advances of the modern sciences’ (Norris 1984:465). He notes that Torrance claims that his understanding of theological method is not something which is novel but is found in ‘most of the better theologians down through the centuries’ (Norris 1984:465). Norris questions this theological consensus arguing that it is not representative of the history of Christian thought throughout the centuries

(Norris 1984:466). This criticism of Torrance was first made by Hick in 1969 who comments that in Torrance's work, theology means 'only one particular kind of Christian dogmatics' that is Barthian theology (Hick 1969:58).

It is certainly true that Torrance's understanding of what constitutes theological science is theology which is developed in fidelity to God's self-revelation in Christ.²⁶⁴ For him theology is not a speculative discipline in that sense. The Christocentric nature of Torrance's theology excludes not only other religions from Torrance's definition, it also excludes other Christian approaches to theology, notably and explicitly those in the tradition of Schleiermacher (Hick 1969:58, c.f. Torrance 1968:265). However this constraint in Torrance's definition of which Christian theologies can be regarded as theological science is governed by his definition of what constitutes scientific epistemology. Only those theologians who attempt to respond to God's self-revelation in Christ can be regarded as seeking to allow the objective pole in theological knowledge to determine the method of investigation. According to Torrance's definition of scientific knowledge those theologies which begin with human understanding or the human search for the divine rule themselves out because they do not begin with the actual self-revelation of God within space and time. Torrance argues that key thinkers in Christian history have sought to respond to the reality of God's revelation in Christ and these are the theologians whose approach to theological knowledge he attempts to bring into dialogue with the natural sciences. The biggest gap in Torrance's approach is that he does not discuss contemporary Catholic or Orthodox theologians being content after the patristic period to limit his discussion to reformed theologians, and then almost exclusively Calvin and Barth.

²⁶⁴ See chapter one.

5.3.8 Discussion

In this exposition of Torrance's theological science it has been found, despite Torrance's frequent assertions, that revelation in Christ is not the foundation of his theological epistemology. More fundamental is the doctrine of justification by grace. Torrance often uses revelation in Christ and revelation by grace interchangeably, for he regards Jesus Christ as *the* place in the universe where humanity is encountered by God; yet a close reading of his doctrine of revelation shows both scripture and nature as places of real meeting with God, and therefore as loci of revelation, and not simply as pointers to Christ. Revelation in Christ is normative for the content of our knowledge of God for Jesus Christ is of one being with the Father, but Torrance clearly articulates both the Bible and creation as places within creation where God can and does encounter human beings. Despite obvious differences with his teacher, Torrance's theological epistemology remains Barthian for there is no sense in his epistemology of independent knowledge of God; whether in Christ, Scripture or creation knowledge of God arises from divine self-revelation and God is always in control of our knowledge of him.

Torrance's epistemology does more than bring together theological and natural science. He develops an epistemology which has application to all human ways of knowing and which points to the gracing of all human knowledge. From his doctrine of revelation there emerges a universally applicable epistemology. His theological epistemology is realist and he operates with a disclosure model, but it is not naively realist. From his encounter with Einstein and Polanyi he is fully aware of the partial nature and situatedness of all human knowledge: but incomplete knowledge is or may still be knowledge; similarly an awareness of the subjective element of all knowledge is not the same as arguing that all knowledge is merely subjective.

5.4 Conclusion

Torrance's theological science is important for two reasons: his correlation of a theological understanding of creation with a scientific understanding of the universe; and his rapprochement between theological and scientific epistemology. When Torrance writes of science and scientific method he refers to Einstein's reflections on the relationship between science and reality and specifically the relationship between the theoretical and empirical components of knowledge. Torrance's definition of theology is narrow. For him Christian theology is Christologically founded; it is patristic, reformed and Barthian. The writings of the Nicene theologians and Calvin are central to his understanding of the Christian faith. Despite this narrow definition of what constitutes a proper Christian theology, or perhaps because of it, Torrance is able to bring together the two distinct disciplines of theology and natural science.

Torrance does not impose the methods of natural science upon theology or those of theology on the sciences. As he thinks through the implications of the epistemology of grace which he believes to be absolutely implicit in the doctrine of the incarnation, particularly as he engages with theologies which arise from a dualistic cosmology or epistemology, Torrance finds support in the work of Einstein and Polanyi on scientific method. He finds in Einstein's determination to allow the reality of the universe to determine his apprehension of it, whilst at the same time rejecting any sort of logical bridge between the two, a vindication of his own decision in the field of theology to follow Barth's Christocentrism. In theology as in the sciences a true, if not exhaustive, understanding of reality emerges from a faithful 'thinking after' the object of enquiry. Despite this Christocentrism there is implicit in Torrance's writings on theology and the natural sciences an understanding that knowledge of God can arise from the creation. This is not a return to independent natural theology and is better termed a

doctrine of natural revelation which arises from Torrance's theology of nature.

In his work on the relationship between theology and the natural sciences Torrance demonstrates the correlation between his theological account of the contingent creation and the universe disclosed to scientific investigation. Neither of these is dependent on the other but he demonstrates congruence between them such that he is able to argue that the universe disclosed to the natural sciences points to the transcendent creator in its 'silent cry' for sufficient cause of its mysterious and incomprehensible comprehensibility. He also argues that the doctrine of *creatio ex nihilo* in Christian theology allowed the empirical sciences to evolve in western Europe by keeping the creator distinct from the immanent processes of the creation.

Torrance's account of creation is unusual in that the relationship between God and the universe as unfolded in the incarnation is of more importance than the act of creation. In this he follows the patristic theologians and it enables him to develop his Christocentric theology of nature in a way that is thoroughly Barthian. It also enables him to argue that the change and temporality which characterise the creation are grounded in moments in God's eternal life.

Torrance finds Einstein's concept of relative space fruitful in his exposition of the importance of the incarnation for our knowledge of God. He argues that this theory of space is similar to that developed by the patristic theologians as they tried to understand the importance of Jesus Christ for revelation.

Torrance shows that theology and the natural sciences have benefited from a critical engagement with one another in the past and he believes that there can be a fruitful engagement in the future. He argues that these disciplines can learn from each other without one being subsumed into the other. In particular he argues that they are allies in a battle against dualism both cosmological and epistemological.

Torrance's actualist theological-scientific epistemology is an epistemology of grace. It originates in his encounter with Barth's Christology and is developed in his work on patristic theology and especially in his study of Einstein's scientific method. Torrance argues that a theology which follows such a scientific method will enable a rapprochement between systematic and biblical theology; moreover he argues that the division between these two branches of theology owes its existence to a falsely dualist epistemology in which event is separated from its meaning. In arguing that there are no uninterpreted facts or events he finds support in the work of Einstein and Polanyi.

Torrance further argues that when theology allows its unique 'object of enquiry' to determine its method of enquiry then it is a science in the same way that physics is a science. He argues for a common scientific method in which each branch of science gives priority to the reality under investigation. Torrance's epistemology is objective and realist; like Einstein he argues that the objects of our experience have a reality and significance which is independent of our observation or investigation. Further he argues that although there is no logical bridge between reality and our theoretical construction of it yet there can be an actual correlation between the two. Despite his emphasis on the objectivity of the universe that is open to our comprehension he does not neglect the subjectivity of all human knowledge. He argues that knowledge can be partial but still true. While taking full account of the subjective element in all human knowledge he does not allow it to dominate. This is the essence of his critique of Kant and of those epistemologies which are founded upon the Kantian disjunction between reality and perception. Torrance argues that Barth in the field of theology and Einstein in the field of science have both rejected this and on similar grounds.

Torrance's realist epistemology has a wider application than to theology and the natural sciences. It is an epistemology which can be applied to all human ways of knowing.

What would make a social science 'scientific' in Torrance's terms is not the application of methods from biology or physics, this would be unscientific. Instead a field of knowledge is scientific when the object of enquiry is allowed to determine the method of enquiry. In true science ontology has precedence over epistemology. In his description of scientific method Torrance takes full account of the subjective nature of all human knowledge, requiring self criticism of the observer. In his epistemology Torrance relies on a connection between the human mind and the structures of reality which is mysterious and inexplicable apart from a commitment to a transcendent ground of rationality. For Einstein this connection is a mystery, even a miracle and he speaks of 'intuition' and 'pre-established harmony' between the human mind and the structures of reality (Einstein 1982:226); for Torrance this relationship is a gift of the God who reveals himself within the creation in Christ. Torrance's epistemology can accurately be termed realist or critically realist but it is better termed an epistemology of grace because the fact that the universe is comprehensible is inexplicable. Einstein regarded it as miraculous; there no logical explanation for either the ability of the human mind to grasp the immensity of the universe or for the accessibility of the universe to human investigation. The comprehensibility of the universe, from whichever side we regard it, is incomprehensible. It can only be accepted; but once it is accepted this points to a more fundamental gracing of all knowledge of reality; it points to a transcendent ground of rationality upon which is founded both the human mind and the structures of the universe.

Conclusion

This thesis presents a clear and systematic account of the doctrine of revelation found in the writings of Thomas F. Torrance. He is shown to conceive of revelation as the gracious and miraculous self-revelation of God in Christ; further that the place of the Bible in revelation is as a dynamic witness to Christ while natural theology is transposed into the body of dogmatics and becomes a means of correlating theological with scientific accounts of reality.

However, a close reading of Torrance on revelation shows that he actually operates with a different understanding of revelation. Even more fundamental than revelation in Christ is revelation by grace. This is of course seen most clearly in God's self-disclosure in Christ but it has been demonstrated that he conceives of both scripture and nature as places within creation where humanity is or may be encountered by the creator; that is Scripture and nature appear in his theology as loci of divine self-revelation. Revelation in Christ remains a controlling factor in all our knowledge of God because of the consubstantial relation between the transcendent God and the incarnate Son. This means that whatever the source or locus of revelation what God reveals about himself in Christ must always remain normative for the content of Christian theology.

We have noted that Torrance's work on the human nature of Christ is vulnerable to Crisp's challenge to the Barth-Irving argument that it was a fallen and sinful human nature which Christ assumed at the incarnation. Crisp is particularly critical of the idea of a fallen human nature which is able to sin but does not; he rightly questions the meaning of the idea of a sinful nature which does not actually sin. However, the Barthian position which is an significant element of Torrance's understanding of the

vicarious humanity of Christ is given support in the notion of Christ's temptation or testing which is important, not only in the synoptic Gospels but also in the letter to the Hebrews. If Christ did not have the capacity to sin then there is no temptation or test at all, and his triumph over temptation, which according to Torrance has a vicarious significance, is illusory.

The patristic idea of the *homoousion* has a central place in Torrance's theology beyond its historical roots in the Christological debates of the early Church. The *homoousion* is the linchpin of his doctrine of revelation in Christ. It is noteworthy that he accepts the definition of the phrase *homoousios tō patri* as found in the writings of Athanasius and Hilary of Poitiers. He takes no note of its modified meaning in patristic theologians after Origen. The word occurs throughout Torrance's writings and forms the basis of his argument that theology is or may be a scientific discipline. The term is used sparingly in the *Church Dogmatics* but Torrance's development of the phrase for his own theological and epistemological purposes is rooted in Barth's exposition (Barth 1975:295-304).

Torrance's theological epistemology hinges on the identity between God as he is in himself eternally and God as he is in time and space in Christ; and Torrance finds this on the *homoousion*. Throughout his writings Torrance is working through the inner logic of the incarnation of the second person of the Trinity for theological method. When Torrance uses the term it bears the weight of his understanding that in Christ we have access to the reality of God in much the same way as the natural scientist has access to the reality of the universe through the empirical method; therefore for a theology to be scientific it must be Christologically founded.

There is no recognition in Torrance that the term carries what Barth calls a 'historical and material ambiguity' (Barth 1975:440), rather he assumes that

Athanasius' use of the term and his reading of Athanasius stand; therefore Torrance's use of the *homoousion* is best seen as shorthand for his development of the epistemological significance of the incarnation and not as a definition of the term.

This thesis attempts a critical exposition of Torrance's doctrine of revelation; it also contributes to theological debate in several areas. It raises questions about the source of Christian theology, arguing that theologies which are not founded on the self-revelation of God in Christ are cut adrift from the primary datum of Christian theology and are in danger of falling into abstract and speculative discourse. If theology is to be in any sense a scientific discipline then it must maintain a fidelity to the object of its enquiry namely God as he has actually given himself to be known within the contingent universe.

A second area in which this thesis contributes to debate is in the area of the relationship of theology to the natural sciences. It has been shown that in transposing natural theology to a place within the body of systematic theology where it becomes a theology of nature Torrance has brought the natural sciences under a wider theological account of reality. This enables a correlation of worldviews so that each discipline can contribute to the other. It also enables a theological account of the whole enterprise of empirical science grounding the otherwise inexplicable rational order and comprehensibility of the universe in the creative Word of God. However, the sciences are not restricted by being brought into a theological account of reality for the Christian doctrine of creation points to a gifted freedom and independence of the universe and of human investigation of reality. In such a theology of nature the natural sciences themselves become a type of natural theology in which the scientist by investigating reality comes to knowledge of the world by an encounter with the creative Word in empirical investigation.

It has been demonstrated that Torrance's interpretation of Barth's rejection of natural theology, while being an unusual reading of Barth, can be justified on the basis of Barth's own writings on natural theology. His interpretation of Barth forms the foundation of his development of a non-independent natural theology.

Natural theology and its relation to the natural sciences has been one of Torrance's concerns throughout his career, however he has shown no interest in engaging with contemporary Roman Catholic traditions of natural theology in which theologians such as Rahner have developed traditional understandings of natural theology. Torrance's concern has been to engage with the Protestant tradition of natural theology and particularly with those times and traditions in which the independence of natural knowledge of God from revealed knowledge has been emphasised. One example of an understanding of natural theology as an independent source of knowledge of God is found in John Baillie, one of Torrance's Edinburgh teachers.

In his attempt to correlate his reformulated natural theology with the natural sciences Torrance relies on the work of Einstein. He makes two uses of Einstein's physics. The first use made by Torrance is of Einstein's model of the universe as defined by the theories of relativity. This is important for Torrance because he believes that Einstein's model of the cosmos is a paradigm shift from that of Newton and is a more accurate description of the reality of the universe. There is an important theological principle displayed here, namely that the Christian faith which asserts both that God reveals himself to creatures who are part of the universe and that the creator God has become incarnate within the creation has a theological imperative to take seriously the understanding of the universe as disclosed to the natural sciences. This is one of the things that Torrance is attempting in his work on Einstein. The scientific model of the universe will change as the natural sciences progress and it is important for

Christian theology to continually engage with the natural sciences, but not by simply assimilating the current model of reality into theology, rather by correlating the theological understanding of creation with the scientific paradigm.

Torrance's second use of Einstein is more foundational for his work on theological method. Einstein's writings on the philosophy and epistemology of the sciences are at the heart of Torrance's understanding of what constitutes a science and of his argument that a Christologically founded theology is scientific in the same way that physics is scientific. Torrance has demonstrated parallels between the methodologies of Barth and Einstein, and it is on the basis of their common methods that this thesis has argued for a common human way of knowing which unites not only theology and the natural sciences but potentially the sciences, the social sciences and the humanities.

It has been shown that a realist theological epistemology emerges from Torrance's account of revelation which, while taking full account of the subjective element of all human knowledge, points to the possibility of objective knowledge of reality. This method has been termed an epistemology of grace because it is a disclosure model of theological method which implies a correspondence theory of truth. A reading of Einstein's writings on scientific method shows a similar understanding such that it allows Torrance to argue that theology and the natural sciences share a common epistemology. In the exposition of Torrance's theological epistemology in this thesis it has been argued that his methods have a much wider application than to theology and the sciences; in fact what emerges from an investigation of the doctrine of revelation is a universally applicable realist epistemology which points to the gracing of all human knowledge of reality. This thesis has something to say in the current debates on realism and non-realism in philosophy and theology and presents a challenge from the

epistemology of the natural sciences to those theologians who argue for a non-realist understanding of God founded on Kantian dualism.

In Torrance's writings on revelation there is a very Protestant emphasis on personal relationship with God as opposed to mere knowledge of God. Torrance argues that the most complete knowledge of God is in Christ and that revelation comes through a personal relationship with Christ; consequently in his writings on revelation he places great stress on the difference between personal and propositional knowledge. He uses the phrase 'personal knowledge' in two different ways, one taken from Polanyi and the other from Barth.

From Polanyi Torrance takes the insight that all human knowing has a personal dimension; and this includes scientific knowledge. It is the refutation of the idea that there can be any sort of privileged or neutral point of view. All observers are bound to relative space time as well as to their place in history and culture. In part Torrance is reacting to the position of logical positivism which was an important world-view for much of his career. Polanyi's insight brings the methods of the humanities and the natural sciences into closer proximity, but it does not entail the relativist position that since every point of view has a personal dimension then every point of view is of equal value and that objectivity in knowledge is impossible. Torrance balances the objective and subjective components of human knowing in his theological epistemology.

From Barth Torrance takes a different understanding of personal knowledge; that revelation is personal rather than propositional and that in his act of self-revelation God reveals himself and not propositions about himself. However, theologians such as Barth and Torrance deduce propositions from this self revelation.

There are two problems with Torrance's presentation of personal knowledge in the Barthian sense. The first problem is with his attack on fundamentalist readings of

the Bible. He argues that fundamentalist theologians offer a static and propositional understanding of revelation instead of a dynamic and personal understanding. The problem with Torrance's critique is that he does not engage with any actual theologians whose work embodies such an understanding of revelation; and so it can appear that he is attacking a caricature rather than an actual theological position or tradition; nevertheless his work does sound a warning to traditions which emphasise biblical revelation that God is always far beyond human understanding or grasp.

The second problem that Torrance's critique of propositional knowledge faces is that in the biblical tradition there is evidence of propositional knowledge; of God imparting knowledge about himself. The biblical and Christian tradition does not show such a stark contrast between personal and propositional knowledge as Torrance implies.

A modified Torrancean position would acknowledge the presence within the tradition of both propositional and personal revelation but would argue that personal revelation, particularly revelation in Christ, is not only a more complete revelation; it also points to the utter transcendence of God. It is a reminder that God is always far beyond our thought or grasp for in every personal relationship there is always more of the person than can be known, there is always a mystery beyond our grasp. It is, in fact, a confession of theological humility reminding us of Barth who in the second edition of *Romans* conceives of God hiding himself as much as revealing himself in Christ.

A final area of importance in theological debate is the support that this thesis gives to those theologians who are arguing for a rapprochement between biblical and systematic theology. The decision to ground all Christian theology on what God has actually revealed of himself in Christ means that systematic theologians must focus on the self revelation of God in Christ as revealed in the Scriptures and that biblical

theologians must be aware of the inherent theological context of the Jesus of history.

This thesis is vulnerable to two main criticisms. It is founded on the presumption that God has in fact revealed himself by becoming incarnate within the creation in Jesus Christ. This is a fundamental axiom of both Torrance's theology and of this thesis. As a fundamental presumption it can be defended in two ways. Firstly it can be asked if it is a reasonable presumption and we can find many theologians over the centuries that have operated with this axiom. Secondly it can be asked if proceeding with this presumption is justified on *a posteriori* grounds. The evidence in support is that it leads to an understanding of theology which not only correlates with the natural sciences but also provides an explanation and justification of the empirical method.

The theological epistemology which emerges from the doctrine of revelation by grace is vulnerable to criticisms of correspondence theories of truth. Particularly that no account of how or why theories are said to contain or point to truth is given. Both Torrance and Einstein simply assert that there is no logically necessary reason why there should be a correspondence between theoretical and empirical components of knowledge but that there is in fact such a relationship. The theological justification for this assertion is in the understanding that the rational order which is inherent in the universe originates in a rational creator who is also the creator of rational human beings. Without the assertion of a creative reason as the source of the universe the success of the natural sciences in disclosing the structures of reality remains inexplicable.

There is one further criticism to be levelled at Torrance's theology and that is his use of secondary sources. On reading Torrance one is left with the impression that he simply searches through the writings of theologians from the past who agree, or who can be read in such a way that they can be seen to agree with his own position

developed from his reading of Barth. There is no sense of an engagement with these theologians in their own right except as sources of support for Torrance's position.

This thesis contributes to knowledge in three areas: it is a systematic presentation and discussion of the key doctrine of revelation in Torrance's theology; it contributes to the current debate on the relationship between theology and the natural sciences; and it contributes to the debate in philosophy and theology on realism and non-realism.

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