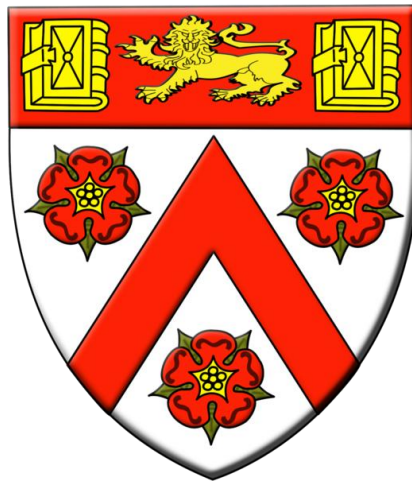


Natural theology and natural philosophy in the late Renaissance

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This dissertation is submitted to the University of Cambridge
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Declaration

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except where specifically indicated in the text.

This dissertation is also not substantially the same as any that I have submitted for a degree or diploma or other qualification at any other University.

The length of this dissertation is under 80,000 words.

Thomas A. Woolford

November 2011

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To fulfil a twenty-year-old promise, this is dedicated to my cousins Alison and David, but they have to share the dedication with my late mother, Mary.

SDG

Natural theology and natural philosophy in the late Renaissance

T. A. Woolford

Despite some great strides in relating certain areas of Christian doctrine to the study of the natural world, the category 'natural theology' has often been subject to anachronism and misunderstanding. The term itself is difficult to define; it is most fruitful to think of natural theology as the answer to the question, 'what can be known about God and religion from the contemplation of the natural world?' There have been several erroneous assumptions about natural theology – in particular that it only consisted of rational proofs for the existence of God, that it was ecumenical in outlook, and that it was defined as strictly separate from Scriptural revelation. These assumptions are shown to be uncharacteristic of the late-sixteenth and early-seventeenth century.

The study of natural theology needs to be better integrated into three contexts – the doctrinal, confessional, and chronological. Doctrinally, natural theology does not stand alone but needs to be understood within the context of the theology of revelation, justification, and the effects of the Fall. These doctrines make such a material difference that scholars always ought to delineate clearly between the threefold state of man (original innocence, state of sin, state of grace) when approaching the topic of 'natural' knowledge of God. Confessionally, scholars need to recognise that the doctrine of natural theology received different treatments on either side of the sectarian divide. In Catholicism, for instance, there were considerable spiritual benefits of natural theology for the non-Christian, while in Protestantism its benefits were restricted to those saved Christians who possessed Scriptural insight. Chronologically, natural theology does not remain uniform throughout the history of Christian theology but, being subject to changes occasioned by philosophical and theological faddism and development, needs to be considered within a particular chronological *locus*. Research here focuses on late sixteenth-century orthodoxy as defined in confessional and catechismal literature (which has been generally understudied), and demonstrates its application in a number of case-studies.

This thesis begins the work of putting natural theology into these three contexts. An improved understanding of natural theology, with more rigorous and accurate terminology and better nuanced appreciation of confessional differences, makes for a better framework in which to consider the theological context of early modern natural philosophy.

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Abbreviations

- ARS** *Apologie de Raimond Sebond* in Michel de Montaigne, *The essays* (*Les Essais*, 1580-95), trans. Donald M. Frame (Chicago & London: Encyclopaedia Britannica, 1990).
- BoC** [Book of Concord] *The Book of Concord: the confessions of the Evangelical Lutheran church* (*Concordia*, 1580), trans. Theodore G. Tappert et al. (Philadelphia: Fortress Press, 1959).
- CAL** Jean Calvin, *Institutes of the Christian religion* (*Institutio Christianae religionis*, 1559), trans. Henry Beveridge (Peabody, MA: Hendrickson, 2008).
- CCH** Arthur C. Cochrane, *Reformed confessions of the sixteenth century* (London: S.C.M. Press, 1966).
- CoT** [Council of Trent] *The canons and decrees of the sacred and œcumenical Council of Trent, celebrated under the sovereign pontiffs, Paul III, Julius III and Pius IV* (*Canones et decreta Sacrosancti Oecumenici et Generalis Concilii Tridentini*, 1564), trans. James Waterworth (Chicago: The Christian symbolic publication society, 1848).
- CER** T. H. L. Parker, *Commentaries on the epistle to the Romans 1532-1542* (Edinburgh: T. & T. Clark, 1986).
- CR** [Catechismus Romanus] *Catechism of the Council of Trent for parish priests, issued by order of Pope Pius V* (*Catechismus ex decreti Concilii tridentini*, 1567) trans. John A. McHugh and Charles J. Callan (New York & London: Joseph F. Wagner & B. Herder, 1923).
- KJB** King James Bible (1611).
- SSCR** [Sebond, Screech] Sebond's prologue, translated from Latin into English in M. A. Screech, 'Introduction', in *Michel de Montaigne: the complete essays* (London & New York: Penguin Books, 1993).
- SAPX** [Sebond, appendix] Sebond's prologue, translated into French by Montaigne, and then from the French into English by M. A. Screech, in an appendix to Michel de Montaigne, and M. A. Screech (ed.), *The complete essays* (London & New York: Penguin Books, 1993).
- SLAT** [Sebond, Latin] Raymond de Sebond, *Theologia naturalis, siue liber creaturarum* (Lyon, 1540).
- SMON** [Sebond, Montaigne] Raymond de Sebond, *La Théologie Naturelle de Raymond Sebon*, trans. Michel de Montaigne (Tournon, 1605).

Introduction

Natural theology in the confessional age*

**My thesis could perhaps be better entitled 'Natural theology in the confessional age.' The reason for this alternative title is primarily a restraint of word limit: several other case-studies on the implications of my research applied to some philosophical tracts cannot fit in. Here, therefore, I provide an historical survey concerning the doctrine of natural theology in the late sixteenth- and early-seventeenth centuries, and hint at how an improved understanding in this area might provide useful tools for the study of late Renaissance natural philosophy.*

The relationship between science and religion has been at the forefront of one of the most vigorous historiographical debates of the last century. The Draper-White thesis, that the relationship was one of warfare, made an enduring impression particularly on the popular consciousness.¹ The 'conflict myth' in its purest guise has been almost entirely discredited, though historians still differ widely on the nature of the relationship between Christian faith and natural philosophy, ranging in their interpretations from distinterested coexistence to productive cooperation.² Many scholars have perceived that, regarding the general tenor of Renaissance discourse, a 'conflict thesis' seems inappropriate and a mere 'coexistence thesis' inadequate. A Christian worldview, theological considerations, institutional interactions and the personal faith of sixteenth- and seventeenth-century thinkers interacted in myriad ways with the philosophy they espoused. Some scholars have recognized the necessity of a certain grasp of Christian doctrine in order properly to understand early modern philosophy. In this bracket one could include Richard Popkin, Andrew Cunningham, and Kenneth Howell.³ Cunningham's thesis in particular, that natural philosophy was inherently

¹ The thesis of 'warfare' between science and Christian religion was advanced by the nineteenth-century American secularists John William Draper (1811-1882) and Andrew Dickson White (1832-1911) in the seminal works, John William Draper, *History of the conflict between religion and science* (London: King, 1875) and Andrew Dickson White, *A history of the warfare of science with theology in Christendom*, 2 vols. (New York: Appleton, 1896). Though the conflict thesis is becoming increasingly untenable and unfashionable in academic historiography, David C. Lindberg even last year described it as 'a widespread myth that refuses to die' (David C. Lindberg, 'The fate of science in patristic and medieval Christendom', in Peter Harrison ed., *The Cambridge companion to science and religion* (Cambridge & New York: Cambridge University Press, 2010), pp. 21-38, at p. 21).

² The suggestion that the relationship between science and religion can be interpreted through a *conflict, coexistence and cooperation* model, is Rivka Feldhay's ('Religion', in Katharine Park and Lorraine Daston eds., *The Cambridge history of science*, vol. III: *Early modern science* (Cambridge: Cambridge University Press, 2006), pp. 727-55, at p. 728). An influential quarto-partite classification (*warfare, independence, dialogue, and integration*) was suggested Ian Barbour in Ian G. Barbour, *When science meets religion: enemies, strangers, or partners?* (San Francisco: Harper, 2000).

³ See, for instance, Richard H. Popkin, *The history of scepticism: from Savonarola to Bayle*, rev. and expanded from 1979 original edn (Oxford & New York: Oxford University Press, 2003); Kenneth J. Howell, *God's two books: Copernican cosmology and biblical interpretation in early modern science* (Notre Dame, Indiana: University of Notre

‘about God,’ has precipitated a vigorous debate.⁴ But in my view the most fruitful work has been done by historians such as Peter Harrison and Sachiko Kusukawa, who have seen how particular theological tropes and confessional allegiances have translated into distinctive philosophical developments.⁵ A broad ‘religion and natural philosophy’ narrative is too broad and amorphous to be very historiographically useful, whereas an awareness of the impact of particular doctrines can provide much more meaningful insight. Natural theology is a key area of Christian doctrine that is appropriate for scholars to consider the relationship of natural philosophy to Christian theology. It is also one that has been much misunderstood.

Natural theology defined

What is, or was, natural theology? It is a problematic term to define. The phrase ‘natural theology’ itself sometimes meant one thing, sometimes another; from being synonymous with metaphysics or ‘first philosophy,’ to being an apologetic tool; from being an aspect of philosophy to being a part of revealed theology; from being the activity of ancient idolatrous pagans to being the sacrifice of praise of pious Christians. Etymologically, there is a case for suggesting that natural theology (*theologia naturalis*) is defined by the great success of one book – the *Liber naturae sive creaturarum* and known later simply as *Theologia naturalis* – which, being written in the 1430s by the Catalan scholar Raymond de Sebond, went through scores of published versions over the following two centuries.⁶

Dame Press, 2002); and Andrew Cunningham and Roger French, *Before science: the invention of the friars' natural philosophy* (Aldershot: Scolar Press, 1996).

⁴ The ‘Cunningham thesis’ was established in the 1990s in the following works: Andrew Cunningham, ‘How the *Principia* got its name; or, taking natural philosophy seriously’, *Historical studies in the physical and biological sciences* 20 (1991), pp. 377-92; Andrew Cunningham and Perry Williams, ‘De-centring the ‘big picture’: the origins of modern science and the modern origins of science’, *British Journal for the History of Science* 26 (1993), pp. 407-32; Cunningham and French, *Before science*. His thesis has both devotees (such as Stephen Gaukroger and Sachiko Kusukawa) and detractors (see Peter Dear and Andrew Cunningham, ‘Religion, science and natural philosophy: thoughts on Cunningham's thesis, together with Cunningham's reply’, *Studies in the History of the Philosophical Sciences* 32 (2001), pp. 377-86; and Edward Grant, *A history of natural philosophy from the ancient world to the nineteenth century* (Cambridge: Cambridge University Press, 2007).

⁵ See Peter Harrison, ‘Original sin and the problem of knowledge in early modern Europe’, *Journal of the History of Ideas* 63 (2002), pp. 239-60, Peter Harrison, *The fall of man and the foundations of science* (Cambridge: Cambridge University Press, 2007) and Sachiko Kusukawa, *The transformation of natural philosophy: the case of Philip Melancthon*, *Ideas in context* (Cambridge & New York: Cambridge University Press, 1995).

⁶ The term ‘*theologia naturalis*’ appears in Augustine’s *City of God* books 6-8, as a pejorative term to describe the inferior theologies of pagan philosophers, and was probably borrowed by the Father from the three genera (*mythicon/fabulosa*, *physicon/naturalis* and *civile*) of theology in the work of M. Terentius Varro. The phrase only ever appears as an Augustinian quotation throughout the Middle Ages, getting a novel and positive airing only in the fifteenth century. Sebond’s book therefore almost ‘re-coins’ the phrase, and certainly carries the main Renaissance association. See John J. Collins, ‘Natural theology and biblical tradition: the case of hellenistic Judaism’, *Catholic Biblical Quarterly* 60 (1998), pp. 1-15. Another phrase that has described the same set of doctrines and activities is ‘physico-theology,’ and in some contexts, such as modern Lutheran dogmatics, this later phrase (originating in the mid-seventeenth century) has come to predominate (See S. Lorenz, ‘Physikotheologie’, in Joachim Ritter, Günther Bien and Rudolf Eisler eds., *Historisches Wörterbuch der*

'Natural theology' makes occasional appearances as a particular discipline in classifications of the sciences. Sometimes it is simply a synonym for metaphysics, the science of immaterial beings; sometimes it stands for 'first philosophy' – a science concerning the foundations of reality and first principles of knowledge; and sometimes it is a subdivision of theology.⁷ Francis Bacon was right to note that the whole area of metaphysics, *philosophia prima* and natural theology was a 'Rapsodie' of ideas, activities, and practices 'strangely commixed and confused.' Bacon suggested a more rigorous defining of natural theology that restricted its meaning to the knowledge of God gained from His creatures.⁸ In this thesis I have, one could say, followed Bacon's advice: I have avoided pure metaphysics and 'first philosophy,' instead looking for how the study of nature was applied to affect knowledge of God and religion. In any case, it is a mistake to get too preoccupied with the particular phrase: the underlying doctrine and its interactions with other areas of theological and philosophical thought is the important thing. Equivalent phrases such as 'natural revelation,' 'the natural knowledge of God,' 'the theology of nature,' and other such variants as well as the 'book,' 'mirror' and other natural theological metaphors are, in my view, just as relevant to and useful for an investigation of how early modern thinkers thought the world they inhabited and examined related to the knowledge of its Creator.⁹ Any attempt to define natural theology too narrowly and precisely is inadequate. For if it is defined in, say, a curricular sense as a branch of philosophy, then the vast discussions of natural revelation in theological works are excluded; if it is a subsection of sacred

Philosophie, vol. VII (Darmstadt: Wissenschaftliche Buchgesellschaft, 1989). It is possible that a Chinese wall could be erected between natural and physico-theology, or that preference for one term over the other betrays a certain theological leaning, but since 'physico-theology' is a term coined later than the period under my consideration I have not exercised myself in investigating such possibilities.

⁷ See, for instance, James A. Weisheipl, 'The nature, scope, and classification of the sciences', in D. C. Lundberg ed., *Science in the middle ages* (Chicago & London: Chicago University Press, 1978), pp. 461-82, at p. 471. Charles Lohr in *The Cambridge History of Renaissance Philosophy* includes natural theology in his survey of metaphysics on the grounds that both are an extra-scriptural philosophy of the divine (see Charles H. Lohr, 'Metaphysics', in Charles B. Schmitt, Quentin Skinner and Eckhard Kessler eds., *The Cambridge history of renaissance philosophy* (Cambridge: Cambridge University Press, 1988), pp. 537-638). Joseph Freedman suggests that natural theology begins to appear as a new subject in the classification of philosophy in the seventeenth century. See Joseph S. Freedman, 'Professionalization' and 'Confessionalization': the place of physics, philosophy, and arts instruction at central European academic institutions during the Reformation era', *Early Science and Medicine* 6 (2001), pp. 334-52, at p. 335; and Joseph S. Freedman, *Philosophy and the arts in central Europe, 1500-1700: teaching and texts at schools and universities* (Aldershot: Ashgate, 1999), p. 47.

⁸ Francis Bacon, *The Advancement of Learning* (1605), in Michael Kiernan ed. *The advancement of learning* (Oxford: Clarendon, 2000), p. 76.

⁹ It has been suggested that natural theology ought to be distinguished from the theology of nature, for instance in Lionel Windsor, *Wisdom literature and natural theology*, (2004), Available: www.lionelwindsor.net/bibleresources/bible/.../Wisdom_Natural_Theology.rtf, p. 3, and in Jonathan R. Topham, 'Natural theology and the sciences', in Peter Harrison ed., *The Cambridge companion to science and religion* (Cambridge & New York: Cambridge University Press, 2010), pp. 59-79, at pp. 59-60. The 'theology of nature' is, Windsor argues, posterior to special Scriptural revelation, whereas 'natural theology' is prior to it. The distinction that he makes, along with the observation that the two have often been confused, is perhaps useful; but the semantic difference is not one that I find expounded in the work of any early modern theologian. Apart from anything else, the fact that that 'theologia naturalis' would be the Latin rendering of either phrase shows that the distinction is likely to be a later development.

theology, then what are we to make of the presence of natural theological arguments in works of natural philosophy? Jonathan Topham in a recent contribution to a volume on the relationship of science and religion conceded that the term admits of a variety of ever shifting meanings – acknowledging that ‘the arguments of natural theology have been used for a wide variety of purposes, which can easily be obscured by the imposition of an essentialist definition.’¹⁰ In my view the most fruitful way to define it is not to impose any disciplinary boundaries but to consider it in the following way: natural theology was in essence the answer to the question, ‘what can be known about God and religion from the consideration of nature?’¹¹

That something, somehow, sometime could be known about God and religion from contemplating the world with man’s natural faculties was a mainstay of Christian theology throughout its history, tracing its roots to biblical sources. Many parts of the Old and New Testaments were cited in connection with the revelation of nature, but a few key texts emerge as the most influential. St Paul’s Epistle to the Romans is without doubt the most important:

The wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who hold the truth in unrighteousness; because that which may be known of God is manifest in them; for God hath shewed it unto them. For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse.¹²

The primary example of Old Testament precedent was the first verses of Psalm 19:

The heavens declare the glory of God; and the firmament sheweth his handywork.
Day unto day uttereth speech, and night unto night sheweth knowledge.
There is no speech nor language, where their voice is not heard.¹³

It is not necessary here to list the other frequently-cited sources that informed the doctrine of natural theology, though the account of creation (Genesis 1), parts of the book of Job, the book of Wisdom (for Roman Catholics) and Paul’s speech in the Areopagus (Acts 17) each had significant bearing. Because of these sources, Christian theologians believed that nature was some kind of *revelation* – that in some way, the created world was meant to impart religious knowledge. This doctrinal position was certainly present in Renaissance theology and philosophy – both before and after the Reformation – as can be seen by the ubiquity of the ‘book of nature’ metaphor. As Raymond de

¹⁰ Topham, 'Natural theology and the sciences', p. 59.

¹¹ I am not alone in preferring to avoid defining natural theology as a discrete doctrine that could be specifically located. The scholar of Catholic theology John J. Collins is absolutely right to explain that ‘natural theology was a process rather than a doctrine. It was the attempt to arrive at the knowledge of God by reflection on the natural order’ (Collins, 'Natural theology and biblical tradition' p. 3).

¹² Rom 1: 18-20 (KJB). Romans 1:20 has been called ‘the foundation of all natural theology in the Renaissance’ (M. A. Screech, 'Introduction', in, *Michel de Montaigne: the complete essays* (London & New York: Penguin Books, 1993) xxvii).

¹³ Ps 19:1-3 (KJB).

Sebond put it, 'God has given us two books: the Book of the Universal Order of Things (or, of Nature) and the Book of the Bible.'¹⁴ Natural theology, then, could in one sense be defined as the theological content read in the Book of Nature.¹⁵ The visible Work somehow reflected the invisible Workman – natural theology was uncovering the eternal and invisible through the temporal and tangible. In the words of the Jesuit controversialist Robert Bellarmine (1542-1621), natural theology was to 'ascend as far as we could through created substances.'¹⁶

The question of natural theology does not only involve what nature revealed, but what man *by nature* could thereby know in terms of innate and acquired knowledge. Consider the following definition by James Barr:

Traditionally 'natural theology' has commonly meant something like this: that 'by nature,' that is, just by being human beings, men and women have a certain degree of knowledge of God and awareness of him, or at least a capacity for such an awareness.¹⁷

In other words, for there to be such a thing as natural theology is attendant not only upon God's signification through the visible forms of the created world, but also on man's capacity to reason from the world and from himself to knowledge of matters divine. The two ingredients for natural theology – if you like the content of the book of nature and man's natural ability to read it – have to be considered simultaneously in order to answer the question 'what can be known about God and religion from the contemplation of nature?' in a doctrinally accurate way.

In the existing scholarship, three errant assumptions are often made about natural theology. They are that natural theology is,

1. By definition independent of, or preceding, revelation,
2. Merely proving the existence of God to atheists,
3. An ecumenical discipline devoid of confessional features.

¹⁴ Raymond de Sebond, in Screech, 'Introduction', p. lvii.

¹⁵ Fernando Vidal and Bernhard Kleeberg's definition of natural theology is 'the knowledge of God drawn from the "book of nature," in contrast to knowledge of God contained as revelation in the "book of scripture."' This definition is one of the best because it preserves the unity of object and diversity of means while (via the book metaphor) maintaining the revelatory character of nature itself. In the terms of the definition, moreover, it does not prejudice *what* can be known about God and *to what end*. See Fernando Vidal and Bernhard Kleeberg, 'Knowledge, belief, and the impulse to natural theology', *Science in Context* 20 (2007), pp. 381-400, at p. 381.

¹⁶ Robert Bellarmine, *De ascensione mentis in Deum per scalas rerum creatorum opusculum*, in John Patrick Donnelly and Roland J. Teske eds., *Spiritual writings*, The classics of Western spirituality (New York: Paulist Press, 1989), pp. 49-234, at p. 154.

¹⁷ James Barr, *Biblical faith and natural theology*, Gifford lectures (Oxford: Clarendon, 1993), p. 1.

1. Independent of revelation?

Among scholars who defined natural theology in terms of its dichotomous independence from revealed theology is Jonathan Topham, who described it as theology 'which relies on reason (which is natural), *unaided by any evidence from God's revelation* through scriptures, miracles or prophecies (which is supernatural).'¹⁸ Renaissance thinkers on both sides of the confessional divide, albeit in different ways, did not define natural theology in strict, necessary contradistinction to revelation. As we shall see, Catholics would challenge such an assumption on the basis that reason and nature were the basis for the higher revelation of faith through Scripture and the Church; Protestants would deny the ability to do a true and worthwhile natural theology without doing so through a Scriptural perspective. Moreover, reason and nature were involved in Scriptural exegesis, while Scripture was sourced for explanations of natural phenomena. The idea that natural theology is an approach to God in the absence of 'revelation' also fails to account for the fact that nature *was itself a species of revelation* in which God actively made Himself known to man, both through signification from without, and assistance (by an imbued innate knowledge or by the assistance of a species of grace) from within. Natural theology cannot be divorced from revelation as if the two were alternatives; rather, the former was an aspect of the latter. Occasionally, the effect of historians' anachronism in this definition is easy to discern. Topham, sticking to his definition of natural theology as entirely independent of biblical revelation, considers the case of the famous *Bridgewater Treatises* of the 1830s: these eight works, founded by a bequest which specified works on the 'power, goodness, and wisdom of God as manifested in the creation,' did not, according to Topham, 'specify that the authors should develop a natural theology as such, since they implicitly allowed that the divine attributes could be made manifest in creation by the light of revelation as much as by reason.'¹⁹ Even for the nineteenth century, the strict dichotomy of reason and revelation is unsustainable and leads historians to dismiss the clearest examples of natural theology as really being some other activity.

¹⁸ Topham, 'Natural theology and the sciences', p. 59. My emphasis. John J. Collins similarly defined natural theology as 'the attempt to give an autonomous account of the common human experience independently of special revelation' (John J. Collins, 'The biblical precedent for natural theology', *Journal of the American Academy of Religion* 45 (1977), pp. B:35-67, at p. 42).

¹⁹ Topham, 'Natural theology and the sciences', p. 70.

The idea that natural theology is something pedagogically *prior* to faith and Scriptural theology is more meaningful and promising.²⁰ In Catholic theology, as we shall see, natural theology did provide the intellectual preambles to, or moral preparation for, faith; nature was the foundation which was perfected by grace; the beginnings of justification were ‘natural’ and its consummation supernatural. Natural theology as the rational preambles to revealed faith reflects fairly accurately an enduring medieval dichotomy between reason and faith; not one in which the two were opposed, but one in which the cogitations of natural reason were a ‘handmaid’ to the higher revealed mysteries. Though a definition of natural theology as prior to faith is a true reflection of the views of some (particularly Thomist Catholics), it was not for others, and must therefore be rejected as its defining characteristic. For Calvinists, for instance, natural theology was only useful if it *followed* rather than preceded faith, regeneration, and Scripture. A dichotomy between natural theology and faith, moreover, obviates the possibility that reading the book of nature could be an exercise *of* faith. Was the reasoned consideration of nature for theological ends something independent from the religious act of a Christian believer? Not necessarily. Did the Church’s promulgation and defence of the faith have no place for reason and her observations and deductions? By no means. Was a reasoned natural theology independent of Scriptural authority and church discipline? Certainly not. And so a distinction between reason and natural theology on the one hand, and faith and revealed theology on the other, has only limited application.

2. *Proving the existence of God?*

While natural theology was the answer to the question, ‘what can be known about God and religion from a contemplation of nature?’ it remains to be examined why the question was worth asking. What was the point of approaching matters divine through the creation? The traditional answer – I would say assumption – is that the point of natural theology was to convince atheists of the existence of God by means of rational proofs drawn from an observation of the natural world.²¹ On a cursory first inspection, it seems to be an uncontroversial assertion: probably the two best-known

²⁰ James Barr claims that a definition of natural theology ought to include that ‘this knowledge or awareness exists anterior to the special revelation of God made through Jesus Christ, through the Church, through the Bible,’ and that ‘it is this pre-existing natural knowledge of God that makes it possible for humanity to receive the additional “special” revelation.’ Barr, *Biblical faith and natural theology*, p. 1.

²¹ Harold Fruchtbaum defined natural theology as ‘the argument for the existence of God based on the supposed evidence of design and order in the universe’ (Harold Fruchtbaum, ‘Natural theology and the rise of science’, unpublished PhD thesis, Harvard University, 1964, p. i). Jonathan Topham argued that many references to design in nature have been called ‘natural theology’ erroneously because they were not explicitly ‘intended to provide a rational argument for the existence and attributes of God independent of the Christian revelation’ (Topham, ‘Natural theology and the sciences’, p. 60). Paul Richard Blum defines it as the proof of God’s existence from design – unnecessarily limiting both its means and ends (Paul Richard Blum, ‘Philosophy in the renaissance’, in Paul Richard Blum ed., Brian McNeil trans., *Philosophers of the renaissance* (Washington D.C.: The Catholic University of America Press, 2010), pp. 1-11, at p. 4).

expressions of natural theology seem to have this as a prime motivation. Thomas Aquinas' celebrated *quinque viae* attempted to prove the existence of God by a series of five reasoned observations attended by compelling logical deduction. Six centuries later, William Paley's *Natural Theology* (1802) seemed to have a similar preoccupation, giving voice to the now famous 'watchmaker analogy' to prove the existence of God from the intricacy of design in the created order. But these examples do not permit historians to take a shortcut from medieval scholastic to post-Enlightenment theology and philosophy. In fact, thinking that natural theology was always about merely proving God's existence leads to some serious anachronisms regarding the early modern context. Keith Thomson, examining the early modern activity of 'reconciling God and nature,' in defining natural theology argued that 'Deist and Christian alike could find much to favour in a movement that sought to discover God through rational study without depending on a belief in miracles or insisting on the literal truth of the Bible.'²² Similarly, Pyenson and Sheets-Pyenson equate Deism and natural theology as in essence the same activity of demonstrating the great Designer behind the natural world.²³ These scholars perpetuate the inaccurate approach to doctrines of natural theology by confusing its ends with that of generic theism and thereby risk oversimplifying hundreds of years of preceding Christian theology and philosophy: the thinkers on both sides of the late Renaissance confessional divide considered in this thesis would be horrified to think that their natural theology was proof for the impersonal and disinterested god of eighteenth-century Deists. The natural theology of the late Renaissance was *Christian*. Never merely about proving God's *existence*, natural theology concerned God's attributes, character, essence, relationship to humanity, moral law, and even providential will. The study of the Book of Nature was applied to a range of Christian ends, from buttressing faith by demonstrating the reasonableness of doctrines, to effecting moral reformation and inciting praise and worship.

Another problem with defining natural theology as proving the existence of God to atheists, is the non-existence of atheists. The 'problem of atheism' has exercised a generation of scholars, but most now agree that speculative atheism – the positive, reasoned denial of the existence of God – was rare indeed in private, the subject of scandalous gossip in public, and unheard of in print. If natural theology was about convincing atheists, there would be very little point to it, there being so few atheists to convince. There simply does not appear to be the theoretical 'market' for arguments for God's existence drawn from nature. Harold Fructbaum has written that 'the message of natural

²² Keith Stewart Thomson, *Before Darwin: reconciling God and nature* (New Haven, CT & London: Yale University Press, 2005), p. xii.

²³ Lewis Pyenson and Susan Sheets-Pyenson, *Servants of nature: a history of scientific institutions, enterprises, and sensibilities* (New York: W.W. Norton, 1999), 396ff.

theology...spared men the terror of living in a godless universe created by chance.'²⁴ But that was a terror not yet felt and that godless universe was not yet imagined. The point of natural theology, therefore, could not have been primarily intended to provide natural proofs of the existence of God to atheists: it was much broader in scope and aim.²⁵

3. *Non-confessional?*

If natural theology really was about the existence of God, it might make sense for it to be non-confessional; to have no distinguishing sectarian features. It would also suggest an ecumenism of purpose: since the lowest-common-denominator of God's existence was in view, then Protestants and Catholics might be expected to work together to formulate the most convincing natural proofs. But since natural theology was indicative of a much fuller doctrine of God, and since it was (as we shall see) closely related to doctrines of particular sectarian sensitivity (such as revelation, the role of grace, and justification), natural theology admits of considerable confessional distinctives.

The relative importance of natural theology in the two confessions is difficult to ascertain. On the one hand, it appears that Protestantism had a peculiar affinity for natural theology: probably the majority of the early modern writers whose works have been identified as works of natural theology were confessing Protestants.²⁶ While intellectual historians have tended to assume a positive correlation between Protestantism and natural theology, some historians of theology have often argued the precise opposite. It has been thought inconceivable that Lutheranism could embrace any notion of God being revealed outside of the Gospel, while the Swiss Reformed mid-twentieth century theologian Karl Barth caused an internecine debate on the very *existence* of natural theology in historic sixteenth-century Calvinism and its subsequent legitimacy within the Reformed tradition.²⁷ Historians considering natural philosophy in the late Renaissance seem largely oblivious

²⁴ Fruchtbaum, 'Natural theology and the rise of science' p. vi.

²⁵ Some scholars have recently made this point. James Barr in his invaluable guide to biblical natural theology correctly argued that 'natural theology as it has traditionally been has included much more than the proof by reason of the existence of God.' Barr, *Biblical faith and natural theology*, pp. 2-3. Vidal and Kleeberg also recognised that natural theology went 'far beyond a refutation of atheism through the argument from design,' suggesting instead 'a broader and more complex natural theological impulse' (Vidal and Kleeberg, 'Impulse to natural theology' p. 396).

²⁶ Ann Blair noted that 'the genre often seems dominated by Protestant authors.' Ann Blair, *The theater of nature: Jean Bodin and renaissance science* (Princeton, NJ & Chichester: Princeton University Press, 1997), p. 24.

²⁷ The debate was largely conducted by Karl Barth (1886-1968) and his long-time Reformed colleague in neo-orthodoxy and fellow countryman Emil Brunner (1889-1966). Brunner wrote a piece suggesting that the time was ripe for a new natural theology; Barth famously replied with a counter-argument entitled 'Nein,' and the pamphlets, published originally in 1934, were translated into English and published in a single volume in 1946 as, Emil Brunner and Karl Barth, *Natural theology: comprising "Nature and Grace," and "No"* (London: Geoffrey Bles, The Centenary Press, 1946).

to this controversy: but Barth's assertion that Calvinism entailed the complete uncompromising rejection of natural theology was, according to the Swiss, robustly historically supported.

What then, of Catholicism? Just as with Protestantism, there are conflicting theological impulses that pull on natural theology from opposite directions. For instance, a high view of church authority and the administration of its sacraments for approaching God mitigates against the possibility of natural theology pertaining to knowledge of divine matters; while the belief that man's natural reason remained powerful and his will free despite the Fall commends a certain optimism. In addition, the orthodox position that some articles of Christian faith completely transcend natural reason has to be balanced against the Roman Church's vigorous denunciation of a fideist approach to revealed truths.²⁸ John Collins, who studied the influence of biblical and Hellenic Jewish sources on the doctrine of natural theology, asserted that 'natural theology is traditionally associated with Catholic sensibilities,' and noted that it remains endorsed – in apparent continuation from Trent – in the official Catholic catechisms.²⁹ Karl Barth argued that natural theology was only found within Roman Catholicism and the bastardised (as he saw it) versions of 'modern Protestantism.' Early modern Catholic natural theology, however, has been almost completely neglected. The few monographs on natural theology in the sixteenth and seventeenth centuries have focussed overwhelmingly on the Protestant tradition – in fact, more narrowly still on seventeenth-century English Puritanism. But in fact, within Catholic confessional and philosophical literature, natural theology is a live and debated issue with important implications for other doctrines and the attitude toward study of the natural world. This thesis intends partly to redress that balance.

Different doctrinal positions and theological emphases in the two confessions give each a particular flavour that will emerge in the course of this thesis. Without detailed doctrinal contextualisation, one might be led to assume that natural theology was an ecumenical activity, uniting the Christians of Europe in a joint assault on atheists. Witness, for example, this claim by Ann Blair:

Given its general natural theological usefulness, natural philosophy elicited considerable agreement across confessional lines not only within Christianity but also among the Jewish minorities.³⁰

Blair argues that natural theology, which she defines as 'arguments from design that defended the existence and worship of God,' was ecumenical because its end was so limited (showing that God

²⁸ Indeed, 'Roman Catholicism has condemned fideism as a heresy and has found it a basic fault of Protestantism.' Popkin, *History of scepticism*, pp. xxii.

²⁹ Collins, 'Natural theology and biblical tradition' p. 1. The First Vatican Council declared that 'God...can be known with certainty by the natural light of human reason from the works of creation' (Concilium Vaticanum I, *Constitutio dogmatica*, chap. 2, "De revelatione" – cited in Collins' article).

³⁰ Ann Blair, 'Natural Philosophy', in Katharine Park and Lorraine Daston eds., *The Cambridge history of science*, vol. III: *Early modern science* (Cambridge: Cambridge University Press, 2006), pp. 365-406, at p. 383.

existed and ought to be worshipped). Blair elsewhere described natural theology as 'by definition largely nonconfessional,' and that 'in the late Renaissance natural theology offered grounds for agreement among the warring religious parties by demonstrating from reason alone a common core of piety,'³¹ but does not provide evidence to support what I fear is a modern assumption. Indeed in that book, Blair conceded that 'some [natural theologies] contained sectarian references,' but she appears to restrict confessional distinction in terms of blatant polemics rather than broader doctrinal allegiances.³² Jonathan Topham too claims that natural theology was a 'common core of rational belief on which people of different theological views could agree' but offers no evidence that it was positively non-confessional and does not investigate confessional differences.³³

Some scholars have opposed the 'ecumenism thesis' concerning late Renaissance natural theology and seen it as much more polemical. John Henry suggests that a 'sudden encroachment' of theology into natural philosophy in the late sixteenth century was occasioned by a polemical aim to show that nature vindicated a 'particular brand of religion better than any other.'³⁴ Harold Fruchtbaum has similarly explained the rise in popularity of natural theology in seventeenth-century England as attributable to increased occasion for polemics: 'Epicureans, atheists, Catholics, and feuding Protestants created a rich environment for natural theology, and it flourished.'³⁵ It was for Fruchtbaum because of its polemical potential that works of natural theology proliferated and thus provides a rejoinder to the argument that natural theology had a ministry of Christian unity. But it is primarily for deep-rooted doctrinal reasons (reasons that Fruchtbaum does not supply) that an ecumenism of purpose cannot have been the case: Protestants and Catholics had significantly divergent views of natural theology. Natural theology was an area of doctrine, like any other, included in official statements of faith and subject to ecclesiastical oversight and even discipline.³⁶ There is no reason to think that natural theology would be exempt from the thoroughly agonistic dimension of late Renaissance theology. We cannot impose a pan-confessional, lowest-common-denominator approach to Christian apologetics that was utterly alien to the post-Reformation. The idea that natural theology united theists of all hues and that that explained cooperation in natural philosophical endeavor is based more on anachronistic assumption than on sixteenth-century

³¹ Blair, *Theater of nature*, pp. 25, 6.

³² *Ibid.*, p. 24.

³³ Topham, 'Natural theology and the sciences', p. 64.

³⁴ John Henry, 'Religion and the scientific revolution', in Peter Harrison ed., *The Cambridge companion to science and religion* (Cambridge & New York: Cambridge University Press, 2010), pp. 39-58, at p. 43.

³⁵ Fruchtbaum, 'Natural theology and the rise of science' p. 96.

³⁶ Zabarella, for instance, was denounced to the inquisition for questioning the persuasive value of Aquinas' *quinque viae*, while there are many sixteenth-century examples of the disciplining of natural philosophers who denied that the immortality of the soul could be proven by reason alone. Both these cases involve the institutional defence of a confessionally-distinct dogma concerning the knowability of matters divine from the inspection of the natural world.

theological and philosophical analysis. I do not intend to convey the impression that the differences regarding natural revelation were as marked, as bitter, or as trenchant as those regarding the doctrine of Scripture or justification: it must be conceded that the theology of nature, while a battleground, was not in general considered the main locus *in itself* where souls would be won and lost. For instance, T.H.L. Parker, in his survey of commentaries on the Epistle to the Romans between 1532 and 1542 (a period of particular interest in that part of the biblical canon) was able to write that exegesis of the first three chapters of the book (that part of the New Testament most pertinent to questions of natural theology) did not feature ‘the rabid polemic against the heretics’ that could be said to characterise other religious works of the period.³⁷ Nevertheless, the doctrine of natural theology permeated the various doctrines that were most vehemently contested – such as soteriology, the role of Scripture, postlapsarian depravity, and the place of good works.

The confessional age

In seeking to explain why natural theology cannot be defined as strictly independent of revelation, about proving the existence of God, and as a non-confessional area of doctrine, this thesis also plugs something of an historiographical gap. Scholarship on natural theology focuses in three main areas: the patristic, the medieval, and a period from around the mid-seventeenth century to the mid-nineteenth. Some scholars speak as if the doctrine were invented sometime in the seventeenth or eighteenth centuries. Keith Thomson in *Before Darwin: reconciling God and nature*, describes the *Natural Theology* of William Paley in 1802 the capstone of a ‘new movement’ that was welcomed by some and treated with suspicion by others.³⁸ Last year John Henry asserted that,

Arguably, the earliest contributions to this particular manifestation [natural theology] of the coming together of science and religion were *The Darknes of atheism dispelled by the light of nature* (1652), by Walter Charleton (1620-1707), and Henry More’s *Antidote against atheism* (1653). From these beginnings, natural theology went on from strength to strength.³⁹

Arguably indeed! The *Theologia naturalis* of Sebond more than suffices to disprove this assumption. Many more examples of arguments that pass over the sixteenth century could be supplied.⁴⁰ Of course, just as I argue that natural theology has not always meant the same thing, I also concede that

³⁷ T. H. L. Parker, *Commentaries on the epistle to the Romans 1532-1542* (Edinburgh: T. & T. Clark, 1986), p. viii.

³⁸ Thomson, *Before Darwin*, p. xii.

³⁹ Henry, ‘Religion and the scientific revolution’, p. 54.

⁴⁰ Pyenson and Sheets-Pyenson’s chronological account of the relationship of science and religion only mentions natural theology after first treating of the Enlightenment, Deism, and David Hume’s critique of natural religion. One gets from their book the wrong impression that natural theology was a response to the challenge of Enlightenment *philosophes* – indeed, natural theology and Deism are described as ‘a happy solution’ to the problem of reconciling the new materialist worldview with theist commitments Pyenson and Sheets-Pyenson, *Servants of nature*, p. 396.

it has not always had the same level of interest. It seems probable that natural theology, at least as a separate sphere of intellectual activity, rose in prominence in the early modern period and reached its zenith in seventeenth-century England. But we cannot divorce its heyday from its patristic and medieval ancestry, nor separate later autonomous formulations of the doctrine from its sixteenth-century confessional basis.

It is the state of natural theology in the decades of confessional formulation, after the Council of Trent and in the period when Protestant Churches draw up what will be their definitive articles of faith, that is largely missing from the historiographical narrative. With remarkable regularity, histories that discuss natural theology focus upon Aquinas and other medieval thinkers ranging from Anselm to Lull, and then pick up the story again in the second half of the seventeenth century.⁴¹ Is there any other theological topos that often skips the Reformation and its aftermath? The confessional age is often skipped over, and yet the intention to get to grips with an area of early modern doctrine surely necessitates careful study of the period in which orthodoxy was debated, defined, and defended.

The focus of this thesis is on the key authoritative theological tracts in the two confessions in the late sixteenth century. Catechisms, confessions, articles of religion, homilies, commentaries, systematic theologies and devotionals all feature in order to establish from a wide basis the doctrine of natural theology and expose the areas in which different doctrines diverged. I have largely focussed upon confessional orthodoxy; that is, the ideas and tracts that were broadly endorsed by official church bodies. This is by no means because there is not a wealth of interesting things to be said about the natural theologies of those on the fringes of, or beyond the bounds of, acceptable doctrine, but because the constraints of time and space necessitate a somewhat narrower focus. As a result, sixteenth-century 'heretics' such as the Socinians or those labelled 'Anabaptists' have largely not been considered, while figures like Giordano Bruno (1548-1600), trends such as hermeticism, and ideas such as natural magic and Kabbalah do not receive as much attention as would be desirable.

Through this survey, I have been made aware of the need for clear theological sensitivity in a number of areas. I will explain briefly some of the phrases which I have found it necessary to use

⁴¹ Vidal and Kleeberg's survey of the 'impulse to natural theology' ranges from Augustine's use of Varro's tripartite division of theology, through the twelfth and thirteenth century scholastics, mentions Sebond's work of the 1430s, but draws the next example (Robert Boyle) from some 260 years later. The contributions to their volume also reflect the historiographical hole of the century of the Reformations: going from Aquinas to the late seventeenth century with nothing in-between. See Vidal and Kleeberg, 'Impulse to natural theology'. Jonathan Topham notes a 'laxity' regarding historians' treatment of natural theology, but in his examination of natural theology's interaction with science, goes straight from Aquinas to Thomas Sprat in the 1660s (save an unanalysed pit-stop with Bacon's *Advancement of Learning* from 1605). None is cited from the century of the Reformation and Counter-Reformation (Topham, 'Natural theology and the sciences').

relating to the 'threefold state of man,' clarity on which is invaluable for illuminating the differences in doctrines and sources of historiographical confusion. The *Second Helvetic Confession* of 1566 was typical in teaching 'a threefold condition or state of man,' namely, '*What Man Was Before the Fall...What Man Was After the Fall...[and] the Regenerate.*'⁴² The terms I use on occasion, therefore, are *prelapsarian* and *postlapsarian* to delineate between man in Edenic paradise and his fallen state; and *pre-fideal* and *post-fideal* to delineate between the (postlapsarian) man who has not been given the grace of Christian faith, and he who has. Other terms could be used for this second distinction in particular, but they sometimes have confusing or pejorative connotations that might obscure the issue.⁴³ The terms I use are not absolutely unequivocal: 'pre-fideal', for instance will sometimes imply someone on a spiritual-intellectual journey to an anticipated Christian faith; it will often refer to people of sincere religious, but not Christian, faith; and it will sometimes refer to the reprobate for whom faith would never come. The term is useful for distinguishing those who have received the gift of saving faith and are therefore purported to have true and effective knowledge of the One True God, whatever the process and criteria for their justification and salvation. Because that state of being a Christian believer normally (the Protestants would say necessarily) attended the reception of the Word of God in the Bible, I have sometimes used the term 'post-Scriptural' to indicate when someone has been 'enlightened' by the revealed Word. The three states of man are absolutely essential for properly understanding doctrines of natural theology and I hope that the terms I use serve to make it clearer rather than more obscure.

Part of the problem with the state of scholarship on early modern natural theology and indeed natural philosophy is the lack of broad theological integration. It is not possible to understand how the category of nature fitted into the theological worldview of a Renaissance Christian without also understanding how they regarded God, man, Christ, revelation (both particular and general), the Fall, the law of nature and of reason, justification, sanctification, salvation and a host of other doctrines. Questions, therefore, about these areas of doctrine are touched upon in what follows in order to provide that essential theological context for the question of what is revealed by nature and to what end. There is, thankfully, some excellent recent scholarship on some of these areas of doctrine and how it applied to the study of the natural world. Rivka Feldhay, for instance, noted the relationship between early modern epistemology and conflicting doctrines of soteriology.⁴⁴ Peter

⁴² *The Second Helvetic Confession* (1566), in Arthur C. Cochrane ed. *Reformed confessions of the sixteenth century* (London: S.C.M. Press, 1966), [CCH] p. 237.

⁴³ For instance, one might talk of the 'natural man' meaning fallen, non-Christian; or the elect, meaning the Christian believer; or the age of innocence (prelapsarian) versus the 'present age' (postlapsarian); of someone being 'reprobate' (pre-fideal) or 'in a state of grace' (post-fideal).

⁴⁴ Feldhay writes, 'the emergence of this characteristic early modern dialectic between religion and science should be understood against the background of a persistent tension regarding salvation that lay at the heart of

Harrison noticed the synergy between biblical literalism and the new philosophy before turning his attention to the anthropologies attendant on different versions of the doctrine of the Fall and how that commended, for instance, an empirical approach to natural philosophy.⁴⁵ In this thesis, therefore, I am able to use these theses as part of my attempt to comprehend the doctrine of natural revelation. The theological significance of nature has also been studied from an experiential, tangible and practical direction by historians such as Alexandra Walsham. That nature was thought to be imbued with theological significance and indeed, signification, emerges clearly from Walsham's work – showing an outworking of great interest in natural revelation in religious expression. Approaches to the theological role of natural contemplation at this practical level shows similarly confessional sensitivity: in Walsham's narrative, the visible world, steeped in doctrines of creation and providence, was in some ways shorn of its sacredness and divine immanence by the Protestant theology, while in other ways 'resacrilized' in a modified form.⁴⁶ My thesis, concerning the more theoretical and dogmatic confessional side of the question of nature's theological content, dovetails with Walsham's more practical work on the providential signification of nature and the impact of the Reformation and Counter-Reformation on attitudes to natural phenomena and holy places.

I also suggest that my thesis provides a useful framework with which to improve understanding of early modern natural philosophy. Historians who attend to the relationship of religious faith to natural philosophy would benefit greatly from a fuller understanding of doctrines of natural theology. Cunningham argues that natural philosophy was 'the study of God's creation and God's attributes...in a way different from that pursued by theology.'⁴⁷ Ann Blair also argues that what distinguishes natural philosophy from later natural 'science' was 'that natural philosophy was unified by its search for a better understanding of God – of divine creation...and divine laws.'⁴⁸ What is this except to say that natural philosophy had natural theology as its organising and

medieval Christian culture.' How faith related to other kinds of knowledge was of crucial import for understanding the spiritual value of studying the various aspects of the scholastic curriculum. Feldhay, 'Religion', p. 730.

⁴⁵ Harrison noted that 'competing strategies for the advancement of knowledge in the seventeenth century were closely related to different assessments of the Fall and of its impact upon the human mind.' Harrison, 'Original sin' p. 240.

⁴⁶ See Alexandra Walsham, *The reformation of the landscape: religion, identity, and memory in early modern Britain and Ireland* (Oxford: Oxford University Press, 2011).

⁴⁷ Cunningham, 'How the *Principia* got its name' p. 388. In Cunningham and Williams, 'De-centring the big picture' however, Cunningham argues that 'Natural philosophy was an autonomous study separate from theology and from natural theology [my emphasis], but whose practitioners had at the forefront of their minds...the same God whose attributes the theologians studied from other points of view' (p. 421). It is unclear how Cunningham is able to separate natural philosophy in this way from natural theology, which was the study of God through created things – the material of natural philosophy.

⁴⁸ Blair, 'Natural philosophy', p. 403.

motivating principle?⁴⁹ Given the vigorous debate on the relationship of theology to philosophy, confessional theories of natural theology have been somewhat understudied. I suggest that there has been an imbalance in historians' approach to the role of theology in the study of nature. God was, for early modern natural philosophers, the First Cause of nature. That much is well-established and generally accepted by all historians. According to Neo-Platonist emanation theories, God might be considered the Formal Cause. In instances of supernatural providence such as the miraculous and portentous, God was the Efficient Cause. But what if we were to recognise that for early modern philosophers, God was also the *Final Cause* – the end at which nature, and therefore natural philosophy, aimed?⁵⁰ Natural philosophy if shaped by a doctrine of natural theology indeed implicitly invokes God as first cause, as it concerns the world as His creation; but it can be differentiated from a later more secularised view of God's relationship to the world in also positing God as the end to which natural knowledge might tend. The currency of the 'book' and 'theatre' metaphors in early modern natural philosophy signify that the revelatory character of the creation was at the heart of its study.⁵¹ In some ways, therefore, this thesis aims to engage that live debate around the Cunningham thesis: if natural philosophy was 'about God,' then it is surely of paramount importance to ask 'how?' and 'why?' These are none other than questions to which natural theology supplies the answers.

In what follows, I examine the doctrine of natural theology in the confessional age by first considering Counter Reformation Catholicism (chapter 2), and post-Reformation Protestantism (chapter 3) broadly. There then follow some case-studies that illustrate doctrines of natural theology in a particular context. I have also considered the fifteenth-century *Theologia naturalis* of Raymond de Sebond because of its importance to the genre and terminology of natural theology and its continued currency in Counter-Reformation Catholic Europe (chapter 4), and the treatment of the deuterocanonical Book of Wisdom and how it was held to be indicative of an optimistic pre-fideist

⁴⁹ Some scholars, such as John Hedley Brooke and Vidal and Kleeberg, have recognized the central importance of natural theology for understanding the relationship of science and religion (see John Hedley Brooke, 'Science and Religion,' in Robert Olby, *Companion to the history of modern science* (Routledge, 1990) and Vidal and Kleeberg, 'Impulse to natural theology') but have not focused their attentions on the confessional age.

⁵⁰ Gregor Reisch used the term 'tri-causal' to describe God's relation to the world: 'God also binds together the causality of the said causes. For He is tri-causal: the Efficient cause, producing everything from nothing; the Formal cause, because He is the exemplar, containing the forms of all things in Himself; and the Final cause, to which everything tends.' Gregor Reisch, *Natural philosophy epitomised: books 8-11 of Gregor Reisch's Philosophical pearl* (1503), ed. Andrew Cunningham and Sachiko Kusukawa (Farnham: Ashgate, 2010), bk. VIII, ch. 13, pp. 37-38.

⁵¹ The importance of the metaphors themselves for understanding the Renaissance view of nature has lately been noticed, with a double volume on the subject from antiquity to modernity being published in the last few years: Arjo Vanderjagt and Klass van Berkel eds., *The book of nature in antiquity and the middle ages* (Leuven, Paris & Dudley, MA: Peeters, 2005) and Klass van Berkel and Arjo Vanderjagt, *The book of nature in early modern and modern history* (Leuven, Paris & Dudley, MA: Peeters, 2006).

natural theology (chapter 5), Philippe de Mornay's (1549-1623) reformulation of an apologetic natural theology in the *Traité de la vérité de la religion chrétienne contre les athées, épicuriens, payens, juifs, mahométans et autres infidèles* (1581) (chapter 6) and Lambert Daneau's (1535-1590) synthesis of Aristotelian philosophy and the biblical account of nature in the *Physica Christiana* (1576) (chapter 7). Finally, I will conclude with a summary of the key findings attained by the theological oversight afforded in this thesis and suggest how the confessional picture of natural theology began to change in the course of the seventeenth century.

I. Catholicism and natural theology

Introduction

In order to overcome some of the anachronisms and inaccuracies that have accrued concerning natural theology in the late Renaissance, an in-depth confessional consideration of the doctrine and its application is necessary. In this chapter I give Catholic natural theology the distinctive voice it merits, marking its differences from the Protestant account to which it was opposed. The Canons, Decrees and Catechism of the Council of Trent (1545-63) – constituting the authoritative statement of Counter Reformation Catholic orthodoxy – are essential to understand the intellectual context of Renaissance natural philosophy,¹ and in this chapter, therefore, constitute the major sources for establishing the mainstream Catholic doctrine of natural theology.² Catholicism was in many ways more slippery to define theologically than the Protestant sects (at least in the period we are considering) that rallied around certain dogmatic mottos (e.g. *sola scriptura*) and defined themselves in opposition to specific tenets of Catholic doctrine (e.g. justification or Church government). This makes the Tridentine texts even more essential, because they systematically present Catholic faith in a way that makes explicit the differences between acceptable dogma and those Protestant (and fringe Catholic) beliefs that were defined as anathema. The Tridentine sources are complemented by a range of other important Catholic texts, including mid-century Catholic commentaries on the Epistle to the Romans (whose first

¹ The Council of Trent began meeting in December 1545 under the instructions of Pope Paul III (pontificate 1534-49), to determine and define the doctrines of the Roman Catholic Church against the Protestant heresies, and to reform and renew the Church doctrinally and ecclesiologically in the light of recognised abuses. In its own words, the Council was called ‘for the increase and exaltation of the Christian faith and religion; for the extirpation of heresies’ (James Waterworth ed. *The canons and decrees of the sacred and œcumenical Council of Trent (1545-63), celebrated under the sovereign pontiffs, Paul III, Julius III and Pius IV* (Chicago: The Christian symbolic publication society, 1848) [hereafter ‘CoT’], p. 12). Over two hundred and fifty bishops were present during the course of the twenty five sessions through three pontificates (Paul III, Julius III and Pius IV) held by its close in December 1563. The best history of the Council remains Hubert Jedin, *Geschichte des Konzils von Trient*, 4 vols. (Freiburg: Verlag Herder, 1949-1975). The papal Bull, *Benedictus Deus* (26 January 1564) called for the publication of the Canons and Decrees (*Canones et decreta Sacrosancti Oecumenici et Generalis Concilii Tridentini sub Paulo III, Iulio III, Pio IIII, Pontificibus Max.*, (Rome, 1564)) and the promulgation of a Catechism to answer the need established in the final session of the Council for an authoritative statement to instruct priests and laity in the settled Catholic dogma. *Catechismus romanus ex Decreto concilii Tridentini: ad parochos*, (Venice, 1567) followed two years’ later. The Catechism was widely published throughout the remainder of the sixteenth century and beyond. See Gerhard J. Bellinger, *Bibliographie des catechismus Romanus: ex decreto Concilii Tridentini ad parochos, 1566-1978* (Baden-Baden: Koerner, 1983).

² The Council of Trent does not, of course, represent the breadth of Catholic belief, but we can take it to represent late sixteenth-century orthodoxy. Where there is a significant tradition that runs contrary to the legislating of Trent, I have included a wider array of sources – some of which were put on the Roman *Index Librorum Prohibitorum* in either or both of the sixteenth and seventeenth centuries.

two chapters constitute the Bible's richest source of natural theological argument),³ and catechismal works by leading counter-Reformation figures Robert Bellarmine (1542-1621) and Peter Canisius (1521-1597).⁴

Since sixteenth-century Catholicism was nothing if not scholastic, one must include reference to works by thirteenth-century figures Thomas Aquinas (1225-1274) and John Duns Scotus (1265-1308) who still had their devoted (and bickering) followers three and four hundred years later. Aquinas was championed by the Dominicans and the new, prolific and powerful Society of Jesus. The sixteenth- and seventeenth-century Jesuits rigorously defended the teaching of Aquinas, whose theological and philosophical *summa* undoubtedly formed the backbone of the structure of both sciences throughout the period.⁵ Scotus, for his part, had a great following in the various Franciscan orders, with the emergence in the late Renaissance of a Scotist school that grew in influence. Like Thomism, Scotism flourished in the sixteenth century: it formed the central teaching syllabus of several scholastic orders, specialist Scotist chairs were set up in many Catholic universities, and the works of the subtle doctor were collected, edited and published in several editions.⁶ Duns Scotus' influence on sixteenth-century Catholic scholastic theology and philosophy is also evidenced by the pejorative connotations his name ('Duns') possessed from the 1570s in Protestant England.⁷ The ecclesiastical approbation of Scotism is seen not only by the elevation of many Franciscans to senior Church posts, but also by the fact that none of the particularly Scotist propositions were censured by the Roman Church, while the Council of Trent adopted many doctrines especially emphasized by Scotus and his followers as dogma, including several that emerge as fundamental to the theology of natural revelation – such as the freedom of the will, the merit of good works, and the capacity and necessity for man's cooperation with grace.

³ Parker, *Commentaries on Romans*.

⁴ Robert Bellarmine, *Christian doctrine composed by Robert Bellarmine, translated into better English than formerly* (London, 1676); Peter Canisius, *A summe of Christian doctrine: composed in Latin, by the R. Father P. Canisius, of the Society of Iesus. With an appendix of the fall of man & iustification, according to the doctrine of the Council of Trent. Newly translated into Englishe*, trans. Henry Garnet (London, 1592).

⁵ Indeed, Gian Mario Anselmi argues that from the 1560s Jesuit teaching was defined by its total adherence to Thomism (Gian Mario Anselmi, 'Per un'archeologia della ratio: dalla 'pedagogia' al 'governo', in Gian Paolo Brizzi ed., *La ratio studiorum: modelli culturali e pratiche educative dei Gesuiti in Italia tra Cinque e Seicento* (Rome: Bulzoni Editore, 1981), pp. 11-42; cited in Rivka Feldhay, 'Knowledge and salvation in Jesuit culture', *Science in Context* 1 (1987), pp. 195-213, at p. 196).

⁶ The Franciscan Pope Sixtus V (pontificate 1585-90) amid a large number of important theologians, philosophers and churchmen could certainly be characterised as belonging to this Scotist school. For details of the 'Scotist school' in the sixteenth and seventeenth centuries, see Parthenius Mingos, 'Scotism and Scotists', in Charles G. Herbermann ed., *The Catholic Encyclopedia: an international work of reference on the constitution, doctrine, discipline and history of the Catholic Church*, vol. XIII (New York: The Encyclopedia Press, 1912).

⁷ The *Oxford English Dictionary* charts the use of the word 'dunce' to English Protestants' denunciation of Scholastic theology and philosophy: according to a Richard Stanyhurst in 1577, he 'who so surpasseth others either in cauilling sophistry, or subtile philosophy, is forthwith nicknamed a Duns' (*The Oxford English Dictionary*, 2nd edn., 20 vols. (Oxford: Clarendon, 1989)).

Aquinas and Scotus, alongside other medieval theologians such as Bonaventure (1221-1274) and Anselm (1033-1109), and in the context of patristic sources principally by Augustine, Ambrose and Basil, generally set the agenda for Renaissance Catholic natural theology. While there were occasional innovations as philosophical fads waxed and waned in the late Middle Ages (thinking particularly of Ramon Lull, c. 1232-1315) and early Renaissance (for example, Nicolas of Cusa (Cusanus), 1401-1464), natural theological arguments remained fairly constant through to the beginning of the Reformation when the debates concerning doctrines of man, grace, and revelation impacted upon the theology of nature and natural revelation. The authoritative publications arising from Trent, set within a scholastic and patristic tradition make 'Catholicism' a valid category for analysis. Of course, it is foolish to attempt to fit all Catholic theology and natural philosophy into a single framework. Many figures and groups who counted themselves Catholic did not accede to all the decrees of Trent. Trent was deliberately theologically 'conservative'; the Council was concerned with producing an authoritative statement of faith that could be robustly defended by Scripture, tradition, experience and reason. Those areas of faith and practice (however widespread) that had questionable defensibility on some of those fronts were silently passed over.⁸ In fact there was an amorphous tapestry of theological position within the Roman Church on probably every theological question both before and after the Council met. Nevertheless, it remains meaningful to speak of 'Catholic' natural theology insofar as there were patterns of Catholic thought regarding the key doctrines upon which natural theology was built – namely, the nature of the world as a creation and revelation, the nature and knowledge of God, the doctrine of man and the effects of the Fall together with his ends, means of justification and assistance by God's grace. Despite much variation in extents and emphases, a central commitment to Catholic dogma on these issues is possible – and important – to discern. Our Tridentine sources thus act as a plumb line against which to judge the elaborations of many Renaissance Catholics. In treating the Tridentine sources as the basic authority on matters religious for Catholic theologians and philosophers, we are only treating them as they were treated. Acceptance of and adherence to the decrees of the Council of Trent were vigorously enforced by the machinations of the Church politic as Trent sought to define dogma as opposed to the Protestant (and other) heresies. In addition to the infamous vehicles of the Inquisition, the Catechism was also positively commanded 'to be followed in all churches by those to whom are lawfully entrusted the duties of pastor and teacher,' being translated into the vernacular to effect this aim.⁹ These seminal sources must be seen as the foundation of any meaningful doctrinal category of late Renaissance Catholicism and it is my aim to treat them as such.

⁸ For instance, Limbo did not feature in the decrees of Trent, while the *Catechismus Romanus* was silent on indulgences.

⁹ John A. McHugh and Charles J. Callan eds., *Catechism of the Council of Trent for parish priests, issued by order of Pope Pius V* (New York & London: Joseph F. Wagner & B. Herder, 1923) [hereafter 'CR'], p. 4. Concerning

The creation of the world by God *ex nihilo* and in time, though in one sense uncontroversial and universal tenets of Catholic faith and philosophy, did provoke both embarrassment and debate given the teachings of Aristotle's *Physics*. The Philosopher's doctrine of the eternity of matter, for instance, had earned the ire of many a pious philosopher in the Middle Ages and the Renaissance ever since, through Aquinas, Aristotle's teaching had assumed almost canonical status. Further, the relative place of secondary causes compared to the First Cause, the mode of God's providential government of the world, and the question of God's freedom in creation, elicited pronounced philosophical disputes in the faculties of the Renaissance universities. Significant though those debates are for relating theological commitment to the understanding of the natural world, the focus of my research is the revelatory character of God's creation.

According to Trent, God's very purpose in creating the world was self-revelation: God did not create the world for 'any other cause than a desire to communicate His goodness to creatures.'¹⁰ In the first place, the world's creation itself was a testament to the creative power of God. The vastness of the world portrayed the infinity of God, its great antiquity his eternity, its beauty his goodness, its harmony his wisdom. But the natural world as a creation also had a participatory connection to its Creator. Some Catholics were inclined to an emanative view of the act of creation somewhat in line with the mystical theories of Jewish Kabbalah.¹¹ More ordinary, however, was the idea that the visible world was laid out to conform to a blueprint in the divine mind: in the Platonic language of the Catechism of Trent, 'in the work of creation He followed no external form or model; but contemplating, and as it were imitating, the universal model

the translation of vernacular Catechisms, see the 'Decree on reformation' at Session XXIV of the Council of Trent, c. vii.

¹⁰ CR, pp. 26-27.

¹¹ Essential, formal and modicative emanation theories (these terms are Andreas Blank's) were commonly used by late Scholastic Catholic philosophers to explain both the creation and conservation dependence of the world on God. Foremost among these philosophers were Marsilio Ficino (1433-1499) and Francesco Piccolomini (1520-1604) whose Neoplatonism also posited the existence of a world soul. Emanation theories were, of course, not exclusive to Catholic thinkers (see, for instance, Christia Mercer, *Leibniz's metaphysics: its origins and development* (Cambridge & New York: Cambridge University Press, 2001) on seventeenth-century Lutheran emanation theories) but – in the sixteenth century at least – were more often held by Catholic, and critiqued by Protestant, metaphysicians. The critique of emanation theory by Nicholas Taurellus (1547-1606) and Rudolph Goclenius (1547-1628) was in large part based upon their assertion that emanation theories misrepresented the natural theological relation; the way in which the attributes, nature and essence of God was present and seen in His creatures. Taurellus explicitly drew the pessimistic pre-fideal natural theological conclusion directly from his denial of emanation theory: 'The ancient philosophers did not know anything certain about God. For God is neither the matter, nor the form, nor the entelechy of things' (Nicholas Taurellus, 'Synopsis Aristotelis metaphysices (1596)', in Jacob Wilhelm Feuerlein ed., *Taurellus defensio: dissertatio apologetica pro Nic. Taurello atheismi et deismi injuste accusato, et ipsius Taurelli Synopsis Aristotelis Metaphysices, recusa cum annotationibus editoris* (Nürnberg: 1734), par. 82 (unpaginated appendix), translated in Andreas Blank, 'Existential dependence and the question of emanative causation in Protestant metaphysics, 1570–1620', *Intellectual History Review* 19 (2009), pp. 1-13, at p. 8). Goclenius's critique also clarifies that from the known perfections in creatures, 'God, in some way, is known, too, as a cause: but nevertheless from none of them he is known in the way he is' (Rudolph Goclenius, Matthubus Becker, Peter Maus and Ruprecht Pistorius, *Lexicon philosophicum* (Frankfurt, 1613) p. 704, translated in Blank, 'Existential dependence', p. 11). The denial of emanation theory by these two Lutheran philosophers goes hand-in-hand with limitations on the content and extent of natural theology.

contained in the divine intelligence.’¹² It was this relation of the character of the world to divine wisdom and intent that underpinned the whole idea of nature as a revelation. That the world was created with revelatory intent, however, is not a peculiarly Catholic emphasis. That nature was a form of revelation was believed (as we shall see) by both Protestants and Catholics, being based on biblical sources and confirmed by the best regarded Church Fathers. But Catholic natural theology can be separated from Protestant in four ways:

- (i) The relative importance of natural to Scriptural revelation
- (ii) The ability of man to discern theological content in nature
- (iii) The extent of theological content in nature
- (iv) The ends of natural theology.

i. The relative importance of natural and Scriptural revelation

What does begin to separate Catholic from Protestant natural theology, therefore, is the sense of parity, equivalence, or even identity, between natural and Scriptural revelation that emerges in the work of many Catholic exegetes.

That the world was a source of divine revelation fitted in with the general tenor of Catholic hermeneutic, in which a variety of sources were to be drawn upon in the synthesis of doctrine and the exegesis of Scripture. Those sources included Scripture, the Church (in its Councils, Papacy and Priesthood), tradition (those rites and beliefs that were inherited, and the writings of the Church Fathers), and *nature* or *reason*. It was, of course, this plurality of revelatory sources that came under the sustained polemical attack of Protestants who defined authoritative revelation to be *sola scriptura*. But Catholic theology was thought to be most securely based when all the various sources of revelation could be called upon as witnesses. All sources of revelation had God the Holy Spirit as its ultimate author, but His divine authority was mediated variously through His appointed canonical prophets and apostles, the offices and pronouncements of His Church, His providential rule of history, the arrangement of His visible creation, and His inbreathing of the divine self-image in the human faculty of reason. It is that revelation which was ‘natural,’ which occupied the natural world, both from the perspective of the objects of natural theology (created forms, natural species) and the subject of natural theology (natural man, equipped with natural reason), that forms the focus of this thesis.

A sense of parity between Scripture and the world as a source of revelation is evident in the tone of some sixteenth-century Catholic exegetes. Marino Grimani (papal legate and Cardinal, 1489-1546) said that God, to reveal himself to all men, ‘either shed in them a certain divine light, or gave them philosophers or Prophets, or published the Law; by which things they might be able

¹² CR, p. 27.

to know, not only earthly matters, but also divine.¹³ The Scriptures ('Law') were for Grimani only one of three or four sources for knowledge of divine matters alongside the interpretation of God's revelation by philosophers and by the inherent divine light of reason. Another Cardinal, Thomas Cajetan (Tommaso de Vio, 1469-1534, a notable professor of metaphysics as well as a leading Churchman) in his exposition of Romans, argued that God had manifested (*manifestavit*) the truth about Him by the light of nature and revealed (*revelavit*) it by the light of grace.¹⁴ The two means of knowledge both had God as their active originator (whether in manifesting or revealing) and were equivalent, though different, routes to knowledge of him.

On account of the natural world's revelation of God, it became common in the Middle Ages to speak of God's twin revelation in nature and Scripture as His 'two books,' a metaphor that only increased in ubiquity in the Renaissance. In the common Catholic view, the two books were separated not so much by dignity or sufficiency, but by simple chronology. The Book of Nature was God's first book; and it contained a full expression of God (nature's Creator), his commands (natural law) and worship (natural religion). The Book of Scripture was necessitated by the sin of Adam and his progeny which required God to restate the natural law by *supernaturally* carving the natural law (the Decalogue) onto stone tablets and ultimately necessitated Christ's *supernatural* acts of Incarnation, Passion, Ascension and sacramental presence. In dignity, therefore, the two books could be variously seen as equal (two routes to know God – the *via per creatorum* and *via per revelationem*); or the Book of Scripture as more exalted (the only way to know the mysteries of Christ); or even, as in Raymond Sebond's (d.1436) book, the Book of Nature as more exalted (the original, universal revelation and God's original intention). Vidal and Kleeberg tell us that by the onset of the Renaissance, for many Catholic theologians 'the Book of Nature stood as an independent and equal partner to the Book of Scripture, capable of leading a trained exegete to the same sort of religious truths...Reasoning from God's creation becomes of equal validity with his revealed word in Scripture.'¹⁵

The parity of sources of revelation was a central Catholic apologetic. The Protestant doctrine of faith based on Scripture alone was premised upon its sufficiency and perspicuity, which made all other sources of revelation and divine authority (such as the decrees of Church Councils and papal authority) redundant. The *sola scriptura* doctrine was vigorously contested by the Roman Church on both fronts. The meaning of Scripture was not plain, for Scripture was accommodated to the capacity of the multitude and pregnant with levels of metaphor and analogy. It required the authorised exposition, and supplementation, of the authority and traditions of the Catholic Church which had been guarded and guided by the Holy Spirit since

¹³ Marino Grimani, *Commentarii in Epistolas Pauli, ad Romanos, et ad Galatas* (Venice, 1542) sig. 14r; in Parker, *Commentaries on Romans* [henceforth 'CER'], p. 122.

¹⁴ Tommaso de Vio Cajetan, *Epistolae Pauli et aliorum Apostolorum* (Paris, 1532), sig. III H; CER, p. 88.

¹⁵ Vidal and Kleeberg, 'Impulse to natural theology', p. 390.

Pentecost. Again, this serves to bring a degree of parity between nature and Scripture regarding their theological authority. Both nature and Scripture were insufficient on their own to lead to the whole truth; both contained truths that were veiled from rude humanity; both required supplementation and authoritative interpretation in order to lead to complete understanding of the faith. Protestants' unqualified doctrine of the perspicuity of Scripture made their distinction between natural and supernatural revelation more robust – Scripture was so written so that any man (illuminated by the Holy Spirit) could interpret it truly and certainly while the Book of Nature was impenetrable even to the finest natural minds because it was obscured by the effects of sin in both subject and object. It is possible to conceive how a Catholic, however, believing in an allegorical, analogical, metaphorical, anthropocentric Book of Scripture that needed great and authoritative minds to discern its meaning might equate that revelation to a considerable degree with the allegorical, analogical, metaphorical, anthropocentric book of nature that needed great and authoritative minds to discern *its* meaning. I do not mean to suggest that the *via per creatorem* was regarded as exactly equivalent to the *via per revelationem*, but only that, unlike in the Protestant system, the two *viae* were not separated by a gulf of truth, authority and dignity.

ii. Man's ability to discern nature's theological content

Of crucial import for distinguishing Catholic from Protestant doctrines of natural theology is the perceived ability of natural man to hear the sermons that nature preached. Belief concerning the condition of man, particularly the state of his mental faculties after the Fall, profoundly affected the extent and ends of natural theology. The importance of theological anthropology for discerning and understanding Catholic natural theology cannot be stressed strongly enough, yet only a few historians, such as Peter Harrison,¹⁶ have recognised that doctrines of the Fall's impact on man impact so directly and severely on the early modern approach to natural philosophy and, as I shall argue, natural theology.

At his creation, man was made 'in the image of God.' The creation of Adam in God's self-image was understood to be reflected in the faculties of the human soul and man's intellectual, moral, and spiritual capabilities. Man alone out of all the natural bodies in the corporeal creation possessed, in addition to the vegetative and sensitive souls, an intellective soul – participating thereby in the intellectual, moral and spiritual realms proper to the inhabitants of the spiritual realm. When God breathed life into him, he received the intellectual faculties (invariably three of them, in an apparent image of the Trinity, typically – following Augustine – memory, understanding or reason, and will) proper to his station as God's image-bearer and viceregent

¹⁶ See Harrison, *Fall of man*.

on earth. Man's being in the image of God referred especially to his faculty of reason.¹⁷ It was the intellective soul, and the faculty of reason in particular, that elevated man above the baseness of his corporeal nature, formed, decreed the Council of Trent, 'from the slime of the earth.'¹⁸ By his reason man was also set apart from the animals in end: 'for this cause were we created, & endued with reason,' wrote Bellarmine in his 1605 *Ample declaration of the Christian doctrine*, 'to the end we may know, and praise God: wherein also doth consist our chiefest good.'¹⁹ Reason was the faculty given to man that he might practise religion.

On man's natural being, God showered spiritual gifts. Though Bellarmine listed seven,²⁰ two or three of these were most commonly discussed; original righteousness, immortality, and the obedience of the flesh to reason. As the Catechism of Trent declared, after equipping the animal man with the intellective God-image soul, God 'then added the admirable gift of original righteousness,' which was Adam's uprightness of moral and spiritual character and standing in the sight of his Creator.²¹ The obedience of flesh to reason is also significant: In paradise, Adam's faculties worked in perfect harmony. The vegetative and sensitive functions of the soul served, and were obedient to, the intellective: within the soul, reason had complete hegemony and directed the motions of the spirit and body to the good work of the garden and the pious contemplation of the Creator through the creation. Adam's encyclopaedic knowledge of all creation, reflected in his naming the animals, extended also to his perfect knowledge of God and religion. Adam's naturally-discerned religion was an intrinsic part of his nature as a being created in God's image and a necessary activity of the soul equivalent to the functions of the body like sleeping and eating.²² Clothed with the grace of original righteousness, he existed in a state of perfect intellect, morality and religion.

So much for innocence: in order to understand the difference between Catholic and Protestant natural theology, it is essential to grasp differences regarding the doctrine of the Fall of man and its effects upon his nature, particularly how it affected his ability to reason from the natural world to God and religion. Peter Harrison's, *The Fall of Man and the Foundations of Science* (2007) is an invaluable addition to the study of early modern natural philosophy. Harrison stresses the central importance of the doctrine of fallen man to Renaissance discussions of what could be achieved and how, by studying the natural world. He recognised that seventeenth-century

¹⁷ The divine self-image being housed in the faculty of reason was a tradition dating as far back as Clement of Alexandria in the first century, whose collected works were, in fact, first published in 1550 (Clement of Alexandria, *Works*, ed. Pietro Vettori (Florence, 1550)).

¹⁸ CR, p. 29.

¹⁹ Robert Bellarmine, *An ample declaration of the Christian doctrine. Composed in Italian by the renowned Cardinall, Card. Bellarmine*, trans. Richard Hadock (Douai, 1605), p. 92. *The ample declaration* was a translation of Robert Bellarmine, *Dichiarazione piu Copiosa della Dottrina Cristiani* (Rome, 1598).

²⁰ Bellarmine, *Ample declaration*, p. 276 ff.

²¹ CR, p. 29.

²² See CR, p. 398.

discussions of knowledge usually made reference to sin; the early modern mind related the spiritual, moral and epistemological so closely that dividing philosophical expression from this important theological context is anachronistic.²³ His thesis is both striking and compelling. For Harrison, differing views concerning the severity of the Fall correspond to different approaches to the investigation of nature, such that the Protestants' Augustinian pessimistic anthropology leant itself to the 'mitigated scepticism characteristic of empiricism and the experimental philosophy' while a more optimistic (traditional Thomist Catholic) anthropology made thinkers 'assert the reliability of human reason, the possibility of *a priori* knowledge, and the perfectibility of the sciences.'²⁴

Harrison makes these 'competing anthropological commitments' the nub of his analysis of early modern debates over the sources and reliability of human knowledge.²⁵ In Harrison, therefore, there is useful precedent for delineating confessional views of the natural world. I hope to augment and support Harrison's valuable thesis by supplying greater detail on sixteenth-century Catholic theology and by shifting the focus from approaches to natural knowledge of the natural world, to natural knowledge of the divine; for in this sense the confessional differences are differences both in terms of approach (which Harrison excellently exposes) and theological end (which has been more neglected by generations of intellectual historians).

On account of the Fall of man, said the Tridentine catechism, 'all things have been thrown into disorder', with the cursed earth now replete with weeds and natural disasters that tried man physically and spiritually,²⁶ but it is the effect of the Fall on man himself that is especially pertinent to the question of what could be known about God and religion from nature. Put at its simplest, Catholic theology posited both a localized cause, and a localized effect of the Fall in the soul of man. Man fell because he allowed the motions of his natural concupiscence to overpower his right reason. His animal appetite prevailed; his senses perceived that the tree was 'good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise' (Gen 3:6), and thus he wilfully disobeyed God. Man's sensory soul rebelled against right reason, and his will, inflamed with proud ambition for 'wisdom' proper to God, chose to follow the sensory appetite. It was to be those appetitive aspects of his soul that would bear the brunt of God's curse of judgement.

God's punishment fitted man's crime: it was an act of spiritual pride, and an act of the rebellion of fleshly appetite. In the first place, therefore, Adam's curse was spiritual deprivation. Catholic theology taught that with the first sin, Adam divested mankind of original righteousness and in

²³ Harrison, *Fall of man*, p. 9.

²⁴ *Ibid.*, p. 7.

²⁵ *Ibid.*, p. 54.

²⁶ CR, p. 542.

its place inhabited a status of 'original sin,' which was passed on to his progeny.²⁷ In contradistinction to the Augustinian, Protestant position on original sin, it was understood in late-Renaissance Catholicism to refer to only a *spiritual* stain of deprivation; it did not fundamentally infect all aspects of man's being. The 'extreme misery' of original sin was losing the supernatural gifts – the *dona superaddita* (such as immortality and original righteousness) given to Adam in the garden: 'they sinned against God,' wrote Bellarmine, '& thereby lost those seauen giftes, which I spoke of.'²⁸ While to the Protestant original sin was a fixed feature running like a disease through the whole human soul, body and mind, for the Catholic it was simply 'a priuation of grace.'²⁹ Original sin as a stain on the soul was nonetheless a grave problem for every man. Having transgressed God's law, man stood under God's judgment and separated from the highest end of human flourishing – eternal life and the beatific vision. Moreover, man would surely stray into *actual* sin, provoking God's just and certain judgement on his soul in the afterlife. Even the 'natural impulse' that men 'seek and desire their own end,' – eternal felicity – was 'obscured,' though not altogether extinguished.³⁰ Only the sacraments duly administered by the Catholic Church (principally baptism, penance and the Eucharist) removed the stain of original sin and the guilt of actual sin, beginning the work of restoring the soul's righteousness and thereby opening up the gates of heaven to the meriting faithful.³¹

Second, the effects of God's curse extended to the permanent disordering of man's soul. The rebellion of Adam's fleshly, appetitive, animal nature over his reasonable, intellective, divine nature both occasioned the Fall and characterized man's subsequent inner struggle. Original sin was defined by Thomas Aquinas as a 'disordered disposition growing from the dissolution of that harmony in which original justice consisted.'³² This was a problem for man both spiritually, since it made actual sin likely, and naturally, since he now struggled to direct himself toward his temporal and ultimate ends. The 'miseries of life' which the Fall occasioned (excepting the loss of various spiritual graces such as original righteousness), all fell within the purview of Adam's flesh: 'bodily infirmity, disease, sense of pain and motions of concupiscence'.³³ Henceforth, in place of internal justice and harmony, Adam's race was engaged in a battle between flesh and spirit, sensory and intellective, appetite and reason.

²⁷ The Council of Trent decreed that 'Adam, when he had transgressed the commandment of God in Paradise, immediately lost the holiness and justice wherein he had been constituted; and that he incurred...the wrath and indignation of God' (CoT, p. 22).

²⁸ Bellarmine, *Ample declaration*, p. 277.

²⁹ Ibid., pp. 277-78.

³⁰ CR, p. 529.

³¹ Baptism accounted for original sin ('by the grace of our Lord Jesus Christ, which is conferred in baptism, the guilt of original sin is remitted' - Council of Trent, Session V. CoT, p. 23), while penance and Mass accounted for actual sins after conversion.

³² IaIIae, 82, 1. Thomas Aquinas, *Original sin* (1a2ae. 81-85), trans. T. C. O'Brien, *Summa Theologiae*, vol. XXVI, 61 vols. (New York: Cambridge University Press, 2006), p. 31.

³³ CR, p. 186.

Though the sensory soul was affected by the curse of the Fall insofar as it gained a parity with, or even hegemony over, the rational soul that was not proper to its station, in its sensory functions it was essentially still good, accurate and true and (according to psychological theory) the ultimate source of all knowledge. The primary difference in man's postlapsarian sensory soul was *concupiscence*, defined as 'a certain commotion and impulse of the soul, urging men to the desire of pleasures.'³⁴ In paradise, there could be no concupiscence, for man enjoyed the fullest experience of human flourishing and therefore wanted nothing. That is why it was proper to say that concupiscence entered with the Fall, for postlapsarian man needed to seek and work for both his physical sustenance (food, shelter) and spiritual sustenance (relationship with God). Concupiscence both 'originated in sin' and since Adam's sin, was 'always inherent in our fallen nature.'³⁵ Concupiscence was fuel for sin, for it fixed its intentions upon those sensory things that satisfied the fleshly nature without regard for its moral turpitude, as in gluttony or lust. 'That is why,' explained the Catechism, 'the incentive to sin, dwells in the flesh.'³⁶ Owing to the weakness of will, the concupiscible appetite often fructified into actual sin. Even after baptism, Christians 'still have to struggle against their own passions on account of the tendency to evil implanted in man's sensual appetite.'³⁷

Out of the intellectual faculties of the soul, it was the will that was particularly cursed. It had wavered at that crucial juncture of the encounter with the snake in the garden, and its condition since was one in which it often allowed itself to be seduced by the fleshly appetites of concupiscence and misdirected the motions of the man. As Aquinas had put it, 'from the will's turning away from God...the disorder in all the other powers of the soul followed.'³⁸ Fittingly, therefore, it was the will, as the power with 'the first inclination towards sinning' that bore the brunt of the effect of original sin on Adam's progeny.³⁹ This association of the cause and effect of the Fall primarily with the will continued in early modernity. It was in man's 'voluntary inclination' that the spiritual effect of the Fall continued so that the will was no longer bent on man's true end.⁴⁰ The fallibility of the free will was stressed by orthodox Counter Reformation Catholics in distinction from the Pelagian heresies anathematised eleven hundred years earlier. The inability of the natural will to choose and follow the good invariably was made explicit at the Council of Trent. The argument was that since even baptised Christians occasionally lapsed into sin, the heathen (who lacked the external graces of Church, Scripture, Sacraments and the inner grace of sanctification) could not be naturally capable of resisting worldly temptations for

³⁴ CR, p. 469.

³⁵ CR, p. 468.

³⁶ CR, p. 532.

³⁷ CR, p. 532.

³⁸ IaIIae, 82, 3. Aquinas, *Summa*, p. 39.

³⁹ IaIIae, 83, 3. Ibid., p. 55.

⁴⁰ See CR, pp. 529-30.

the entirety of their lives. No; it was the natural condition of all mankind to lapse – at least from time to time – into sin.

The will nevertheless retained the natural capacity and actual potentiality to choose the good and do good works, both before and after justification. Man's will remained *free* to choose the good as well as the bad; to do good works as well as evil; to worship the true God as well as idols. 'Free will, attenuated as it was in its powers,' decreed Trent, 'was by no means extinguished.'⁴¹ As Scottish Jesuit John Hamilton put it in his *Facile Traictise* (1600), 'we confes that men after the fal of Adam hath frie will not only to do ewil bot also to do good'.⁴² In their insistence on this point, early modern Catholics were following in the footsteps of Aquinas. The freedom of the will was, for Aquinas, circumscribed by sin, 'not in the sense that it takes away the liberty he has by nature...but in that it takes away his freedom from guilt and unhappiness.'⁴³ The will had to still be free in order for salvation – man's highest good – to be possible to effect. The soteriological synergism of Aquinas, rigorously propounded by sixteenth-century Catholic theologians, therefore flows naturally: 'freewill is the proper recipient of grace, with the help of which *it chooses its own good*.'⁴⁴ The will retained its freedom both to choose and *do* good. Rome vigorously opposed the Protestant teaching that all works before justification were necessarily actual sin.⁴⁵ The Catholic Church tried to stamp out this pessimistic view of natural man's sinful propensity and moral inability from within its own ranks, legislating unequivocally against the heresy of Michel Baius (1513-1589) in a papal bull of 1567.⁴⁶

Since God did not demand what was impossible, and since nature did nothing in vain, man had to be able both to know and keep the natural law by which he was bound. He knew it by 'a law...inscribed on his heart by God, teaching him to distinguish good from evil, vice from virtue, justice from injustice;' and could keep it, since 'the observance of the commandments is not difficult.'⁴⁷ Because man could know and obey the moral law by nature, there could be such a person as the 'moral heathen' – the man who, though not enlightened by the grace of Christian

⁴¹ Council of Trent, Session VI; Decree on Justification (CoT, p. 31).

⁴² John Hamilton, *A Facile Traictise, Contenant, first: ane infallible reul to discerne trevv from fals religion. Nixt, a declaration of the Nature, Numbre, Verteuv & effects of the sacraments togider vvith certaine Prayeres of deuotion*. (Louvain, 1600), in Thomas Graves Law ed. *Catholic tractates of the sixteenth century, 1573-1600* (Edinburgh & London: William Blackwood and Sons, 1901), p. 252.

⁴³ Ia, 83, 2. Thomas Aquinas, *Man* (Ia. 75-83), trans. Timothy Suttor, *Summa Theologiae*, vol. XI, 61 vols. (New York: Cambridge University Press, 2006), p. 243.

⁴⁴ Ia, 83, 1. *Ibid.*, p. 239. My emphasis.

⁴⁵ Luther had contended as early as 1517 that 'man, being a bad tree, can only will and do evil', while the Calvinist Theodore Beza similarly wrote (in an English translation published in 1563, the same year as the Council of Trent closed) that 't[hat] which is done w[ith]out faith...whether god commaunded it or not, is but synne.' Thesis iv (of 97) in Luther's 1517 *Disputations against Scholastic Theology*, excerpted from Martin Luther, *Martin Luther's basic theological writings*, ed. Timothy F. Lull (Minneapolis: Fortress, 1989), Théodore de Bèze, *A briefe and piththie summe of the Christian faith, made in forme of a confession, with a confutation of all such superstitious errours, as are contrary therevnto*, trans. Robert Filles (London, 1563), sig. 27v.

⁴⁶ *Ex omnibus afflictionibus*, 1 October 1567.

⁴⁷ CR, p. 360.

revelation, could attain favour with God through living in accordance with the substantial natural light his soul afforded. Though the will was weak and often inclined by concupiscence to sin, orthodox Catholics strongly resisted the idea that sin was a natural property inhering man's body and soul in the way that the Protestants did. Though man's postlapsarian nature made sin more likely, it was neither necessary or inevitable. The closest the Tridentine Catechists got to admitting of sin being natural was to say that man's desire for revenge was '*almost* natural to man' or that the prevalence of lying meant that 'it would *almost* seem as if this were the only sin which extends to all mankind.'⁴⁸ Catholic doctrine still allowed for man to be 'blinded by sin'; indeed the example of King David showed how sin 'left no part of him uninfected', it even 'infected his understanding and will, which are the two most intimate faculties of the soul'.⁴⁹ The blinding was not the result of original sin on reason as in Protestant theology, but the numbing effect on conscience that repeated sin caused. *Actual* sin was that which 'takes away man's heart and often blinds his understanding.'⁵⁰ Man's will was not given over to evil, but the site of a moral battle, right reason contending for the good, concupiscence for the bad. Man had free self-determination whether to be 'the sensualist, whose every thought and care is absorbed in the transient things of this world' and therefore 'estranged from the will of God,' or the reasonable man, ruled by right reason which directed him toward his true, spiritual end. A sense of his own 'weakness of will' meant that the righteous man beseeched God for assistance in this battle, 'to repress the turbulent emotions of passion; to subject our sensual appetites to reason.'⁵¹ The freedom of the will (compared to the Protestant doctrine of its slavery to sin) is an important doctrinal context for considering natural theology: because man naturally possessed the inclination and ability to pursue his highest end (God) and act in accordance with that end, his efforts in discerning God and religion from the contemplation of nature could have a range of positive spiritual results.

Man's moral and spiritual ability to will the good was possible only because reason itself remained unsullied. While the curse had removed the good gifts of supernatural graces, reason survived the Fall unaffected. Protestants, citing Augustine, argued that the Fall was not merely a privation of supernatural gifts but also a thorough corruption of natural faculties. Luther's Augustinian Fall meant that, 'the will is impaired, the intellect depraved, and the reason altogether changed.'⁵² Counter Reformation Catholicism disagreed, endorsing the Thomist view that the intellect was exempt from the curse of original sin because sin affected the substance rather than the powers of the soul, and belonged to the faculty that effected action (i.e., the

⁴⁸ CR, pp. 427, 454. My emphasis.

⁴⁹ CR, p. 555.

⁵⁰ CR, p. 436.

⁵¹ CR, pp. 535-38.

⁵² Martin Luther, *Lectures on Genesis*, Luther's works, ed. Jaroslav Pelikan, vol. I, 8 vols. (St Louis, Philadelphia: Concordia, 1955), I, p. 166, qu. in Harrison, *Fall of man*, p. 56.

will).⁵³ The powers of the soul were ‘neither destroyed nor lessened through sin.’⁵⁴ ‘The natural light of reason’ retained its status as ‘a sort of sharing in the divine light.’⁵⁵ The same commitment to unsullied reason continued to underpin the Catholic doctrine of man in the Counter Reformation and beyond.⁵⁶ The knowledge that came by faith did transcend the exercise of natural reason, but this was not to denigrate the powers of the latter. Knowledge by faith was *more* certain, *more* dignified, *more* complete than knowledge by reason (*melius, illustrious, certior, ab omni errore purior, praestantior*)⁵⁷ but the two were related in a spectrum, not a fundamental dichotomy. There was nothing in its nature that rendered natural reason incapable of attaining true and extensive knowledge even of divine matters. The Fall did not blind reason to natural and divine truth, as the Protestants alleged, but, owing to the motions of concupiscence, made its work in attaining truth and effecting right conduct a harder struggle. That original sin had not affected man’s essential intellectual nature can be demonstrated by the way in which baptism, which took away the guilt of original sin, was held to remit fully the effects of original sin: the Council of Trent declared anathema those who ‘dare to assert that although sin is forgiven in Baptism, it is not entirely removed or totally eradicated, but is cut away in such a manner as to leave its roots still fixed in the soul.’⁵⁸ As Bellarmine wrote later, baptism ‘reneweth a man perfectly.’⁵⁹ The soul was not so altered in the functionality of its faculties such that baptism could not repair the whole effect of the Fall. With the guilt and effect of original sin fully remitted by baptism, men were able to ‘convert themselves to their own justification,’ by good works to ‘satisfy for [their] sins’, and thereby to ‘merit the rewards of eternal glory.’⁶⁰ No one could doubt, explained the Catechism, ‘that under His guidance *it is in our power* to be reconciled to God.’⁶¹ This synergistic process of justification, so different to the monergistic *sola fidei, sola gratia* Protestant doctrine, was necessarily built on a radically different and fundamentally optimistic doctrine of man. While in the Protestant estimation the Fall hideously affected both man’s spiritual *and natural* (i.e. intellective) capacities, the Catholic Fall was almost exclusively a spiritual affair. That difference in theological anthropology had significant bearing on the extent and potential effect of man’s natural, reasonable knowledge of God.

⁵³ IaIIae, 83, 2, 3. Aquinas, *Summa*, W. T. Costello summarizes scholastic Catholicism as holding ‘that man’s nature is essentially uncorrupted...that original sin...leaves the natural faculties unimpaired and his nature good’ (William T. Costello, *The scholastic curriculum at early seventeenth-century Cambridge* (Cambridge, MA: Harvard University Press, 1958), p. 114).

⁵⁴ IaIIae, 85, 1. Aquinas, *Summa*, p. 81.

⁵⁵ Ia, 12, 11. Thomas Aquinas, *Knowing and naming God* (1a. 12-13), trans. Herbert McCabe, *Summa Theologiae*, vol. III, 61 vols. (New York: Cambridge University Press, 2006), p. 39.

⁵⁶ In the seventeenth century the Catholic Church was forced to defend its optimistic view of the postlapsarian condition of man’s faculties against an Augustinian incursion within its own ranks in the shape of Jansenism.

⁵⁷ *Catechismus romanus ex Decreto concilii Tridentini: ad parochos, Catechismus romanus*, pp. 17-18.

⁵⁸ CR, p. 183.

⁵⁹ Bellarmine, *Ample declaration*, p. 208.

⁶⁰ Council of Trent, Session VI, Decree on Justification, chapter V (CoT, p. 33); CR, p. 301.

⁶¹ CR, p. 557. My emphasis.

So much for the state of postlapsarian man. But what was the process by which the natural knowledge of God could be attained? First, there was a sense in which some knowledge of God was known naturally in the human heart, and that the universal possession of this knowledge was somehow part of what it meant to 'be human.' The argument for the existence of God from the ubiquity of religion among all people groups was often repeated. Knowledge of God was, since the time of the Fathers, thought to be 'implanted' by God Himself in the rational faculty of man's soul.⁶² Though Aquinas had denied the natural instinctive knowledge of God (thus necessitating his *quinque viae*),⁶³ sixteenth-century Catholics almost universally endorsed the doctrine. Philibert Haresche, for instance, argued that the knowledge of God was manifest to the gentiles 'by an inward light, by which in their hearts...they possess a means of knowing, that is, a natural reason, in which light the face of the Lord is imprinted upon us.'⁶⁴ The Catechism of Trent likewise spoke of 'that knowledge of the Deity...acquired in common *by all* from the contemplation of nature.'⁶⁵ The innate divine light was often thought to extend beyond the existence of God. Grimani believed that God 'not only shed upon us from the beginning a certain light by which we knew the good and arrived at the truth of God, but he also naturally sowed in us the first principles of all arts and doctrines, by which we receive the more easily the knowledge of himself.'⁶⁶ Innate knowledge of spiritual matters (rightly included as 'natural' theology because they were considered part of man's nature), also concerned man himself. The Tridentine Catechism explained that 'the frailty and weakness of human nature are universally known and felt by each one in himself,' so that, 'impressed with a just sense of the frailty of human nature, their first and most earnest desire should be to advance with the divine assistance in the ways of God, without sin or failing.'⁶⁷ The universal implanted knowledge of

⁶² Origen wrote that 'humans know this truth [the nature of God] by the natural and God-given powers of the mind.' Extracted from Gerald Bray, *Romans*, Ancient Christian commentary on Scripture, ed. Thomas C. Oden, New Testament vol. VI (Chicago & London: Fitzroy Dearborn Publishers, 1998), Romans 1:18. Augustine too claimed there was an innate knowledge of God in the soul, arguing that it was, as William Mann summarises, 'discoverable by a special meditative technique of inward-turning contemplation.' See William E. Mann, 'Duns Scotus on natural and supernatural knowledge of God', in Thomas Williams ed., *The Cambridge companion to Duns Scotus*, Cambridge companions to philosophy (Cambridge & New York: Cambridge University Press, 2003), pp. 238-62, at pp. 239-40. Mann is basing his arguments on Augustine's *De libero arbitrio* and *De magistro*.

⁶³ Aquinas alleged that even 'the awareness that God exists is not implanted in us by nature in any clear or specific way,' and likewise denied that synderesis (his term for internal or instinctual knowledge of moral principles) was an intrinsic part of the human soul ('synderesis is a habit, not a power'). For Aquinas, natural theology was not something involuntarily and universally entered into by all men everywhere, but a difficult and voluntary activity from which only a few could gain true knowledge of God. Ia, 2, 1. Thomas Aquinas, *Christian theology* (Ia. 1), trans. Thomas Gilby, *Summa Theologiae*, vol. I, 61 vols. (New York: Cambridge University Press, 2006), p. 7.

⁶⁴ Philibert Haresche, *Expositio tum dilucida, tum brevis Epistolae diui Pauli ad Romanos* (Paris, 1536) sig. XXIV; CER, pp. 111-12. The idea of a pre-cognitive natural knowledge of God was also, as we shall see, found in the Protestant traditions; Calvin called it the *sensus divinitatis* (and the related *semen religionis*).

⁶⁵ CR, p. 18. Perhaps the universal knowledge of God being *acquired* by all (rather than inherent in all) indicates agreement with Aquinas.

⁶⁶ Grimani, *Commentarii in Epistolas Pauli*, sig. 14r; CER, p. 121.

⁶⁷ CR, p. 261.

God and self therefore constituted a natural impulse to the obedience of moral law and performance of religious duty.⁶⁸

The most obvious way by which natural theology could be attained was by the exercise of reason. The intellect was the peculiar possession of man, who was intended and designed for religious relation to the God whose image he bore. Some Catholic exegetes such as Thomas Cajetan and Jean Gagney (d.1549), in an exegetical tradition dating to Nicolas of Lyra (1270-1349), expounded Romans 1:20 in such a way to emphasize that the invisible attributes of God were perceived by the *intellectual creature* of the world – that is, man.⁶⁹ The faculty of reason was that which made natural theology possible.

The primary route by which the human intellect could arrive at a natural theology was by reasoning from effect (the creation) to the Cause behind them (God). Man attained knowledge of God, in the words of Cardinal Cajetan, by ‘natural understanding from the effect.’⁷⁰ The idea that a chain of causes led ultimately to a First and Final Cause (in efficacy and teleology) is originally found in classical sources,⁷¹ and was frequently restated in works of natural philosophy in both the Middle Ages and Renaissance. Several common metaphors represented this effect-cause pedagogical relation of the creatures to the Creator, such as the ‘Book of Nature,’ the ‘mirror’ of the divine and the *vestigia Creatoris*. Just as a cabinet testifies to something of the carpenter, so the visible world testifies to its invisible Cause. In the words of the sixteenth-century exegete Marino Grimani, ‘Even as the skill of the workman (*artifex*) is shown by his works, so all these things were manifested by the works of God.’⁷² It was the creation that made the invisible God visible to the mind’s eye.⁷³ Reasoning from effect to cause formed the basis of all of Aquinas’ *quinque viae*. The five proofs of God’s existence were based upon the observation of natural phenomena in the sensible world, be it change, causation,

⁶⁸ This is actually in the context of the Sacrament of Penance. The Catechism of Trent apparently allowed for the non-Christian to be sincerely penitent and to have their prayers heard by God. So here, universal, implanted, natural knowledge of God and religion could lead to a meritorious religious act (the beseeching of forgiveness) and result (the granting thereof).

⁶⁹ The Latin Vulgate for Rom 1:20a reads, ‘invisibilia enim ipsius a creatura mundi per ea quae facta sunt intellecta conspiciuntur.’ The KJB rendered the verse ‘For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made.’ Both Thomas Cajetan and Jean Gagney (d. 1549 – see Jean Gagney, *Epitome paraphrastica enarrationum Iohannis Gagnaei Parisini doctoris Theologi, in epistolam diui Pauli apostoli ad Romanos* (Paris, 1533)) preferred to render the passage ‘...understood by the intellectual creature of the world.’ See Parker, *Commentaries on Romans*. To my knowledge, no Protestant exegete interpreted the ambiguous Latin of the Vulgate in this way, presumably because it implied an optimistic view of the potentiality of natural reason.

⁷⁰ Cajetan, *Epistolae Pauli* fol. III H, CER, p. 101.

⁷¹ That God could be known from His effects in nature was a principle found in the work of both Greek philosophers such as Aristotle and Latin thinkers such as Cicero. The latter, in his *Tusculan Disputation* (1.28) argued that God, though he could not be seen directly in the creation, could be recognized *ex operibus eius*. See Barr, *Biblical faith and natural theology*, p. 75.

⁷² Grimani, *Commentarii in Epistolas Pauli*, sig. 14r; CER, p. 122.

⁷³ For examples of the use of these ubiquitous metaphors, see Haresche, *Expositio* fols. XXIV-XXIIr; CER, pp. 111-12.

contingency, gradation in perfections or teleology.⁷⁴ God's effects in nature revealed His existence and metaphysical attributes. This was also the basis of Scotus' natural theology. For Scotus, determining the attributes of the First Being had to be conducted – Ross and Bates summarise – '*a posteriori*, from what features a thing must have in order to produce the effects we perceive.'⁷⁵ Not only did the knowledge of God from His effects in nature refer to His original act of creation, but also from its continued sustenance. The Catechism of Trent stressed that 'God, as the Apostle says, *left not himself without testimony, doing good from heaven, giving rains and fruitful seasons, filling our hearts with food and gladness*. Hence it is that the philosophers conceived no mean idea of the Divinity.'⁷⁶ God's governance of the natural world was as responsible for the accuracy of pagan natural theology as His act of creation.

Though it is the most obvious and dominant form, reasoning from sensible effects to their Unseen Cause is not the only way of doing natural theology. An accurate view of God and religion could be achieved by a movement of logic beginning with some observation about reality and then progressing by syllogism to other necessary truths. As with other modes of natural theology, there were influential medieval forebears. Some natural theological arguments needed almost nothing in the way of observation, except the very existence of the world and its most basic constitutive character. Anselm of Canterbury's conception of God as *id quo nihil maius cogitari potest* is an example of *a priori* reasoning about God that puts forward a positive position on deity through the natural process of human intellection without relying on any direct observation of the universe. Scotus similarly reasoned that for an inferior transcendental notion to exist (e.g. 'contingent'), the superior must also exist ('necessary') in reality. Scotus' 'indirect proof' method of naturally discerning the properties of deity was based not on the varied qualities of the creatures but on syllogisms whereby a certain proposition about God is proven by showing the logical contradiction in its opposite.⁷⁷ The Catechism of Trent also made use of the idea of logical necessity to infer natural truths about the deity. Divine omnipotence, known

⁷⁴ Aquinas' explanation of the first argument (the Unmoved Mover) begins, '*Certum est enim, et sensu constat, aliqua moveri in hoc mundo.*' Similarly, the argument from causality ('*Invenimus enim in istis sensibilibus esse ordinem causarum efficientium*'), from contingency ('*Invenimus enim in rebus quaedam quæ sunt possibilia esse et non esse*'), from gradation ('*Quarta via sumitur ex gradibus qui in rebus inveniuntur*') and from design ('*Quinta via sumitur ex gubernatione rerum*') are all based on observations of natural things and phenomena. Ia. 2, 3, in Thomas Aquinas, *Existence and nature of God* (Ia. 2-11), trans. Timothy McDermott, *Summa Theologiae*, vol. II, 61 vols. (New York: Cambridge University Press, 2006), p. 13ff. My emphasis.

⁷⁵ James F. Ross and Todd Bates, 'Duns Scotus on natural theology', in Thomas Williams ed., *The Cambridge companion to Duns Scotus*, Cambridge companions to philosophy (Cambridge & New York: Cambridge University Press, 2003), pp. 226, 209.

⁷⁶ CR, p. 17.

⁷⁷ Ross and Bates paraphrase Scotus' method of 'indirect proof' as follows: 'He supposes the opposite of his intended conclusion and deduces a contradiction between that supposition and certain self-evident or previously proved propositions, thus getting his own conclusion by using the principle that whatever entails the denial of what is already known to be so is false and its opposite true.' Ross and Bates, 'Duns Scotus on natural theology', p. 194.

from creation, implied omniscience by logical necessity. No new observation was needed to infer God's all-knowing from His all-powerful nature, for it followed by means of deduction.⁷⁸

The reason that the natural world could provide a comprehensive theology was not merely that as an effect it indicated a Cause. The created universe was not taken simply to be one homogenous, 'flat' effect that related to God. Instead, there was commonly perceived to be within creation a *hierarchy* of being. The idea of a ladder of degrees of perfection reaching up from the mundane and rudimentary creatures to the divine font is originally Stoic,⁷⁹ but was appropriated by the early Christian theologians.⁸⁰ Aquinas' metaphysical ontological hierarchy linked all forms of being together – from God, through angels and spirits, to man, animals, plants and so on. The creatures were hierarchically arranged according to the extent of their participation in the divine perfection and essence. By God's sharing of his divine essence in proportion to excellence, the creatures were said to 'touch His likeness in representing the exemplar understood by God.'⁸¹ The world was understood in terms of essences arranged in an order that led both causally and pedagogically to God. A stronger view even held to a theory of emanation whereby natural things had their being by *emanation* from the divine mind. The essential view of the universe distinguishes the Renaissance Catholic mindset from that, say, of a seventeenth-century Deist. God was not merely related to the world as its originator, but the continued existence of the latter was intimately tied up with God's Being. Though God was transcendent, He was also immanent in the natural world, sacramentally and causally ever-present in a world which participated in His essence. The creatures' arrangement in a participatory hierarchy of essence is an important basis for understanding the character of Catholic natural theology. First, the participatory perfections of the creatures manifested the complete original perfection of God: 'any perfection found in an effect must also be found in the cause of that effect' since 'effects obviously pre-exist potentially in their causes.'⁸² Second, the hierarchical arrangement of the creatures especially counselled the elevation of the mind to ascend from the visible effects to their divine cause. All the creatures reflected God, but some

⁷⁸ The Catechism explained that 'by acknowledging God to be omnipotent, we also *of necessity* acknowledge Him to be omniscient, and to hold all things in subjection to His supreme authority and dominion. When we do not doubt that He is omnipotent; we must be also convinced of everything else regarding Him the absence of which would render His omnipotence altogether unintelligible.' My emphasis. This is taken, in fact, from a section of the Catechism that is not ostensibly concerned with natural knowledge of God. But since omnipotence could be naturally discerned, the logical inferences made from it (with no reference to Scripture, grace or faith) could surely be too. CR, p. 17.

⁷⁹ It is expressed, for instance, by Quintus Lucilius Balbus in Cicero's *De natura deorum*.

⁸⁰ According to Gregory of Nyssa (d. 386), one of the Cappadocian Fathers, the hierarchy of nature was reflected in the order of the creation. Man was made last; nature had ascended from the lower to the perfect form of life (that is, the soul). Man, the intelligent and rational being, comes last as the summit of God's creation – the only creature that resulted from God's active deliberation. Edward Lowth and Marco Conti, *Genesis 1-11*, Ancient Christian Commentary on Scripture, ed. Thomas C. Oden, Old Testament vol. I (Chicago and London: Fitzroy Dearborn Publishers, 2001), Genesis 1:26.

⁸¹ Ia. 44, 3. Thomas Aquinas, *Creation, variety and evil* (Ia. 44-49), trans. Thomas Gilby, *Summa Theologiae*, vol. VIII, 61 vols. (New York: Cambridge University Press, 2006), p. 19.

⁸² Ia. 4, 2. Aquinas, *Summa*, p. 53.

more than others. Since 'the nobler the creatures the closer they approach God's likeness,' then 'if...the properties of creatures are to be read into God, then at least they should be chiefly of the more excellent not the baser sort.'⁸³ This traditional hierarchical worldview was retained in Renaissance Catholicism. In particular, the principle that steps of natural knowledge could lead to the perception of God had particular purchase in the neo-Platonic tradition of the fifteenth and sixteenth centuries. Marsilio Ficino (1433-1499), a Florentine priest whose philosophy retained its prominence and influence in the century following his death, especially stressed that the natural order led by degrees to God. For Ficino, the soul was 'part of the great chain of existence coming forth from God and leading back to the same source, giving us at the same time a view of the attributes of God and his relations to the world.'⁸⁴ This worldview and its natural theological implications was by no means heterodox. Rivka Feldhay notes that the scholastic metaphysics of an ontological hierarchy descending from God, through angels and spirits, then man, animals, plants and minerals – though challenged by philosophical developments in the Renaissance – remained the standard Catholic worldview at the advent of the Reformation and for decades thereafter.⁸⁵ Philibert Haresche thought that in reading the Book of Nature from the visible *vestigia Creatoris*, an ascending order of being could be followed, arriving in a logical and ontological procession to true understanding of God.⁸⁶ The metaphor of the creatures as a 'ladder to the divine' was commonplace, providing, for instance, the title and structure of one of Cardinal Bellarmine's devotional treatises. Bellarmine believed 'that man can ascend through the works of God, that is, through creatures, to a knowledge and love of the Creator.'⁸⁷ The hierarchical participatory model of relating the creatures to God ontologically (which was much more common in Catholic theology and philosophy than Protestant) begins to explain why knowledge of nature could be of such theological significance. There was a continuous link between knowledge of nature and knowledge of God on account of the hierarchy of being. Natural knowledge was a bridge, in this way, to salvation.

In the hierarchical essential arrangement of the creatures, man himself was the summit: he, made in God's own image, was the creature which participated most in, and thereby revealed most of, the divine nature. Renaissance Catholic philosophy tended, therefore, to stress the importance of man's *natural self* for knowledge of divine matters. Moreover, while the whole world testified in its great diversity to the perfections of God, man was commonly described as a 'microcosm' of it. 'He who examines his whole self and considers what lies hidden within,' wrote Bellarmine, 'will find the whole world in shortened form, from which he will ascend

⁸³ Ia. 1, 9. Aquinas, *Summa*, p. 33.

⁸⁴ M. Schumacher, 'Marsilio Ficino', in Charles G. Herbermann ed., *The Catholic Encyclopedia: an international work of reference on the constitution, doctrine, discipline and history of the Catholic Church*, vol. VI (New York: The Encyclopedia Press, 1909).

⁸⁵ Feldhay, 'Religion', p. 732.

⁸⁶ Haresche, *Expositio*, sig. XXIV; CER, pp. 112-13.

⁸⁷ Bellarmine, *De ascensione mentis*, p. 53.

without difficulty to the maker of all things.’⁸⁸ Of all precedents of the idea that investigation of the self led to a true and extensive knowledge of God and practice of religion, the most cited was the second-century father of medicine, Galen. Galen’s *De usu partium* related the structure and function of the human body to the providence and powers of its Creator and as a result was frequently cited as a pagan with great natural knowledge of God and true piety. Galen’s investigation of man had converted him to proto-Christianity. The Jesuit Robert Parsons (1535-1572), for instance, said that the ‘prophane and very irreligious Physicien’ sang a hymn to God when ‘oppressed as it were with the exceeding great wisdom, cunning and providence which hee discoured in euery last parcel & particle of mans bodye.’⁸⁹

A natural knowledge of God and religion was inherent in human reason. It could also be reasoned *a posteriori* from visible effects to the unseen Cause. Logical deductions of the being of God could be made *a priori* through the exercise of the mind. The ontological hierarchy of all things participating in the divine essence provided the mind a ladder to ascend by created things to knowledge of God. But another mode of natural theology was also within man’s purview, based upon the analogical and allegorical relation of the natural and divine worlds. There was a prevalent belief that the properties predicated partially of creatures were analogous to the full truth predicated only of God. This principle was absolutely central to the Thomist worldview. The ‘analogy of being,’ dictated that God (‘pure act’ and Necessary Being), by virtue of His omnipresence, was in all things – and could therefore be seen in them by analogy – to the measure in which they participated in His being.⁹⁰ For Aquinas, predicates applied to creatures had a qualified analogous relation to God; while the *res significata* was the same, the *modus significandi* was different. Aquinas explained that ‘words are used of God and creatures in an analogical way, that is in accordance with a certain order between them.’⁹¹ The predicates of the creatures signified the excellences of God by an analogous relation of meaning.

The analogous relation of the properties of the creatures to the Creator was not, however, universally approved. Indeed it was concerning this mode of natural theology that the two thirteenth-century Doctors of the Church – and their later adherents – differed most sharply. Scotus related predicates of creatures and God *univocally*, that is, the descriptions had to be applied to the creatures and to God with the same meaning. A ‘pure perfection’ was a property – such as life, love, freedom, intelligence – which it was in every respect better to be than to not

⁸⁸ Ibid., p. 55.

⁸⁹ Robert Parsons, *The Second Part of the Booke of Christian Exercise* (London, 1619), pp. 37-39; qu. in Fruchtbaum, ‘Natural theology and the rise of science’, p. 109.

⁹⁰ Costello explains, ‘there is a proportionality, say the scholastics, or a likeness of relationship between God and His being and creature and its being. Being is predicated of each, but of a transcendently different kind: God *is* being, creature *has* being’ (Costello, *Scholastic curriculum*, p. 79).

⁹¹ Ia. 13, 5. Aquinas, *Summa*, p. 65.

be.⁹² In Scotus' logic, we can only come up with the concept of a 'pure perfection' by examining what makes a certain creature better in every respect. Since God is the most perfect being, he must possess that perfection; it must be predicated of him univocally. God, approached by this univocal, rather than analogical, natural theology was He who possessed all the pure perfections observed in the creatures to the highest degree.⁹³

The natural world was frequently regarded as an analogy of the spiritual world. This is certainly the case concerning Renaissance Sacramental doctrine. Natural species spoke analogically of their spiritual reality. In partaking of the natural species of bread and wine, 'we are led...*by this analogy* to believe that the substance of the bread and wine is changed, by the heavenly benediction, into the real flesh and real blood of Christ.'⁹⁴ In fact the whole of natural life was an analogy to the spiritual life. For instance, the existence of seven sacraments was explicated by the analogical relation to natural life. According to the Catechism of Trent,

Why they are neither more nor less in number may be shown, at least with some probability, from *the* analogy that exists between the natural and the spiritual life. In order to exist, to preserve existence, and to contribute to his own and to the public good, seven things seem necessary to man... Now, since it is quite clear that all these things are sufficiently analogous to that life by which the soul lives to God, we discover in them a reason to account for the number of the Sacraments.⁹⁵

In a related vein, the Book of Nature could also be read allegorically. Allegory was a key tool for the Catholic exegete. A passage of Scripture could be interpreted in four different ways, two of which (the tropological and anagogical) were manifestations of allegory.⁹⁶ In the sixteenth century, the allegorical hermeneutic was rejected by the Protestants but retained by Catholics. Not only, however, did the Book of Scripture contain a rich tapestry of veiled allegorical meanings, but so too did the Book of Nature. The visible creation was thought to contain within its corporeal, material bounds a veiled signification of the incorporeal and spiritual. An allegorical reading of nature dated as far back as the third century. According to the Hellenic philosopher-theologian Origen (c.185-254) in his commentary on Genesis, the arrangements of the natural world were allegorical lessons of spiritual truths: the separation of waters from the land, for instance, was an allegory of the need to cast off the sins of the body so that good deeds

⁹² Ross and Bates, 'Duns Scotus on natural theology', p. 194.

⁹³ For discussion on this, see Thomas Williams, *John Duns Scotus* (2001), Available: <http://plato.stanford.edu/entries/duns-scotus/>.

⁹⁴ CR, p. 223.

⁹⁵ CR, pp. 152-53. Robert Bellarmine echoed this argument three decades later in his *Ample Declaration of Christian Doctrine*. 'The reason wherefore they are seven is this: for that God would proceede in giuing vs spirituall life, as he vseth to proceede in giuing vs our corporall life.' Bellarmine, *Ample declaration*, p. 201.

⁹⁶ There was a *literal* meaning (the historical record), a *typological* connection (for instance between an Old Testament 'type' that signified a New Testament reality such as the Scapegoat representing the Atonement of Christ); a *tropological* meaning (which was a moral or other figurative message communicated through narrative), and an *anagogical* meaning (a veiled mystical meaning, often foreshadowing things to come).

may be perceived.⁹⁷ Origen's account of the allegorical signification of nature was not as unique as one might expect. Augustine also allegorised the whole heraxmeron account in his treatment of Genesis. In the seventeenth century, Bellarmine's *De ascensione mentis* was built on the belief that nature possessed allegories of spiritual truth. A combination, therefore, of the world's analogical and allegorical relation to God underpinned the philosophical vocabulary of 'signs' of God discernable in creation. Some of those signs had a clear meaning that could be accessed by all, but there was a strain of esoteric natural theologico-philosophy that was enormously popular in the Renaissance (proponents included Nicolas Cusanus, Jean Bodin (1530-1596), Tommaso Campanella (1568-1639), and Bernadino Teleso (1509-1588)), in which nature was thought replete with hidden signs and connections that the wise philosopher ought to penetrate in order to find divine mysteries. Reading the Book of Nature for all its theological worth meant reading it *symbolically*.⁹⁸ It was this symbolic, or hieroglyphic, reading of the world whose decline – first, and primarily, in early modern Protestant contexts – was most responsible, according to Peter Harrison, for the new conception of nature that provided the theoretical context for the innovations of the Scientific Revolution.⁹⁹

Finally, one must not preclude from the consideration of natural theology the quasi-mystical, quasi-natural meditative approach to knowledge of God and religion. Meditation was, for medieval and Renaissance Catholics, a legitimate means of theological illumination (and a rule of some monastic orders); part of the Christian's natural communication with his spiritual life while inhabiting the corporeal creation. The Majorcan *arabicus christianus*, Ramon Lull, had attempted (apparently following a vision on Mount Randa in which he saw 'the attributes of God, his goodness, greatness, eternity, and so on, infusing the whole creation')¹⁰⁰ to formulate a naturally-attainable *methodus* for attaining knowledge of God. In one sense, this means of attaining theology was not strictly 'natural,' since the objects of the meditative thoughts were not the sensory inhabitants of the corporeal world, but in another sense Lull proposed a method that was *natural* to man's intellectual faculties, and that neither drew upon Scripture, nor presupposed saving grace, for the veracity of its doctrinal results. Distrusting sensation as a basis for truth, Lull sought to transcend ordinary processes of cognition in the search for knowledge of God. But Lull's method (or 'art' – *ars*) was still a kind of natural theology. In his *Ars magna* (and its shortened version, the *Ars brevis*), Lull argued that the nine essential

⁹⁷ Some of Origen's other allegories in nature concerned the two lights of sun and moon (which stood for Christ (the sun) and the Church (the moon) giving spiritual light unto the world); the stars (which signified the saints of the Bible, shining forth their light to posterity); the swimming creatures of the sea and flying creatures of the air (allegories of the evil and good thoughts of men, inhabiting the heart). See Lowth and Conti, *Genesis* 1-11.

⁹⁸ Amos Funkenstein, *Theology and the scientific imagination from the middle ages to the seventeenth century* (Princeton, NJ: Princeton University Press, 1986), p. 64.

⁹⁹ See Peter Harrison, *The Bible, Protestantism, and the rise of natural science* (Cambridge: Cambridge University Press, 1998).

¹⁰⁰ Frances Amelia Yates, *The art of memory* (Chicago: University of Chicago Press, 1966), p. 174.

attributes of God were made manifest in the created world. Charles Lohr has described Lull's as a 'vision of natural theology which should approach the true God through a method of contemplation on the divine names.'¹⁰¹ The nine names – goodness, greatness, eternity, power, wisdom, love, virtue, truth, and glory – were the divine attributes whose reflected perfection in the creation could lead by a reasoned and spiritual ascent to knowledge of God. The 'art' dictated that one began with the recognition of, for instance, the *good* in the sensible creatures, ascending therefrom to a comparative degree. At this point the senses that had perceived the good (*bonum*) from natural sensation yielded to the incorporeal reason which perceived the abstract notion of the better (*melius*). A second mystical ascent progressed from rational knowledge of comparative perfection to the spiritual knowledge of the superlative (*optimum*) wherein was true knowledge of God, the *optimum et maximum*.

In Lull's account, therefore, sensation and reason were both necessary stages in attaining knowledge of God from the observation of nature. By this method, Lull believed that the highest mysteries of the Christian religion could be attained even by the natural man. The Trinity itself was not only possible to discern from nature, but was demonstrated as logically *necessary*. The attributes of God were plainly manifest in the natural world so that all monotheists – including in particular the Muslims whom Lull was evangelising – could accede to them and follow them to their logical, Christian, conclusions. Though Ramon Lull's *ars* was condemned by the Church for a short period in the late fourteenth century,¹⁰² it established itself as one of the most influential philosophies of the Renaissance, heavily influencing (among others) Raymond Sebond, Nicolas Cusanus, and Giordano Bruno (1548-1600).¹⁰³ The *Ars magna* and *Ars brevis* were reproduced in both text and diagrammatic form frequently throughout the fifteenth, sixteenth, and seventeenth centuries.¹⁰⁴ By this at-once mystical and natural route, a comprehensive

¹⁰¹ Lohr, 'Metaphysics', p. 540.

¹⁰² Lull's *ars* was condemned in Avignon in 1376 and in the University of Paris in 1390, before being absolved in 1416. See Badia et al., 'Centre de Documentació Ramon Llull,' University of Barcelona, 2011, www.centrellull.ub.edu.

¹⁰³ Yates reports that Bruno thought that 'since the divine mind is universally present in the world of nature...the process of coming to know the divine mind must be through the reflection of the images of the world of sense within the *mens*' (Yates, *Art of memory*, p. 257). Bruno's natural theology, however, was symptomatic of the pantheism for which he was executed for the crime of heresy in 1600.

¹⁰⁴ Other Catholic philosophers of the sixteenth century heavily indebted to Lull include the Parisian humanists Jacques Lefèvre d'Étaples (c. 1455-1536) and Charles de Bouvelles (1479-1553). Francis Yates has dedicated a volume of essays to Lull's sixteenth-century following (Frances Amelia Yates, *Lull & Bruno*, Collected essays (London & Boston, MA: Routledge & K. Paul, 1982). Also see Yates, *Art of memory*, 189ff.). Many editions of Lull's work and commentaries thereupon were published in sixteenth- and seventeenth-century France and Italy, such as Bernard de Lavinheta, *Explanatio compendiosaque applicatio Artis Raymundi Lulli* (1523); Heinrich Cornelius Agrippa von Nettesheim, *In Artem brevem Raymundi Lulli* (1533); and Pierre Grégoire, *Syntaxis Artis mirabilis* (1583-87). Lazarus Zetzner's 1598 edition of Lull's entire corpus (Ramon Lull, *Opera ea quae ad inventam ab ipso artem universalem* (Strasbourg, 1598)) was reprinted in 1609 and 1617. A chair of Lullian philosophy and theology was founded by Cardinal Jiménez de Cisneros (1436-1517) at the University of Alcalá. For these examples of Renaissance Lullism, I am indebted to Badia et al., 'Centre de Documentació Ramon Llull.' A full bibliography of editions of Lull's printed works in the Renaissance can be found in Elies Rogent, Estanislau Duràn and Ramón Alós-Moner, *Bibliografía de les impressions Lul·lianes*

knowledge of God and the Christian doctrines was thought possible outside of the external graces of Scripture, Church and Sacrament.

iii. The extent of theological content in nature

In a number of ways, therefore, the Book of Nature could be mined for an extensive array of theological truths. The ability of man to read nature for its theological content was premised upon the optimistic view of man's natural, postlapsarian intellectual and spiritual capacity.¹⁰⁵ As the Catechism of the Council of Trent said, '*Such is the nature of the human mind and intellect*' that it 'by means of diligent and laborious enquiry has of itself investigated and discovered many other things pertaining to a knowledge of divine truths.'¹⁰⁶ It is possible to categorise the theological content of nature into three areas: the doctrine of God, the doctrine of man and the soul, and the moral law and religion.

That true knowledge of God could be had from nature without the revelation of Scripture was an essential and ubiquitous feature of Catholic theology. The Catechism of Trent leaves us in no doubt: Romans 1:20, it alleged, taught that 'the philosophers were able to learn' what it described as 'great and sublime truths regarding the nature of God, which are in full accord with Scripture...from an investigation of God's works.'¹⁰⁷

The most basic component of the natural theological doctrine of God is His existence. The natural theological arguments for God's existence that commonly featured in works of early modern Catholic theology and philosophy were inherited from a rich and varied medieval tradition. Aquinas' *quinque viae* remains the best known synthesis of natural theological arguments to prove God's existence. For Aquinas, the existence of God is not 'self-evident to us,' but needed to be shown 'by means...of God's effects.' The natural creation had to be the basis for belief in God's existence: 'one must be able to demonstrate that God exists from the things that he has made.'¹⁰⁸ The first proof argues from change in the world to 'some first cause of change not itself being changed by anything, and this is what everybody understands by God.' The second argument is based on causation: 'In the observable world causes are to be found ordered

(Barcelona: Institut d'estudis catalans, 1927). There are modern critical editions of Lull's work in both Latin (Ramon Lull, *Raimundi Lulli Opera Latina*, Corpus Christianorum Continuatio Mediaevalis, 34 vols. (Palma & Turnholt: Brepols, 1959-2010)) and Catalan (Ramon Lull, *Obres de Ramon Lull*, ed. Antoni Maria Alcover I Sureda, Salvador Galmes and Mateo Obrador Y Bennassar, 21 vols. (Palma & Barcelona: Diputacio Provincial de Balears, 1906-1950), Ramon Lull, *Nova edició de les obres de Ramon Llull*, ed. Fernando Domínguez, Anthony Bonner, Lola Badia, Antoni Joan Pons, Joan Santanach, Albert Soler and Guillem A. Amengual, 9 vols. (Palma: Patronat Ramon Llull, 1990-2010)).

¹⁰⁵ Peter Harrison has noticed the essential relation of theological anthropology to the possibility for natural theology: 'The whole enterprise of natural theology was premised upon this optimistic view of the natural powers of the human intellect.' Harrison, *Fall of man*, p. 46.

¹⁰⁶ CR, p. 1.

¹⁰⁷ CR, p. 18.

¹⁰⁸ Ia. 2, 7, Aquinas, *Summa*, p. 9.

in series...One is therefore forced to suppose some first cause'. The third argues from contingent beings that there is 'something which must be, and owes this to no other thing than itself; indeed it itself is the cause that other things must be.' The fourth argument 'is based on the gradation observed in things.' Creatures 'describe varying degrees of approximation to a superlative' therefore indicating something that 'is the truest and best and most noble of things, and hence the most fully in being.' The fifth and final proof is 'based on the guidedness of nature... An orderedness of actions to an end is observed in all bodies obeying natural laws, even when they lack awareness.' The conclusion is that 'Everything in nature...is directed to its goal by someone with understanding, and this we call "God."' ¹⁰⁹ The *quinquae viae* of Aquinas had the force of dogma in Counter Reformation Catholicism. The natural philosopher and logician Jacopo Zabarella (1533-1589) was denounced to the Inquisition for rejecting Aquinas' proof from motion in his *De rebus naturalibus* (Padua, 1590). To these cosmological and teleological arguments (which, though summarised in the thirteenth century by Aquinas, antedated him in different guises in patristic and classical philosophy and theology) must be added the ontological argument of Anselm of Canterbury (1033-1109). In the *Proslogion* (c.1077-78), Anselm attempted to prove that 'something than which greater cannot be thought [that is, God] undoubtedly exists both in thought and in reality.' ¹¹⁰ A generation after Aquinas, Duns Scotus attempted a proof of 'triple primacy,' proving by means of natural and observed logic (for example, from the premise that no effect can produce itself, that a chain of causes existed, and that there could be no infinite regress) a first cause in efficient causality (ontology), final causality (teleology), and in pre-eminence (normativity). ¹¹¹

Knowledge of God to be gained through natural theology went much further, however, than mere cognisance of His existence. The God that could be conceived from nature was a God upon whom all creation depended. That knowledge of God as the Creator or First Cause of creation could be had from nature was a trenchant assertion in early modern Catholic theology. The Catechism of Trent explained that man, 'guided solely by the light of nature... is able to contemplate with difficulty the invisible things of God, to discover and understand a First Cause and Author of all things.' ¹¹² Making it plain that the supernatural gift of faith was not required to know God in this way, the Catechism explained that,

¹⁰⁹ Ia. 2, 3. Ibid., pp. 13-17.

¹¹⁰ Anselm of Canterbury, 'Proslogion', in Paul Halsall ed., David Burr trans., *Internet Medieval Sourcebook* (Fordham University, 1996-2011).

¹¹¹ See Williams, *John Duns Scotus*. Duns Scotus' *Ordinatio*. I, d. 2, q. I., cited in Ross and Bates, 'Duns Scotus on natural theology', p. 201.

¹¹² CR, p. 16.

Even some on whose darkness the light of faith never shone conceived God to be an eternal substance from whom all things have their beginning, and by whose Providence they are governed and preserved in their order and state of existence.¹¹³

The knowledge of God from nature included also His sustaining of the world and His governmental providence of all natural phenomena. In fact, it was impossible to separate natural knowledge that God must exist from several of His attributes. Aquinas' proofs of God's existence for instance infer an extensive positive theology of God's metaphysical properties: God as the first mover, final cause, and necessary being speak together of his eternity and omnipotence. There was a diverse range of medieval precedent for learning of God's attributes from the natural world. In the thirteenth century, Bonaventure listed seven characteristics of the created world ('origin, vastness, multitude, beauty, fullness, operation, and order'), contemplation upon which meant that man could arrive at a 'consideration of divine power, wisdom, and goodness as something existent, alive, intelligent, purely spiritual, incorruptible, and immutable.'¹¹⁴

A large number of divine attributes was held to be accessible to natural reason. The most common aspects of a natural doctrine of God's metaphysical properties were His oneness, omnipotence, omniscience, omnipresence, eternity, infinity and incorporeality. Considering the unity of creation and exercising a modicum of logic could, it was believed, lead every reasonable human to monotheism. Aquinas held that the observation of nature necessitates monotheism, 'because the world is one.'¹¹⁵ It was on account of the blatancy of monotheism from the contemplation of the world that made the heathens' polytheism a perversion of manifest truth and a culpable transgression of divine law. The first commandment ('Thou shalt have no other gods before me')¹¹⁶ was given, said the Tridentine Catechists, 'on account of the blindness of many of old who professed to worship the true God and yet adored a multitude of gods.'¹¹⁷ In other words, the commandment was broken *only by polytheism* (Protestants would hold that it was invariably broken by all who did not know God in Christ), while their worship of one god was apparently akin to worship of the true God. The omnipotence and omnipresence of God could also be easily discerned from nature. The pagan philosophers knew, maintained the Tridentine Catechists, that God's 'immense and infinite power fills every place and extends to all things.'¹¹⁸ In this they were following Scotus, who had insisted that 'it can be concluded naturally that [the First Being] is omnipotent.' This attribute was necessarily inferred from the existence of contingent beings, since the First Being must possess the power to cause whatever is

¹¹³ CR, p. 20.

¹¹⁴ Bonaventure, *The journey of the mind to God (Itinerarium mentis in Deum)*, The works of Bonaventure: cardinal, seraphic doctor, and saint, ed. Jose De Vinck, vol. I, 5 vols. (Paterson, NJ: St. Anthony Guild Press, 1960), p. 15, qu. in Fruchtbaum, 'Natural theology and the rise of science', p. 44.

¹¹⁵ Ia. 11, 3. Aquinas, *Summa*, p. 165.

¹¹⁶ Exodus 20:3 (KJB).

¹¹⁷ CR, p. 368.

¹¹⁸ CR, p. 17.

possible.¹¹⁹ By various chains of logic (still constitutive of a *natural* theology since involving the exercise of natural reason), some attributes of God could be derived from others. The Council of Trent cast omnipotence as the logical progenitor of the other divine attributes, for instance omniscience: 'by acknowledging God to be omnipotent, we also of necessity acknowledge Him to be omniscient, and to hold all things in subjection to His supreme authority and dominion.'¹²⁰ For Scotus, God's *infinity* was that attribute that implied, by logical necessity, all the others.¹²¹ Divine infinity was for Scotus, as Ross and Bates summarise, '*manifested* from [God's] intensively infinite creative power.'¹²² From this naturally-derived conception of God as Infinite Being (Scotus includes it in a tract on 'man's natural knowledge of God'), the divine attributes of necessity, simplicity, omniscience, omnipotence, freedom, and creation could be discerned.¹²³ Infinite Being therefore 'includes the "infinitely good", the "infinitely true", and all pure perfections.'¹²⁴ God's incorporeality could also be learned from the contemplation of nature. The Tridentine Catechism held that 'the philosophers conceived no mean idea of Divinity, [they] ascribed to Him nothing corporeal, gross or composite.'¹²⁵

This extensive knowledge from nature of the metaphysical attributes of the Godhead is apparent also in several contemporary commentaries. Thomas Cajetan, in his commentary on Romans provides a typical example. One could know, argued Cajetan, that God is one, sovereign, powerful, and eternal. The *invisibilia* of God that St Paul claimed could be apprehended by man, the intellectual creature of the world (Rom 1:20), included God's incorporeality, immateriality, oneness, intelligence, omnipotence and omniscience. It penetrated into aspects of God's power and even the divine essence.¹²⁶ Marino Grimani in his commentary on the same passage also argued for a detailed and extensive natural knowledge of the metaphysical attributes of deity. True knowledge of God – His *invisibilia*, *sempiterna virtus*, and *divinitas* – was attainable through the contemplation of nature. The *invisibilia* that could be known by creation were the invisible *conditiones* (attributes) of God – the ways in which God is God. Pagan philosophers thus knew 'that he is *actua* or *potentia*, first, infinite, immutable.' The philosophers knew of God's eternal power (*sempiterna virtus*) and – albeit incompletely – His essence and divine nature (what Grimani dubbed *divinitas*). Man could know that God is 'essence (*substantia*) and not merely *accidens* and that he is *simplex* without any *concretio* (admixture).' His commentary explained that

¹¹⁹ Scotus' argument paraphrased in Ross and Bates, 'Duns Scotus on natural theology', p. 217.

¹²⁰ CR, p. 25.

¹²¹ See Duns Scotus, *Ord.* I, d. 3, pars I, qq. 1-2, n. 58, trans. Allan B. Wolter, 'Reflections on the life and works of Scotus', *American Catholic Philosophical Quarterly* 67 (1993), pp. 1-36, at p. 27.

¹²² Ross and Bates, 'Duns Scotus on natural theology', p. 223.

¹²³ See *ibid.*, p. 210 ff.

¹²⁴ Scotus, 'Man's natural knowledge of God,' in A. Wolter ed. *Duns Scotus: Philosophical Writings* (Indianapolis: Hackett Publishing Company, 1987), p. 27.

¹²⁵ CR, p. 17.

¹²⁶ Cajetan, *Epistolae Pauli*, CER, p. 99 ff.

the pagan philosophers were wise 'not only in the knowledge of natural things, but also of God and of other entities separate from the body.'¹²⁷

Though there was a general consensus that a doctrine of God's metaphysical attributes could be learned from His effects in nature, the question of whether God's very essence could be known elicited a range of responses. Aquinas denied that knowledge of God's essence was possible outside of the beatific vision. Though that position was probably the dominant doctrine, the Scotist school offered an alternative approach that cut to the heart of the question of how descriptors of God's effects in the visible creation related to the being of the divine Effector. 'Not only can a concept be had naturally in which God is conceived accidentally...through some attribute,' wrote the subtle doctor, 'but also...some concept [can be had] in which God is conceived in himself and quidditatively.'¹²⁸ According to Scotus, natural knowledge of the perfections does not lead to knowledge merely of God's *properties* but of His *essence*. Man's natural ability to recognise in the creatures semblances of these perfections, such as wisdom in Socrates, necessitates that the concept is applied to creatures and to God univocally, without shift in meaning. There can be no other source of knowing these perfections: if the perfections were known analogically there must be a prior univocal concept of which they are an analogy. God's possession of all the pure perfections to the maximum degree actually produces the metaphysical descriptions of God that are so familiar: God is wisdom to the highest degree, therefore he is omniscient; God is power to the highest degree, therefore he is omnipotent, and so on.¹²⁹ According to Scotus' Franciscan devotees, the Scotist univocal natural theology, centred on the conception of God as Infinite Being, was fuller and more accurate than the alternatives, such as comparative statements of God's qualities, such as the 'highest good' (Anselm's position), analogical statements such as 'God is wise in an analogous relation to the wisdom of Socrates' (the basis of the Thomist relation of the creatures to the properties of God), and negative statements such as 'God is not bad' (Moses Maimonides' (1138-1204) and Nicolas Cusanus' emphasis).

Late Renaissance Catholics also held that natural knowledge of God could encompass several of His moral attributes. According to Aquinas' fourth natural proof of the existence of God, God was known as the superlative Good and Truth – the perfection in which the creatures variously participate. The exegete Claude Guillaud (1493-1551) when expounding the 'invisible attributes of God' of Romans 1:20 held that they also comprised His divine character – namely His moral

¹²⁷ Grimani (1542), sig. 14r, *CER*, p. 122.

¹²⁸ Quoted and translated in Mann, 'Duns Scotus on knowledge of God', p. 243.

¹²⁹ Knowledge of God's essence in the context of divine simplicity implies that there must a single, simple, positive concept that contains all the maximally-realized pure perfections. This is Scotus' concept of God as Infinite Being.

qualities of goodness and wisdom.¹³⁰ The Catechism of Trent explained that philosophers were able to perceive from creation that God was,

the perfection and fullness of all good, from whom...flows every perfect gift to all the creatures. They called Him the wise, the author and lover of truth, the just, the most beneficent, and gave Him also many other appellations expressive of supreme and absolute perfection.¹³¹

In fact, God's moral character was necessarily inferred from His metaphysical attributes: 'Acknowledging God to be immovable, immutable, always the same, we rightly confess that He is faithful and entirely just.'¹³² All men could know from nature God's identity as a just judge of all moral turpitude.

In early modern Catholicism, the most ambivalent position on the content of natural theology concerned the Trinity. Could God's triune Personhood be known by nature? Among patristic sources, Origen held that mankind's ability to know the truth about God from nature theoretically included knowledge of the Trinity, since worship of any god other than the true triune God was idolatry.¹³³ Augustine's whole tactic in the second half of *De Trinitate* (c. 417) was (taking his cue from Romans 1:20 and Wisdom 13:1-5) to discern a series of trinities in the creatures in order to render knowledge of the divine Trinity possible through the contemplation of traces of it in the natural order. For Augustine, a kind of natural theology whereby the Trinity was known 'through a glass' by its image stamped upon man was the only way of knowing it before the direct knowledge of beatific vision.¹³⁴ Aquinas reserved to Scripture the revealing of Trinitarian doctrine, but held that the contemplation of nature could lead men a great distance towards cognising God's triune nature. The pagan philosophers did know 'some of the essential attributes appropriated to the persons, as power to the Father, wisdom to the Son, goodness to the Holy Ghost,' and were aware of 'some perfection residing in the number three.' 'In all creatures' said Aquinas, 'we find a likeness of the Trinity...For each created thing subsists in its own existence, has a form which makes it the kind of thing it is, and bears on something other than itself.' There was therefore 'a trace of the Trinity...discoverable in every creature.'¹³⁵ That the father of scholastic philosophy therefore allowed for – in some sense – the Trinity to be known from the natural world explains why many Catholics in the Renaissance had few qualms asserting that natural theology could extend to this divine mystery. The sixteenth-century exegete Philibert Haresche is an example of those exegetes who claimed the Trinity could be

¹³⁰ Claude Guillaud, *Collatio in omnes divi Pauli Apostoli Epistolas* (Lyon, 1542), CER, p. 123.

¹³¹ CR, p. 17.

¹³² CR, p. 368.

¹³³ Bray, *Romans*, Romans 1:18, pp. 35-36.

¹³⁴ See Augustine of Hippo, *On the Trinity*, books 8-15, trans. Stephen McKenna, Cambridge texts in the history of philosophy, ed. Gareth B. Matthews (Cambridge & New York: Cambridge University Press, 2002), book 15 in particular.

¹³⁵ Ia. 45, 7. Aquinas, *Summa*, p. 57.

perceived in the creatures by the heathen: gentiles, he argued, 'knew, or could know, God and the Trinity.'¹³⁶

The doctrine of man could also be known, to a considerable degree, from nature. The best-known example concerns the immortality of the soul. This was a 'necessary truth,'¹³⁷ whose provability from natural philosophy, without relying on a scriptural fideism (as had figures such as Pietro Pomponazzi (1462-1525) and Jacopo Zabarella) was a dogma fiercely defended from Renaissance novelties both before and after the advent of the Protestant Reformation. The debate about whether the soul's immortality could be known by natural reason went back at least as far as the thirteenth century. Aquinas, following Aristotle, had argued that the soul had to be immortal on account of the incorporeality of the intellect; but Scotus argued that man could neither naturally know nor demonstrate the immortality of the human soul or the future bodily resurrection of the dead. The soul's contingent existence could become non-existence; it could theoretically be subject to dissolution albeit in a different sense to the corruption of organic, corporeal forms. Man could also not know from nature that there would be a future resurrection. The Renaissance Catholic Church endorsed the Thomist view and, at the Fifth Lateran Council (1512-17), rendered the philosophical provability of the soul's immortality a dogma that was enforced by the Church's disciplinary bodies throughout the sixteenth and seventeenth centuries. Not only was the immortality of the soul knowable by natural reason, but so too could some conception of man's ultimate good be naturally perceived. The accessory felicities of heaven – glory, honour, and peace – were 'within the reach of human comprehension,' and therefore were 'generally found more effectual in moving and inflaming the heart' than preaching on the beatific vision.¹³⁸ It is instructive that natural knowledge of the good of man in the bestowal of honour, glory and peace was seen to have a higher pedagogical value than knowledge by faith of the end of man in the beatific vision. In line with the rationalism that characterised the Fifth Lateran Council, some Catholic sixteenth-century works of philosophy claimed to establish not only the immortality of the soul from nature, but also a range of orthodox dogmas. The *Margarita philosophia* (1503) of Gregor Reisch (1467-1525) – an epitome of learning published 13 times by 1600,¹³⁹ includes within its natural philosophy books whole chapters on how 'all creatures exemplify the Creator in their diverse perfection' (X.5), 'how philosophers have been able to come to knowledge of the Creator through the creatures' (XI.6), 'how the Trinity and its image may be found in the soul' (XI.14), the future resurrection (XI.30), and the existence of hell (XI.46) in addition to a chapter on natural knowledge of the immortality of the soul (XI.23). An extensive theology was often thought attainable from the contemplation of nature.

¹³⁶ Haresche, *Expositio* sig. XXIIv; CER, p. 113.

¹³⁷ CR, p. 120.

¹³⁸ CR, p. 139.

¹³⁹ See Reisch, *Philosophical pearl*, p. ix.

From nature, man could, for instance, know something of God's law and how to practise true religion. Orthodox Catholics believed that the moral law of God was implanted in the natural constitution of man and inherent in the very fabric of nature. 'Natural law,' as it was often called, was known instinctively by all. 'Who is not conscious that a law is inscribed on his heart by God, teaching him to distinguish good from evil, vice from virtue, justice from injustice?' asked the Catechism of Trent. The law of nature was known by the distinctively human faculty of reason. It was reason that put man under obligation to obedience: 'no one who has arrived *at the use of reason* can be justified, unless he is resolved to keep all of God's commandments.'¹⁴⁰ A man's reason also condemned his conscience when he transgressed God's law, for instance, 'the grievousness of the sin of theft is sufficiently seen by the light of *natural reason alone*.'¹⁴¹ The Decalogue was seen as the epitome of natural law: the content of the naturally known moral law of God was identical to that which could be known by revelation in the Ten Commandments. In fact, concerning moral law, nature had an unquestioned primacy in both chronology and dignity over revelation. The Decalogue was supernaturally given to Moses, 'not so much to establish a new code, as to render more luminous that divine light which the depraved morals and long-continued perversity of man had at that time almost obscured.' It was its being 'written and impressed by nature on the heart of man,' 'long before' its writing at Sinai that made it 'obligatory by God for all men and all times.'¹⁴² As Bellarmine explained, 'this law was made by GOD, and written by himself, first of all in the hartes of men, and afterwards in two tables of stone.'¹⁴³ The Ten Commandments were binding on Christians, not on account of the authority of Moses, but because 'they are in conformity with nature which dictates obedience to them.'¹⁴⁴ There was therefore a twofold equivalent source of this moral law; both an implanted, natural knowledge, and verbal revelation.

Natural knowledge of the moral law led to knowledge of true religion. The Tridentine Catechism even presented right worship of God as the spiritual teaching of the natural law: 'The worship of God and the practice of religion, which it comprises, have the natural law for their basis.'¹⁴⁵ Further, on account of an optimistic anthropology that held fast to the freedom of the will and the uprightness of reason and the principle that God does not demand the impossible, it was believed that every man possessed the natural ability to keep the law of nature (though not without occasional lapses). It is no wonder, then, that natural knowledge of true religion was thought much more extensive in Counter Reformation Catholic theology than in that of most Protestants. Since natural man could discern both from within (being implanted with such

¹⁴⁰ CR, pp. 358, 361. My emphasis.

¹⁴¹ CR, p. 442. My emphasis.

¹⁴² CR, pp. 358-59, 363.

¹⁴³ Bellarmine, *Ample declaration*, p. 124.

¹⁴⁴ CR, p. 397.

¹⁴⁵ CR, p. 398.

knowledge) and without (the witness of nature) the First Commandment,¹⁴⁶ and since he possessed the natural ability to abide by it, by natural theology man was able to confess God, repose in, and love Him. Similarly, knowledge of the Fifth Commandment ('Thou shalt not kill') went hand in hand with knowledge of God's anthropocentric creation and man's being made in His image, while the Seventh ('Thou shalt not steal') evidenced the possibility of a natural knowledge of justice. In other words, the natural cognisance of the moral law meant that the seed of true religion was within the grasp of the virtuous heathen. Instead of natural religion being the inevitable progenitor of idolatry, as in Calvinist doctrine, it was rather an aberration of that which was clearly known by nature. Nicol Burne's *Disputation concerning the controversit headdis of Religion* (1581) is especially noteworthy for making the point that the law of nature prescribed even the ornamentation of the Church thus presenting the plain simplicity of the Presbyterian churches of his native Scotland as contrary to God's ordinance *in nature*:

Ye, of the lau of nature it self, all nationis hes vniuersalie learned that the tempillis quhilk ar dedicate to the vorschipping of God, aucht to be decored with greit magnificence, and exterior apparel...for declaratione and testificatione of our deutie and subiectione vnto him, and als to excitate, and valkin our dull nature be sik exteriore thingis as ar subiect to our eis to deuotione and pietie.¹⁴⁷

That churches should be ornamented with 'gold, precious stanes, and vther thingis' was plain by the light of nature, given the glory that was owed to God and the need of man for sensory things to elevate his mind to heaven.

Although there did exist a Catholic doctrine of natural theology of God, man and religion, there was considerable variance regarding the extent of the revelation discernable through nature. In some areas of doctrine, however, including Christology and several articles of the creed, natural theology was thought to be limited in extent compared to Scriptural revelation. The Counter-Reformation Church was more conservative regarding the extent of natural theology than many of the traditions it inherited; traditions which indeed continued to be propagated throughout the sixteenth century.

There were commonly taken to be many certain articles of belief that could not be discovered by natural means. In particular, the 'two mysteries' of the Christian religion – the Trinity and the Incarnation – were commonly (though not always) thought beyond the reach of natural reason.¹⁴⁸ In the twelfth century, some Neoplatonist theologians had argued that Creation,

¹⁴⁶ 'I am the Lord thy God...Thou shalt have no other gods before me. Thou shalt not make unto thee any graven image...Thou shalt not bow down thyself to them, nor serve them.' Exodus 20:2-5 (AV).

¹⁴⁷ Nicol Burne, *The Disputation concerning the controversit headdis of Religion, haldin in the Realme of Scotland, the zeir of God ane thousand, fyue hundreth fourscoir zeiris. Betuix. The praetendit Ministeris of the deformed Kirk in Scotland. And, Nicol Burne Professor of philosophie in S. Leonardis college* (Paris, 1581), in Graves Law ed. *Catholic tractates*, p. 138.

¹⁴⁸ This is how Bellarmine described the mysteries of the faith in his 1605 *Ample Declaration of Christian Doctrine* (*Dichiarazione piu Copiosa della Dottrina Cristiani*, 1598): 'the principall misteries of our faith are

Incarnation and the Trinity could be known from nature alone.¹⁴⁹ This extreme optimism regarding the extent of pre-fideal natural theology, however, was quashed in the thirteenth century. Both Aquinas and Scotus agreed on the necessity of supernatural revelation in order to know these and certain other doctrines. Scotus argued that for knowledge of various 'complex truths,' 'it is necessary that the knowledge be handed on to us supernaturally, because no one could naturally find knowledge of them and by teaching hand it on to others.'¹⁵⁰ Those truths unknowable except supernaturally included, for Scotus, the true end of man and the Trinity of the Godhead.¹⁵¹ Nature was not equipped to illuminate these divine properties. Though God's properties belonged to *three* Persons, 'the effects do not show these properties.' In fact, 'if one argues from the effects to the Cause, one is led into great hindrance and error, as there is nothing found in the unity of nature except the supposition of one cause.'¹⁵² In addition, God's effects in nature 'lead more unto their sempiternity and necessity than unto their contingency and novelty.'¹⁵³ In other words, nature witnessed more to the divine unity than Trinity, and contained nothing in itself that led to knowledge of God's creation of the world in time; therefore for knowledge of the true triune nature and eternal power of God one required supernatural revelation. Though, as we have seen, Aquinas thought there were vestiges of the Trinity stamped on the natural world, he did insist that revelation was necessary for a full knowledge of the Trinity. Revelation 'helps us to know [God] better in that we...are taught certain things about him that we could never have known through natural reason, as for instance that he is both three and one.'¹⁵⁴ He answered the question 'whether the Trinity of the divine Persons can be known by natural reason?' firmly in the negative: Natural reason could lead to knowledge of the unity of the Godhead (which, after all, was still a true theological position) but not the plurality and distinction of the three Persons. The Council of Trent, following Aquinas and Scotus, legislated the requirement of the grace of faith for knowledge of the creedal formula of the Trinity. Knowledge by faith was more exalted than knowledge by

two...The first mystery is the Vnity and Trinity of God: The second is the Incarnation and Passion of our Sauour.' Bellarmine, *Ample declaration*, p. 6.

¹⁴⁹ Vidal and Kleeberg describe this as the 'high point in the impulse to natural theology': 'Scholars such as Thierry of Chartres (d. 1150), Clarenbaldus of Arras (d. c. 1160), and William of Conches (c. 1090-1154) produced works in which such central Christian tenets as the Creation, the Incarnation, and the Trinity were deduced by reason without recourse to revelation' (Vidal and Kleeberg, 'Impulse to natural theology', p. 389).

¹⁵⁰ 'Istarum igitur notitiam necesse est nobis supernaturaliter tradi, quia nullus earum notitiam potuit naturaliter invenire et eam aliis docendo trader.' *Ord.*, I, prologue, 62. In John Duns Scotus ed. *Opera Omnia* (1950), p. 38. My translation.

¹⁵¹ See Mann, 'Duns Scotus on knowledge of God', p. 255 ff.

¹⁵² 'Quod apparet de proprietatibus primae substantiae immaterialis in se; proprietas enim eius est quod sit communicabilis tribus; sed effectus non ostendunt istam proprietatem, quia non sunt ab ipso in quantum trino. Et si ab effectibus arguatur ad causam, magis deducunt in oppositum et in errorem, quia in nullo effectu invenitur una natura nisi in uno supposito.' *Ord.*, prologue, I, n. 41; in Scotus ed. *Opera Omnia*, p. 24. My translation.

¹⁵³ *Ord.*, prologue, I, n. 41, in *ibid.*, p. 25.

¹⁵⁴ Ia, 12, 13. Aquinas, *Summa*, p. 45.

nature since the light of faith 'discloses to us the unity of the Divine Essence and the distinction of Three Persons, and show also that God Himself is the ultimate end of our being.'¹⁵⁵

The related but separate case of the Incarnation was similarly normally held to be beyond the reach of natural reason. The 'mystery' of the Gospel (as it was described in the Pauline Epistles) indicated the inability of natural reason to anticipate it. The Catechism declared that 'the mystery which hath been hidden from ages and generations so far transcends the reach of man's understanding, that were it not made manifest by God to His Saints...man could by no effort attain to such wisdom.'¹⁵⁶ Many of the doctrines regarding the person and work of Christ were, therefore, not available by natural theology. The eternal begetting of the Son ('a mystery which reason cannot fully conceive or comprehend'); his incarnation ('the manner in which He became man exceeds our comprehension'); the virgin birth ('what surpasses the order of nature and human comprehension'); and his atoning death on the Cross ('nothing is so far above the reach of human reason') – all these were not known from nature nor through reason, but transcended both, revealed only by apostolic writing and known only by faith.¹⁵⁷

Natural reason was also thought not to extend to various other parts of Christian doctrine. For instance, though man, like all living creatures, had a natural propensity to seek his highest good, nature and reason did not reveal the reward that awaited the righteous.¹⁵⁸ As the Council of Trent ratified it, 'the end proposed to man as his ultimate happiness is far above the reach of human understanding,' being known only by faith.¹⁵⁹ Similarly, the effect of the holy Sacraments, though they were in themselves sensible signs understood through man's natural powers of cognition, 'cannot be comprehended by human reason and intelligence' for their spiritual benefit, being known only 'by the light of faith.'¹⁶⁰ Transubstantiation, the Catechists admitted, 'defies the powers of conception' such that one could not find 'any example of it in natural transmutations, or even in the very work of creation.' Instead of natural reason anticipating, or at least commending the Sacramental doctrine, 'human reason is particularly beset with difficulty and embarrassment when faith proposes to our belief that Christ the

¹⁵⁵ CR, p. 19. Similarly, Cardinal Cajetan's natural theology, extensive though it was, specifically precluded knowledge of the Trinity. See Cajetan, *Epistolae Pauli* in CER, p. 100.

¹⁵⁶ CR, p. 1.

¹⁵⁷ CR, pp. 37, 44, 43, 53. The difficulty that reason had with the virgin birth was not so much conception by the Holy Spirit but the way in which the body and rational soul of Christ were formed in the womb together, contrary to the established order in scholastic theories of generation: 'That this was the astonishing and admirable work of the Holy Spirit cannot be doubted; for according to the order of nature the rational soul is united to the body only after a certain lapse of time' (CR, p. 43).

¹⁵⁸ Aquinas wrote that God 'destines us for an end beyond the grasp of reason' (Ia.1.1, in Aquinas, *Summa*, p. 7. Scotus agreed that 'man cannot know [scire] his own end distinctly from natural (things); therefore there is necessary for him some supernatural cognition concerning this.' *Ord.*, prologue, I, 13. In Scotus ed. *Opera Omnia*, p. 10.

¹⁵⁹ CR, p. 11.

¹⁶⁰ CR, p. 157.

Lord...suffered death for us, and this death is designated by the Sacrament.’¹⁶¹ It had to be accepted by faith and could be neither discovered nor investigated by natural reason: ‘how it takes place we must not curiously inquire.’¹⁶² In addition to the Sacraments, the three theological virtues of faith, hope and charity, were considered by some to be purely *super-natural*. Faith, according to Bellarmine, was the gift of firm belief in the Church’s doctrine that was ‘otherwise hard and *aboue naturall reason*.’ Hope in heaven ‘was not possible to reach thereto by *humane ability*.’ Finally, charity went beyond what reason dictated by causing the Christian to ‘loue God...Not only as Creator, and Author of all our naturall good, but also as the giuer of grace & of glorie, which are supernaturall.’¹⁶³ There were, then, some areas of doctrine generally held to be inaccessible by the *via per creatorem*. The mysteries of the Trinity and Incarnation were the primary doctrines that could not be attained by natural theology, but others were also often given – such as the nature of the beatific vision, the Sacramental union in the Eucharistic host, and the theological virtues.

Despite limitations, the content of natural theology was, in one sense, sufficient for faith (*qua* belief). By it, a natural man could come to believe that God existed, to know several of His metaphysical and moral attributes, to know the immortality of the human soul and its future judgement, and to know and be able to fulfil the moral-natural law which also directed true worship. But in another sense, natural theology could not lead to ‘the Faith,’ *qua* the objective body of Catholic doctrine encompassed in the Creeds. Thus, by nature one could not (according to conservative ‘minimalist’ natural theology) come to know, among other doctrines, the Incarnation and Passion of the Second Person of the Trinity.¹⁶⁴ Therefore natural *belief* in God and of His demands and attributes was inferior to ‘the Faith’ propagated and defended by the Church:

How much more exalted must not that knowledge of the Deity be considered, which cannot be acquired in common by all from the contemplation of nature, but is peculiar to those who are illuminated by the light of faith? This knowledge is contained in the Articles of the Creed.¹⁶⁵

It is worth pointing out the semantic difficulty that twenty-first century historians have when approaching this topic: for the question, ‘did Catholics believe that nature led to faith?’ can legitimately be answered either way, depending on whether subjective belief or the objective deposit of full ecumenical doctrine is meant. Only with this equivocation in mind are we equipped to approach Catholic writing on ‘faith and reason.’ According to Trent, natural

¹⁶¹ CR, pp. 239, 227.

¹⁶² CR, p. 239.

¹⁶³ Bellarmine, *Ample declaration*, pp. 250-53.

¹⁶⁴ Some Renaissance Catholics, including Raymond Sebond, had a much more optimistic, or ‘maximalist’ view of the potentiality of learning the content of ‘the Faith’ (the articles of the creed) from an examination of the creatures; but the official statements of the Counter Reformation Church tended toward the conservative, ‘minimalist’ doctrine.

¹⁶⁵ CR, pp. 18-19.

knowledge of God was possible, but it was not the same in extent (and therefore dignity) as knowledge gained through the supernatural revelation of Scripture and the supernatural authority of the Church. While 'faith' could be attained, 'the Faith' could not.

One tradition of thought with an influential Renaissance restatement challenged the whole basis of nature as a source of theology on account of its supposed divine similitude. Some believed that the ineffability and incorporeality of God made it impossible to know Him positively from the creatures. That did not, however, necessarily preclude a natural theology. A tradition associated with medieval Jewish philosopher Moses Maimonides held that the only knowledge man could have about God was *negative knowledge*; God's eternity, for instance, meant only that God was 'not caused.' In the Renaissance the idea that God could only be spoken of negatively and known only by negative analogy and dissimilitude was championed, among others, by Nicolas of Cusa (Cusanus). Cusanus believed that man's mind was incapable of a proper conception of God. Though this may sound like the Protestant position (discussed in a later chapter) – that man by nature had no means of knowing God and true religion – Cusanus' doctrine of 'ignorantia' did not base man's mental inability on his fall from grace but on the metaphysical divine attribute of infinity. The universe was indeed a kind of analogy for God, but an analogy of negation. The universe by its apparent boundlessness (according to human comprehension) by analogy spoke of God's true infinity. Because natural theology could only be conducted negatively it could not, in Cusanus' estimation, inform the mysteries of positive theology which were found only in scriptural revelation.¹⁶⁶ In the tradition of negative (natural) theology, from the contemplation of things that *are* in the created world, one could reason to a true theology of things that God *was not*. Though Cusanus' metaphysics continued to be revered in the century following his death, his negative natural-theological technique remained a minority position in the Renaissance. Orthodox scholastics denied its premise: Thomists on the grounds of a fundamental optimism regarding human reason and a belief in the positive analogical relation of God to His creatures; Scotists on the grounds that negations could be known only by prior affirmations thereby implying a positive concept of God that could be naturally acquired.

So far we have considered the question whether such-and-such a doctrine could be known from the contemplation of nature, or whether faith (through the graces of Scriptural revelation and the Church) was necessary. But in posing the question thus, we actually assume an autonomous or even opposed dichotomy between natural and revealed theology that is in fact hard to justify for Renaissance Catholicism. We have observed already that natural knowledge of God and religion was not so much *contrasted* with the knowledge that comes by faith, but that both were on a scale of truth and accuracy. To understand the considerable role that natural theology

¹⁶⁶ See Funkenstein, *Theology and the scientific imagination*, p. 64 ff.

played in early modern Catholic doctrine, it is necessary to push further the interrelation of the two sources of divine knowledge. Certain doctrines, such as the Trinity, might not be *known* with demonstrable certitude from natural investigation, but might yet admit of *probabilistic* arguments that suggest them, while only faith could provide complete clarity and certainty.

Another way that undermines a strict distinction between natural and Scriptural theology is the way in which Scriptural knowledge of God was subject to the same limitations as natural knowledge. A full knowledge of God's essence, for instance, could not be had by natural reasoning – but nor could it be had *by any means* in the course of an ordinary Christian life. In fact, according to Aquinas, knowing God through impressions of the natural world was the only way to know Him at all. All knowledge, according to Aquinas and Renaissance scholastics – including that which concerns 'the world of intelligence' – 'takes its rise from sensation.' God is pure essence, immaterial, incorporeal but man 'cannot by nature know anything except what has its form in matter or what can be known through such things.'¹⁶⁷ On account of God's incorporeality, He could be known only by the 'images of his effects.'¹⁶⁸ The only way to know God, therefore, was through the visible creation. But this knowledge was imperfect. Though, in Aquinas' formulation, the 'sensible creatures are effects of God,' they are 'less than typical of the power of their cause,' and so 'cannot help us to know him comprehensively for what he is [*suam essentiam*].'¹⁶⁹ Ignorance of God's essence was in fact Aquinas' central example of the limits of natural reason with several articles in his *Summa Theologicae* devoted to it. For Aquinas, 'since...the natural power of the intellect is not sufficient to see the essence of God, this power of understanding must come to it by divine grace.'¹⁷⁰ But 'by divine grace' did *not* mean by Scriptural revelation. A 'mere man...cannot see the essence of God unless he be uplifted out of this mortal life.'¹⁷¹ The only way to know God in His essence was, as the Catechism of Trent taught in accordance with Thomas, to be freed – by ecstasy, or more often, death – from the circumscriptions of mortal intellectual and sensory life and united to God in the beatific vision.¹⁷² Ruling out ecstasy and death, knowledge of God was in a sense *always natural*, even when it was informed by Scripture: complete knowledge of Him in His essence was not attained through revealed theology any more than by natural theology. While 'a thing is known either from its essence, or from its image and appearance' and 'nothing so resembles God as to afford by its resemblance a perfect knowledge of Him,' it followed that 'no creature can behold His

¹⁶⁷ Ia, 12, 11. Aquinas, *Summa*, p. 37.

¹⁶⁸ Ia, 12, 3. Ibid., p. IIIa, 12, 12, *ibid.*, p. 41.

¹⁶⁹ Ia, 12, 12. Ibid., p. 41; Ia, 2, 2. Aquinas, *Summa*, p. 11.

¹⁷⁰ Ia, 12, 5. Aquinas, *Summa*, p. 19.

¹⁷¹ Ia, 12, 11. Ibid., p. 37.

¹⁷² Ecstasy was when 'those who enjoy God while they retain their own nature, assume a certain admirable and almost divine form.' After death, 'the blessed always see God present and by this greatest and most exalted of gifts, being made partakers of the divine nature.' CR, p. 136.

Divine Nature and Essence' without being joined in essence with God.¹⁷³ Knowledge of God through His natural effects was necessarily incomplete because of the imperfect resemblance of corporeal to incorporeal or finite to infinite, even if described in Scripture by divinely-endorsed analogies to creatures. All this serves to show that there was no essential dichotomy between the knowledge of God by nature and knowledge of God by Scripture; not only were the two related to one another, but both were circumscribed by the same epistemological limits. As Aquinas strikingly put it, though 'knowledge of God in his essence is a gift of grace and belongs only to the good [that is, in heaven],' 'yet the knowledge we have by natural reason belongs to both good and bad,' that is, to Christians possessing the Book of Scripture and pagans possessing only the Book of Nature.¹⁷⁴ Supernatural and natural knowledge of God for the Christian and 'natural man' were not two fundamentally distinct categories as they were in Protestant theology (true versus false; comprehensive versus limited; Redeemer versus Judge), but a continuum with substantial overlap.

The *continuity* between natural knowledge of God and knowledge by faith is strikingly different to the dichotomous Protestant approach. Instead of being two autonomous spheres of prospective knowledge of God and religion, in Catholic theology they were interwoven strands that drew strength from each other. Grace did not flood the darkness of nature with spiritual light but *supplemented* and *developed* the truth accrued by natural theology. This is one of the senses in which 'grace perfects nature.' Aquinas explained that 'by grace we have a more perfect knowledge of God than we have by natural reason.' Natural reason, he contended, depended on sensible images and the ability of 'natural intellectual light' – both of which were 'helped by the revelation of grace.' Grace strengthened the power of reason, while prophetic visions provided images that were 'better suited to express divine things than those we receive naturally from the sensible world.'¹⁷⁵ In other words, grace, or faith, does not provide a more perfect knowledge of God by a supernatural *mode* of intellection, but aids the epistemological process begun by natural theology.

Grace added to and built upon that which nature provided. In this way, therefore, faith added a deeper mystery to something known naturally. So while 'reason and the senses are able to ascertain the existence of the Church,' for instance, 'it is from the light of faith only, not from the deductions of reason, that the mind can grasp those mysteries contained in the Church of God.'¹⁷⁶ Or, regarding the Eucharist, natural knowledge was of the mundane elements, but to understand and appreciate the spiritual benefit of the transubstantiated host, the communicant had to 'to be withdrawn from subjection to the senses and excited to the contemplation of the

¹⁷³ CR, p. 136.

¹⁷⁴ Ia, 12, 12. Aquinas, *Summa*, p. 41.

¹⁷⁵ Ia, 12, 13. Ibid., pp. 43-45.

¹⁷⁶ CR, p. 108.

stupendous might and power of God.’¹⁷⁷ In the consecration of the elements in the Sacraments, the natural became supernatural. At that point, natural knowledge was no longer constitutive of true theology – indeed, it had to be transformed into knowledge of a spiritual reality that transcended the modes of natural existence and cognition. The necessity of faith to comprehend the mysterious transformation of the formally natural substance of the Sacrament afforded Catholic polemicists a stick with which to beat the Calvinist heretics. Just as Protestant polemicists charged Catholicism with practising the ‘natural religion’ of men, so too did Catholics charge Protestants with a kind of natural unbelief. John Hamilton, in his *Catholik and facile traictise* (1581) for instance, railed against the Reformed denial of transubstantiation. Their fault, said Hamilton, was ‘fals applications of the scripture, quhilk thaj thrav efter their *sensuall iugement*.’ The Calvinists were false teachers who ‘blasphem all thingis, quhair of they ar ignorant, and mesurs all thing efter their *naturall iugement*...quhatsumeuir they knau naturallie as dum beast, they ar corruptit in the same.’¹⁷⁸ The supernatural gift of faith was necessary to know the full truth. The real presence of the Sacrament, according to Peter Canisius (quoted here in Scots translation), ‘may nocht be comprehendit be the capacitie off mannis sensis, bot conceaut be faithe onli.’ Faith, he continued, ‘consideris nocht the order and rewills off natur, nor yit dependis on the experience off corporall sensis, neither leanis it vpone the puissance or raisons of man, bot in the pouar and authoritie off God.’¹⁷⁹ In other words, the natural judgement of the Protestants was merely the insufficient, mundane part of a full truth attained only by lifting the minds by faith beyond the corporeal that they perceived.

Knowledge of God by the grace of faith was invariably cast as *superior* to knowledge of God by natural reason while inhabiting the same scale. It was not that nature provided bad theology, and faith good; rather, knowledge by nature or reason was good, and knowledge by faith better. First, it was superior in *merit*. Believing something to which the senses did not testify was more meritorious than acceding to the proof of reason.¹⁸⁰ Second, knowledge by faith was superior regarding its *clarity* and *ease*. As the early sections of the Catechism of Trent explain in a passage of paramount importance for our current discussion, ‘guided solely by the light of nature,’ man ‘advances *slowly* by reasoning on sensible objects and effects, and only after *long and laborious*

¹⁷⁷ CR, p. 228.

¹⁷⁸ John Hamilton, *Ane Catholik and facile traictise, drauin out of the halie scriptures, treulie exponit be the ancient doctores, to confirme the real and corporell præsence of chrystis pretious bodie and blude in the sacrament of the alter* (Paris, 1581), in Graves Law ed. *Catholic tractates*, pp. 77 and 83. My emphasis. For another example of the same argument in the same volume, see James Tyrie, *The Refutation of ane Answer made be Schir Johne Knox to ane letter send be James Tyrie to his umquhyle brother* (Paris, 1573), in Graves Law ed. *Catholic tractates*, pp. 24-25.

¹⁷⁹ Petrus Canisius, *Ane Catechisme or schort instraction of Christian Religion drawvven out of the scripturs and ancient Doctours compyled be the Godlie and lerned father Peter Canisius Doctour in Theologie*, trans. Adam King (Paris, 1588), in Graves Law ed. *Catholic tractates*, p. 209.

¹⁸⁰ The Tridentine Catechism’s exposition of the Eucharist demonstrates this point: ‘The receiving Him under a form in which He is impervious to the senses avails much for increasing our faith. For faith, as the well-known saying of St Gregory declares, has no merit in those things which fall under the proof of reason’ (CR, p. 241).

investigation is it able to contemplate *with difficulty* the invisible things of God... Christian philosophy, on the contrary, so quickens the human mind that *without difficulty* it pierces the heavens.¹⁸¹ It was for this reason that 'the philosophers were able to learn from an investigation of God's works' many Christian doctrines; but revelation was needed since it 'makes known clearly and at once to the rude and unlettered, those truths which only the learned could discover, and that by long study.'¹⁸² Even those who thought nature could reveal the greatest mysteries of the Christian creed often admitted the greater effort that must be expended to gain it by natural means. While Philibert Haresche taught that the Trinity could be perceived from the creatures, he did call the natural knowledge of God *obscura* and *abumbrata*.¹⁸³ Third, knowledge by faith was superior to knowledge by nature on account of *reliability* and *certainly*. Revelation is deemed superior 'as to certitude, because theirs [philosophers'] comes from the natural light of human reason which can make mistakes.'¹⁸⁴ The difficulty presented in learning some of the divine truths from nature could be seen, explained the Tridentine Catechism, in the examples of 'many men, eminent for wisdom or endowed with singular learning' who nonetheless 'remained blind to this most certain truth [of the resurrection of the body]', or those 'very many who seemed to themselves wise...imagining that happiness was to be sought in this life.' While many great minds (though not, of course, all) had struggled to determine these truths, God had 'made them known to little ones' through the more certain and more clear Word.¹⁸⁵ Faith was 'much more certain and more secure against error than if it were the result of philosophical enquiry.' Interestingly, revelation was not presented as necessary on account of want in the content of the Book of Nature, nor of inherent human spiritual blindness so much as on account of the limited powers of reason and limited time of the majority. Though knowledge of God and religion by faith was *more* excellent, *more* exalted, *easier* to attain, *more* certain than that by nature, its object was essentially the same. The truth could genuinely be approached and achieved by either route, with both of God's Books to a large extent telling the same story. The importance of this emerges when we compare the Protestant position on the content and purpose of natural theology.

Because natural knowledge of God and faith were separated more by quantity and quality than quiddity, the extent to which one could know divine truths from the natural world depended just as much on an individual's ability to read the Book of Nature as it did on what that Book contained. The Catholic view of the Fall, as we have seen, preserved the freedom of the will to pursue and effect the good, and the integrity of the faculty of reason to attain truth. The extent and value of a man's natural theology therefore depended on those two faculties.

¹⁸¹ CR, p. 16. My emphasis.

¹⁸² CR, p. 18.

¹⁸³ Haresche, *Expositio*, CER, p. 113.

¹⁸⁴ Ia, 1, 5. Aquinas, *Summa*, p. 19.

¹⁸⁵ CR, pp. 130, 133.

Since possession of both a free will and an upright reason was common to all men, there was a corresponding natural theology that was universally possessed. All who had a modicum of reason had a modicum of natural theology. The Tridentine Catechism therefore spoke of ‘that knowledge of the Deity...acquired in common *by all* from the contemplation of nature.’¹⁸⁶ But those who possessed a greater power of reason could attain a more extensive true theology from the study of nature. Aquinas held that ‘the stronger our intellectual light the deeper the understanding we derive from images, whether these be received in a natural way from the senses or formed in the imagination by divine power.’¹⁸⁷ It was therefore only some few ‘philosophers who have been able to perceive the truth by natural reasoning.’¹⁸⁸ The sixteenth-century exegete, Philibert Haresche, similarly maintained that only philosophers were sufficiently wise to arrive at natural knowledge of a first, supreme, eternal, perfect, omnipotent, supremely wise and good God.¹⁸⁹ Even if natural theology could be conducted to some extent by all, the more excellent minds would have a more extensive natural theology. It was because of their extraordinary intellect, diligence, and moral rectitude that Aristotle and Plato were able to peer into the mysteries of God and attain to such knowledge that they anticipated the truths later revealed in the written words and traditions of Christ and the Apostles.

iv. The ends of natural theology

So far we have considered the subject of natural theology (the world as a form of revelation), the object of natural theology (man as a rational being who could read the Book of Nature, in the context of a Thomist lapsarian theology), the method of natural theology (instinct, reason, analogy and meditation) and the content of natural theology (God’s existence, metaphysical and moral attributes, and the natural moral-spiritual law), including its limitations and its interactions with Scriptural theology. What remains, therefore, is to consider the *ends* to which it was applied. Broadly speaking, the ends of natural theology in early modern Catholic doctrine can be divided into two sections referring to (a) the non-Christian (‘heathen’ or ‘natural man’), and (b) the Christian.

The most distinguishing feature of the Catholic doctrine of natural theology in contradistinction to the Protestant, was its spiritual effectiveness for the natural man. In order to understand why natural theology had the potential of profound spiritual benefit for the non-Christian it is necessary to explain the doctrine of prevenient grace. In one sense orthodox Catholicism insisted upon the absolute necessity of grace for divine intellection and moral living that apparently resounded with the Protestant *sola gratia* polemic to which it was ostensibly opposed. The

¹⁸⁶ CR, p. 18. My emphasis.

¹⁸⁷ Ia, 12, 13. Aquinas, *Summa*, p. 45.

¹⁸⁸ Ia, 1, 8. Aquinas, *Summa*, p. 31.

¹⁸⁹ Haresche, *Expositio CER*, pp. 112-13.

Tridentine decree on justification began by asserting ‘*the inability of nature* and the law to justify man,’ while the Catechism likewise asserted that ‘to love and serve God as we ought is something too noble and too sublime for us to accomplish *by human powers*...unless we are assisted by the grace of God.’¹⁹⁰ But it is here that the doctrine of prevenient grace fills a vital gap that explains why Catholic theology placed a high premium on natural theology in the economy of salvation. Despite their capacity for truth and good, the postlapsarian faculties of the human mind needed divine assistance in the form of grace to overcome the temptations of the flesh. But God gave all men ‘sufficient grace’ so that free will was not an empty name. This universal grace went (*venio*) before (*pre*) their conversion. Thomas Aquinas had posited a grace of ‘imperfect preparation’ that ‘precedes the gift of sanctifying grace,’ and which was common to all men.¹⁹¹ It was a universal benefit of Christ’s Passion, a deliverance ‘from the common sin of the whole human race,’ separate from the effects of the Passion on the baptised Christian who, ‘by faith and charity and the sacraments of faith,’ was delivered also from their personal sins.¹⁹² It was God’s prevenient grace, therefore, that ‘opened the gates of heaven,’ by enabling the soul to desire, merit, and effect its ultimate good. The doctrine meant that both the necessity of grace and the ability (and associated moral responsibility) of free will were preserved together. In this account, justification was effected through a man’s cooperation with the prevenient grace that God had instilled in all humanity. The Council of Trent explained,

the beginning of the said Justification is to be derived from the prevenient grace of God, through Jesus Christ...that so they, who by sins were alienated from God, may be disposed through His quickening and assisting grace, to convert themselves to their own justification, by freely assenting to and co-operating with that said grace.¹⁹³

By virtue of the doctrine of prevenient, sufficient grace, Catholic theologians were able to argue (in contradistinction to their Protestant counterparts) that God did not demand from natural man anything that he lacked the power to effect.¹⁹⁴ Man possessed the possibility of an intellectual-spiritual journey toward the knowledge and love of the true God. In contrast, Protestant soteriology knew nothing of prevenient grace. God’s grace to man came in two forms; *common* grace (by which man had the blessings of material, political, family; i.e. *natural* life), and *saving* grace, by which the elect were called to the supernatural life of repentance, belief, justification, sanctification, and perseverance. That is why, as we shall see in subsequent chapters, there was no *positive* role for natural theology in Protestantism *prior* to salvation. In Catholic theology, due to God’s preventing, natural man had both the ability and imperative to

¹⁹⁰ Council of Trent, Session VI, ‘Decree on justification’ (CoT, p. 31); CR, p. 531.

¹⁹¹ IaIIae, 112, 2.

¹⁹² IaIIae, 114, 6; III, 49, 5.

¹⁹³ Council of Trent, Session VI, ‘Decree on justification’, chapter 5 (CoT, pp. 32-33).

¹⁹⁴ The Augustinian formula ‘Deus impossibilia non iubet,’ which was oft-quoted in medieval and early modern Catholic theology, was also quoted in the Tridentine proceedings. See, for instance, Council of Trent, Session VI, ‘Decree on justification’, chapter 11. ‘For God commands not impossibilities...’ (CoT, p. 38).

‘prepare himself’ for grace. That preparation was both moral and intellectual, concerning both will and reason. The Council of Trent declared anathema any who maintained that ‘it is not in any way necessary, that [a man] be prepared and disposed by the movement of his own will.’¹⁹⁵

The will was free, of course, to reject God. Therefore, it was the will, rather than the intellect, that prevented the attaining of true knowledge of God from nature. According to Cajetan, men have true knowledge of God’s character, eternal power and divine essence by nature but do not glorify God as their knowledge necessitates, instead desiring human glory.¹⁹⁶ The Cardinal and papal legate Jacopo Sadoletto (1477-1547) thought man’s intellect was adequately furnished by nature to exercise true worship; only the vanity of an individual’s spirit (rather than the shortcomings of the intellect) prevented men from continuing to achieve his epistemological spiritual potential.¹⁹⁷

Man, then, had a natural potential and propensity to worship the true God. But in the absence of the guidance of the Church and the Scriptures, what was the nature of his religion? In the first place, religion was an instinctive component of man’s natural life. The Catechism explained that ‘as nature requires some time to be given to necessary functions of the body, to sleep, repose and the like, so she also requires that some time be devoted to the mind, to refresh itself by the contemplation of God.’¹⁹⁸ Man’s very inhabiting of the theatre of nature provoked a right religious response. The Catechism extolled ‘the heavenly bodies, whose beauty and order excite the admiration of all peoples, even the most uncivilized, and compel them to acknowledge the glory, wisdom and power of the Creator and Architect of the universe.’¹⁹⁹

In stark contrast with the doctrine of Protestantism, natural religion was thought to contain considerable normative truth and value. Jacopo Sadoletto thought that humanity’s inborn capacity to understand the invisible attributes of God through the investigation of nature meant that man naturally possessed enough knowledge for true worship of God – but error introduced to the world by certain pagan philosophers had frustrated the efficacy of this avenue to religion.²⁰⁰ In Sadoletto’s account, therefore, we see an optimism regarding the potentiality for a true natural religion tempered by a pessimism regarding its attainment due to *philosophical* error. It was in fact his pessimism, in neglecting the effect of prevenient grace, rather than his optimistic belief in the potentiality for complete true worship of God drawn from the wells of nature that caused Sadoletto’s commentary to need official expurgation.²⁰¹ Philibert Haresche

¹⁹⁵ Council of Trent, Session VI, On Justification, Canons v, ix, xi. *CoT*, p. 45.

¹⁹⁶ Cajetan, *Epistolae Pauli*, CER, p. 103.

¹⁹⁷ Jacopo Sadoletto, *Iacobi Sadoleti Episcopi Carpentoractis In Pauli Epistolam ad Romanos commentariorum libri tres* (Lyon, 1535), CER, pp. 106-07.

¹⁹⁸ CR, p. 398.

¹⁹⁹ CR, p. 362.

²⁰⁰ Sadoletto, *In Pauli Epistolam ad Romanos commentariorum libri tres*, pp. 28, 37; CER, p. 30.

²⁰¹ See Parker, *Commentaries on Romans*, p. 28.

similarly held that the 'truth of God' that the gentiles possessed from nature (Rom 1:18) was knowledge both of God *and* the worship that truly belonged to Him.²⁰²

The objective truth that natural religion exhibited extended into many spheres of spiritual life beyond the intellectual comprehension of the doctrine of God, such as key tenets of Christian devotion including prayer and penance. Man was naturally disposed to prayer: 'that God is to be prayed to and His name invoked is the language of the law of nature' wrote the Catechists. To pray for oneself was 'an inspiration of nature', an 'unbidden impulse.'²⁰³ Those who 'have not as yet been illumined with the light of faith,' were moved to prayer when a grace 'illumines in their souls the feeble natural light.' Though there was a difference in the petition of distress prayed by the heathen and by the Christian,²⁰⁴ the prayers of the heathen could be heard and answered. 'God, in His mercy, will not neglect their earnest endeavours.' The prayer of the natural man, with the assistance of prevenient grace, could even effect knowledge of the Christian faith and salvation. When they were 'strongly moved to the desire and pursuit of truth and most eagerly pray for a knowledge of it', God granted it, for the 'doors of divine mercy are closed against none who sincerely ask for mercy.'²⁰⁵ Michel de Montaigne (1533-1592) is an example of one who applied this principle in order to argue that God regarded the religious devotion of all peoples, irrespective of the fineries of their theological content, as meritorious:

This zeal has been regarded universally with favour by heaven... God, in his mercy, perhaps deigning to foster by these temporal benefits the tender beginnings of a rough knowledge of him, however feeble, that natural reason has given us amid the false images of our dreams.²⁰⁶

The devotion of the pagans to a God they did not fully understand was worthy in God's eyes. It was, in fact, doing *quod in se est* (discussed below), and was likely to provoke God to further gifts of grace, building upon 'the tender beginnings of a rough knowledge of him' that man's natural reason, with God's help, was able to cognize. Such 'beginnings' for Montaigne could fructify into proto-Christian belief. Plato, for instance, 'by the purity of his conscience deserved so well of God's favour as to penetrate through the widespread darkness of his time deeply into the light of Christianity.'²⁰⁷

Though the natural man inherited original sin and was invariably guilty of actual sin, he did possess the ability to cognize his sorry state and repent. The 'frailty and weakness of human

²⁰² Haresche, *Expositio*, CER, pp. 112-13.

²⁰³ CR, pp. 491, 509, 578.

²⁰⁴ The natural man, according to the Catechism, though he 'begs of God to cure his diseases and to heal his wounds', 'places his principal hope of deliverance in the remedies provided by nature.' But the Christian, knowing God as the 'author of all his good,' places his hope in God alone, who he knew might operate through the secondary causes of medicine. CR, p. 579.

²⁰⁵ CR, p. 486.

²⁰⁶ ARS, pp. 286-87.

²⁰⁷ Michel de Montaigne, *The complete essays*, ed. M. A. Screech (London & New York: Penguin Books, 1993) I.12, p. 1181.

nature are universally known and felt by each one in himself,' such that 'no one can be ignorant of the great necessity of the Sacrament of Penance.'²⁰⁸ Though penance had to be administered by a Catholic priest, natural man could be sincerely contrite and perceive his need for forgiveness on account of the testimony of his natural conscience and knowledge of an omniscient and holy God. In Protestant theology, by contrast, even contrition was only effected by saving grace – despair (a sin in itself) was the closest that natural man could muster. But Catholic doctrine allowed for the natural man to perceive something not only of his own guilt, but to anticipate the need to amend it in penitential prayer, acts of satisfaction, and hope in atonement.

As we have seen, from nature a comprehensive moral law could be learned. Much of the content of the natural law ruled on how to relate to God aright in conscience and action. Each of the Ten Commandments, including those ones of inner conscience rather than visible conduct ('Thou shalt not covet') could be known by nature. A caveat was only made for the third (keeping of the Sabbath) wherein the natural obligation it carried was not tied by nature to a particular day (Saturday) but demanded only a weekly set-aside period of religious devotion. The third was thus, as Bellarmine said, 'in part naturall, and bindeth all men: and in part it is not natural,' while the others were all 'wholly naturall.'²⁰⁹ Though the theological virtues (faith, hope and charity) were the supernatural additions of grace, the natural man could nevertheless possess and exercise the four cardinal virtues of prudence, fortitude, temperance and justice. These virtues were the natural good of the soul: 'Prudence gouverneth the vnderstanding. Iustice gouverneth the will. Fortitude gouverneth the irascible powre. And Temperance gouverneth the appetite of concupiscence.'²¹⁰ With the moral law that was binding on Christians (and known by revelation in the Decalogue) known from nature, the natural man could go a long way to fulfilling his holy obligations, doing good works and exercising virtue.

It was the natural knowledge of God's law, in fact, that made heathen political society possible. There was an essential and profound relation between the natural knowledge of God's law and civil law. Civil laws, though framed according to the particular circumstances and temperament of each society, were ultimately based upon the natural law whose obligation all men instinctively knew. Civil law was thus a particular expression of a universal natural law. The Catechism of Trent taught that murder, for example, was universally forbidden in positive law because it was known by all to be contrary to both God and nature.²¹¹ In fact, all civil law was ultimately derived from natural law epitomised in the Ten Commandments. The Decalogue was,

²⁰⁸ CR, p. 261.

²⁰⁹ Bellarmine, *Ample declaration*, p. 156.

²¹⁰ Ibid., p. 255.

²¹¹ 'The murderer is the worst enemy of his species, and consequently of nature. To the utmost of his power he destroys the universal work of God by the destruction of man... it is forbidden...to take human life, because God created man to his own image and likeness.' CR, p. 425.

as Bellarmine put it, 'the most ancient law of all others, and...fountaine of all the rest.'²¹² It is a modest, but significant point, that whereas in Calvinist doctrine, civil society was possible for depraved man only by common grace, in Renaissance Catholicism it was because of natural knowledge of God and His law.

The patriarchs of biblical history that lived before the promulgation of the Mosaic law, were commonly held to have been practitioners of a natural religion. Patristic, Medieval and Renaissance Catholicism was influenced in this regard by Philo Judeaus (20BC-50AD), who had argued that the first generations of men had satisfied God's standard of righteousness by obedience to natural law. Abraham, said Philo, 'carried out the divine law,' and did so, 'not taught by written words, but through unwritten nature he received the zeal to follow...wholesome impulse.'²¹³ Though the principle that before Moses the patriarchs had followed natural religion received approbation on both sides of the confessional divide, only in Catholicism was their natural religion thought sufficient in itself without necessitating God's special prophetic revelation and election to saving grace.

In fact, the treatment of the idolatry of which the heathen were guilty itself shows the optimistic Catholic attitude to natural religion. The gentiles were guilty of idolatry, not for worshipping a false god which they conceived of from the witness of the world, but for *not* worshipping the God they knew from nature, instead prostrating themselves to created or artificial idols when they could and did know better. This doctrine dated to the age of the Fathers,²¹⁴ but was retained in Counter-Reformation Catholicism. For instance, Bellarmine wrote that 'the Infidels do sin, who do worship Creatures instead of the Creator.'²¹⁵ The failure of the gentiles to fashion true religion out of the materials presented by the world was a *moral* failure rather than an intellectual one. It was due neither to want of natural revelation nor of the power of reason; instead irreligion and idolatry were the voluntary sin of human will freely bent on evil and falsehood. Marino Grimani, for instance, argued that the first-century gentiles whom St Paul condemned were inexcusable because they naturally possessed enough knowledge of God to practice acceptable natural worship but instead willfully followed an idolatrous religion.²¹⁶ From the denunciation of the natural man's idolatry, we can see that the worship of an incorporeal and eternal Creator-God qualified as true worship of the true God regardless of the clarification

²¹² Bellarmine, *Ample declaration*, p. 124.

²¹³ Philo's book on Abraham is cited in Barr, *Biblical faith and natural theology*, p. 77.

²¹⁴ For instance, Ambrosiaster (4th century) stressed that the gentiles were far from ignorant of God's character and the worship and obedience owed to Him, but willfully clung, against their own judgment of right reason, to visible idols. Gennadius of Constantinople (458-471) also argued that pagans were condemned 'not for want of knowledge...but the opposite.' Accurately perceiving the one true God known from nature, 'they preferred their own.' Both are taken from commentaries of Romans 1:21 cited in Bray, *Romans*.

²¹⁵ Bellarmine, *Christian doctrine*, p. 20.

²¹⁶ Grimani, *Commentarii in Epistolas Pauli*, CER, pp. 121-22.

of special revelation. Some Counter-Reformation Catholic theologians even applied this to excuse the errant religions of the heathen. The Cardinal who drew up the Edict of Worms in 1521, Girolamo Aleandro (1480-1542), believed that sun worship, like the *latría* worship done to images by Catholic Christians, was true worship of the true God through a visible manifestation of His attributes. In a similar vein, the Dominican Bartolomé de las Casas (1484-1566) in his *Apologética historia sumaria de las gentes destas Indias* (1559) and the Jesuit Jerónimo Román de la Higuera (d. 1611) in his *Republicas del mundo* (1575) explained that the New World natives, though lacking the Christian revelation, practiced a natural religion whose ignorance could be overlooked and which in some degree pleased God.²¹⁷ The natural-religious effort spent by the heathen would surely be looked upon by God – who took into account their human imperfection and lack of special revelation – with favour.²¹⁸ Natural religion was spoken of without the sense of sharp rebuke found in Protestant tracts. When the Catechism of Trent, for instance, reported that ‘we find among all nations public festivals consecrated to the solemnities of religion and divine worship,’²¹⁹ no mention was made of idols and the weakness of a depraved soul. Only when man wilfully ignored the witness of nature and reason was his religion displeasing to God. Worship of the God learned by natural theology was, therefore, of merit and an active participation in true religion.

Though the natural man with the aid of prevenient grace could discern from the created world a true theology and aspects of a true religion, he could not (as we have seen) attain knowledge of those theological mysteries of the Christian faith – in particular the Incarnation and Passion of Christ – which were required for his salvation. Nevertheless it is here that natural theology can be understood as a *preparative to grace*. We will consider first, natural theology’s propaedeutic pedagogical role in the scholastic epistemological system, and second, natural theology’s propaedeutic moral function in the Catholic soteriological system.

In the scholastic system there was no fundamental and unbreachable epistemological barrier between theology and philosophy. *Faith*, for instance, was held to be simply a species of knowledge which had God as its object and salvation as its end. In the classification of the sciences, theology was rarely distinguished from the Aristotelian science of metaphysics.²²⁰ While the *content* of the science of theology therefore differed from other sciences, the

²¹⁷ Examples provided in Carina L. Johnson, 'Idolatrous cultures and the practice of religion', *Journal of the History of Ideas* 67 (2006), pp. 597-621, at pp. 614-15.

²¹⁸ See Martin Mulsow, 'Antiquarianism and idolatry: the 'historia' of religions in the seventeenth century', in Gianna Pomata and Nancy G. Siraisi eds., *Historia: empiricism and erudition in early modern Europe*, Transformations: studies in the history of science and technology (Cambridge, MA & London: MIT Press, 2005), pp. 181-209, at p. 201.

²¹⁹ CR, p. 398.

²²⁰ For a discussion of the scholastic classification of the sciences, see Joseph S. Freedman, 'Classifications of philosophy, the sciences, and the arts in sixteenth- and seventeenth-century Europe', *The Modern Schoolman* 72 (1994), pp. 37-65.

intellectual *process* upon which the science was constructed was the same. Moreover, its intellectual end (true knowledge of God) was seen as one and the same as its spiritual end (the salvation of the soul).²²¹ Since, as Rivka Feldhay has argued, both the Augustinian and Thomist traditions held that theology 'could not be completely disentangled from other forms of knowledge,' other areas of human knowledge such as grammar, rhetoric, and – above all – natural philosophy, were relevant aids for Christian theology.²²²

It is in this epistemological context of the interrelation of philosophy and theology that comprehension of the natural world could be considered a preparation for knowledge of divinity. Clement of Alexandria was the first to invoke the metaphor of philosophy as a 'handmaid of theology,' claiming that philosophy was 'a kind of preparatory training to those who attain faith through demonstration' and 'a preparation, preparing the way for him who is perfected in Christ.'²²³ St Basil also claimed (in what would become another Medieval and early modern commonplace) that the purpose of the visible world was to be a 'training place for rational souls and a school for attaining the knowledge of God' by guiding the mind to the contemplation of invisible truths through the visible.²²⁴ Tertullian also argued natural knowledge of God was chronologically prior to knowledge by faith: 'God ought first to be known by nature, and afterwards further known by doctrine – by nature through his works, by doctrine through official teaching.'²²⁵ The principle that philosophical knowledge led to faith was central to the system founded by Thomas Aquinas:

The things of time and eternity are related to our thinking in such a way that one is our way of knowing the other. For in the order of discovery, our investigations lead us through the things of time to those of eternity.²²⁶

The 'order of discovery' showed that natural knowledge of temporal, finite things was learned from the investigations of nature before eternal, incorporeal divine matters could be known. Christian faith had to be appended to an *established basis of natural knowledge*. Aquinas stated in reference to Romans 1:20:

²²¹ Scriptural warrant for this view was found in John 17:3 – 'this is life eternal, that they might know thee the only true God, and Jesus Christ, whom thou hast sent' (KJB).

²²² Feldhay, 'Religion', p. 731.

²²³ Clement of Alexandria, 'Miscellanies', in Cleveland A. Coxe, James Donaldson and Alexander Roberts eds., *The ante-nicene fathers: translations of the writings of the fathers down to A.D. 325*, vol. II: *Fathers of the Second Century* (Grand Rapids, MI: Eerdmans, 1983), bk I, chap. 5, p. 305; qu. in Edward Grant, *Science and religion, 400 B.C. to A.D. 1550: from Aristotle to Copernicus*, Greenwood guides to science and religion (Westport, CT: Greenwood Press, 2004), p. 107.

²²⁴ Basil on Romans 1:20, cited in Bray, *Romans*.

²²⁵ 'Nos definimus deum primo natura cognoscendum, deinde doctrina recognoscendum, natura ex operibus, doctrina ex praedicationibus.' Tertullian, *Adversus Marcionem*, trans. Ernest Evans, Oxford early Christian texts (Oxford: Clarendon, 1972) bk. I, ch. 18, pp. 44-45.

²²⁶ Ia. 79, 9. Aquinas, *Summa*, p. 179.

The truths about God which St Paul says we can know by our natural powers of reasoning – that God exists, for example – are not numbered among the articles of faith, but are presupposed to them. For faith presupposes natural knowledge.²²⁷

In other words, for Thomas, the *via per creaturas* was necessarily logically prior to the *via per revelationem*. Natural theology established the necessary preambles to faith. It has usefully been described by Harold Fruchtbaum as occupying the position of ‘an ante-room to the more important theology of revelation.’²²⁸ The argument that natural knowledge preceded faith was just as prevalent in, if not augmented by, early modern Catholic theology and philosophy. The scholastic system propagated in the Catholic universities related faith and reason such that philosophy was accorded responsibility, as W. T. Costello writes, ‘to light the path for theology.’²²⁹ According to Rivka Feldhay, the ‘conception of studies and knowledge as a bridge to salvation gradually emerged’ in the work of mid-sixteenth century Jesuits. There was, she argues, a ‘persistent tension regarding salvation that lay at the heart of medieval Christian culture,’ between the apparent necessity of actual grace on the one hand, and the soteriological value that philosophical knowledge was thought to have on the other.²³⁰ Since there were ‘two ways’ to knowledge of God, in some sense there were also two ways to salvation. Jerónimo Nadal (1507-1580), author of the Society of Jesus’s *Regula pro scholaribus Societatis* in 1563, wrote of these two ways:

The Society has two means by which it strives for this end: the one is a certain force, spiritual and divine, which is acquired through the sacraments, prayer...and which is warranted by the special grace of God; and the other force is placed in the faculty which is ordinarily found through studies.²³¹

Studies according to the Jesuits had, Feldhay argued, ‘an autonomous status on the path to salvation.’²³² This soteriological end of philosophical knowledge plainly seen in Jesuit philosophy has led Feldhay to assert that ‘the main goal of physical knowledge was to underpin the metaphysics that dealt with higher degrees of being and create a bridge to theology.’²³³ This can be clearly seen, for instance, in Reisch’s *Margarita philosophia* in which natural philosophy is presented (both verbally and pictorially) as the means of ascent to theology:

From the knowledge of one thing we may investigate another...from all these finite things we may rise to the knowledge of the infinite Creator. For we take the concepts

²²⁷ Ia, 2, 2. Aquinas, *Summa*, p. 11. My emphasis.

²²⁸ Fruchtbaum, ‘Natural theology and the rise of science’, p. 55.

²²⁹ Costello, *Scholastic curriculum*, p. 10.

²³⁰ Feldhay, ‘Religion’, p. 730.

²³¹ Jerónimo Nadal, *Regula pro scholaribus Societatis* (1563), in Laszlo Lukacs ed. *Monumenta paedagogica Societatis Iesu*, 4 vols. (Rome: 1965-1981), vol II, p. 116, cited in Feldhay, ‘Knowledge and salvation’, p. 200.

²³² Feldhay, ‘Knowledge and salvation’, p. 201.

²³³ Feldhay, ‘Religion’, p. 732. It is worth also noting Feldhay’s point that sixteenth-century Jesuits justified the study of mathematics by claiming that the abstract perfect bodies it studied were higher on the chain of being than physical entities, thus tending more clearly to theological knowledge (p. 739).

which we form of the eternal unchangeable God from sensible things and from creatures.²³⁴

Natural knowledge of God's wisdom, power and beneficence, therefore, elicited piety and prepared the mind and soul with a base level of natural theological knowledge with which to receive the authoritative doctrinal teaching of Scripture and the Church. This vision of the propaedeutic role of natural theology contrasts sharply with Protestant theology. Every concept of an extra-fideial, extra-scriptural, natural rather than supernatural 'bridge to salvation' was completely rejected by Protestantism on the grounds of human intellectual, moral, and spiritual depravity.²³⁵

Natural knowledge fitted into scholastic epistemology as the intellectual basis for theology. But there was also a vital moral and spiritual function that natural theology performed in the Catholic economy of salvation. As we have seen, the natural man had to cooperate with prevenient grace in order to effect his own salvation.²³⁶ Salvation was in Catholic theology not so much a *status* as it was in Protestant doctrine (the elect versus reprobate), as a graduated *process* of intrinsic justification through the reception of internal and external graces and the purging (in this life and the next) of sin. For this reason we find a preponderance of metaphors of cumulative and gradual progress such as a journey to salvation, or, as in the Catechism of Trent, stairway to faith: 'to us it is given at once to mount as by the *steps of faith* to the knowledge of what is most sublime and desirable.'²³⁷ The ladder or stairway metaphor, dating back to Origen,²³⁸ represented the moral spiritual ascent from the darkness of the mundane world to the light of faith and spiritual reality. In this soteriological context, natural theology was an intellectual and moral step toward the receiving of grace.

This conception of the foundational role of natural knowledge in coming to full saving knowledge of God animates, for instance, Pierre Charon's (1541-1603) masterpiece *De la sagesse* (1601). *Sagesse* begins with directing 'Knowledge of a Man's self, and the Condition of Human Nature in general' – a philosophical inventory of man's fallibility that comprises, Charron

²³⁴ Reisch, *Philosophical pearl*, p. 229.

²³⁵ Feldhay summarizes: 'Luther radicalized the suspicion of knowledge as a bridge to salvation' and, eradicating 'all trust in the natural moral qualities of man', created a 'radical rift between theology and philosophy.' Feldhay, 'Religion', p. 733.

²³⁶ 'It is a duty incumbent on us to cooperate with the grace of God, to use it in pursuing the path that leads to heaven' (CR, p. 527).

²³⁷ CR, p. 527 My emphasis. In another example, Bellarmine in his *Dottrina Cristiani Breve* (Rome, 1597), described 'the ladder to mount us up into Heaven' as 'obedience to [God's] Commandments' (Bellarmine, *Christian doctrine*, p. 15).

²³⁸ Vidal and Kleeberg report that 'Origen of Alexandria believed in the union of *ratio* and *fides* in creation...and in the possibility to climb the "natural ladder" from the visible world towards the unseen.' Vidal and Kleeberg, 'Impulse to natural theology', p. 388.

explains, 'a necessary Preparation to Wisdom.'²³⁹ Charron's Montaignian sceptical method of natural theology results in man's being 'blank, naked, and *ready*' for the grace of faith.²⁴⁰

How far could natural theology take the natural man? Could he, by the possession and practice of natural knowledge of God and religion, be saved? On the one hand, the doctrine of prevenient grace, free will and the possibility of an extensive natural knowledge of God, morality and religion, indicated that he might. But on the other hand, he lacked knowledge of the Gospel of Christ and the Sacraments administered by the Church – the necessary means of grace. The question exercised Catholic theologians throughout the Middle Ages and Renaissance. A particular focus was the eternal destiny of the ancient philosophers. Justin Martyr (103-65), for instance, thought that Socrates, Plato, Aristotle and so on would be saved despite lacking special grace.²⁴¹ In medieval theology, the problem was often phrased in terms of a disputation, *utrum Aristotelis sit salvatus*.²⁴² If Aristotle, the Philosopher whose learning in matters natural and divine was unmatched in the pagan or Christian worlds, could not be saved by his moral living and knowledge of God, then none could. Scholastic Catholics were loath to condemn Plato, Cicero and above all, Aristotle, to eternal torment when their theological and philosophical edifice was based upon their writings; their ignorance of the gospel of Christ was, after all, due to geography and chronology. For some, the doctrine of limbo whereby the virtuous pagan was spared hell yet not granted free pass to heaven, was a convenient solution. Aristotle's appearance in limbo in Dante degli Alighieri's (1265–1321) *Divina Commedia* is an enduring testimony to this idea that, however, never attained the status of dogma. To the question of the possibility of salvation purely by means of natural theology the thirteenth century Doctors gave differing answers. Aquinas insisted that to 'prosper the salvation of human beings' it was necessary for God to reveal himself in Scripture.²⁴³ On the other hand, Scotus insisted on both the natural knowableness of God's essence and on God's absolute freedom to regard as meritorious any works as He saw fit. Scotus therefore argued that the unbeliever, living morally by following natural reason, could yet receive salvation from God. Scotus answered the question 'whether for man in his (present) state it be necessary that any special doctrine supernaturally inspire (him), to which he could not attain by the natural light of the intellect?' firmly in the negative.²⁴⁴ For Scotus, man's intellect was sufficiently furnished and his will sufficiently free to render him capable of performing good works that God could choose

²³⁹ Preface to *De la sagesse*, in Pierre Charron, *Of Wisdom: with an account of the author*, trans. George Stanhope, 2 vols. (London, 1707), vol. I, sig. B1v.

²⁴⁰ Pierre Charron, *Toutes les Oeuvres de Pierre Charron* (Paris, 1635), book II, ch.2, page 22, translated in Richard H. Popkin, 'Charron and Descartes: the fruits of systematic doubt', *The Journal of Philosophy* 51 (1954), pp. 831-37.

²⁴¹ See Screech, 'Introduction', p. xxviii.

²⁴² On this *quaestione* see, for instance, Anton-Hermann Chroust, 'A contribution to the medieval discussion, *utrum Aristoteles sit salvatus*', *Journal of the History of Ideas* 6 (1945), pp. 231-38.

²⁴³ Ia, 1, 1. Aquinas, *Summa*, p. 7.

²⁴⁴ Scotus ed. *Opera Omnia* p. 1.

to reward with eternal beatitude. The unbaptised unbeliever, with 'good motives...conformable to right, natural reason,' could provoke God's infusion of saving grace. God could effect this by sending the virtuous heathen an emissary to teach him theology, or could save him despite his ignorance of the mysteries of Christian revelation. The heathen could be saved though 'he does not have theology, even inasmuch as regards the first credibles, but *only a natural cognition*' that caused him to will 'the good, preceding doctrine' such that 'he merits the grace by which he is just.' 'Nothing of [revealed] theology', Scotus concluded, 'is simply necessary for salvation.'²⁴⁵ Though natural theology for Scotus did not extend to full knowledge of the mysteries of Scriptural revelation, it could effect the full, eternal benefit of faith.

In the intervening centuries between the thirteenth-century Schoolmen and the Counter Reformation, the question of the possible salvation of Aristotle and the other virtuous pagans was answered variously. Some, like the fifteenth-century Thomist lecturer at Cologne, Lambertus de Monte (d. 1499) in his *De salute Aristotelis*, answered in the affirmative – arguing that the passage in Romans taught that natural knowledge of God could be sufficient for salvation. Heinrich Cornelius Agrippa (1486-1535) refers to another fifteenth-century manuscript, the *Liber de vita et morte Aristotelis metricè conscriptus cum glossa interlinarea*, in which Aristotle's salvation as the 'first prophet of nature' is the prerequisite, given that the Incarnation that effected salvation presupposed the physical world, of the salvation wrought by Christ!²⁴⁶ The Counter-Reformation Church, however, recoiled somewhat from this optimism and on the whole appeared to side with Aquinas, stressing the requirement for a faith enlightened by actual grace, based on Scripture and exercised in the Sacraments of the Catholic Church alone. 'That faith...is necessary to salvation no man can reasonably doubt,' insisted the Catechism.²⁴⁷ Faith in this sense comprehended knowledge of those mysteries thought inaccessible to natural reason. Cardinal Bellarmine insisted that 'without beleueing and confessing these two mysteries [the Trinity and the Incarnation and Passion of Christ], no man can be saued.'²⁴⁸ 'Salvation depends on the cross,' the Catechism argued, but 'nothing is so far above the reach of human reason.' Similarly, salvation depended on taking the Sacraments. Without baptism – a supernatural Sacrament unknown except by revelation and impossible except through the priestly mediation of authorised Catholic priests, the spiritual stain of original sin remained and prevented man attaining righteousness.²⁴⁹ As a result, 'not the Gentiles only by the force of nature, but not even the Jews by the very letter itself of the law of Moses, were able to be liberated.'²⁵⁰

²⁴⁵ Scotus, *Ord.* I, prologue, I., 54. *Ibid.*, p. 33.

²⁴⁶ These examples are taken from Chroust, 'Utrum Aristoteles sit salvatus', pp. 235-37.

²⁴⁷ CR, p. 11.

²⁴⁸ Bellarmine, *Ample declaration*, p. 11.

²⁴⁹ 'The Sacraments...are a necessary means of salvation.' CR, pp. 52, 141.

²⁵⁰ Council of Trent (1547), Sixth Session, Canon I; 'The Inability of Nature and of the Law to justify man' (CoT, pp. 30-31).

And yet there was still a latent sense in which man might be justified by natural theology. It is striking in the first instance that none of Scotus' works in which his argument concerning the possibility of salvation for the virtuous heathen was made were ever prohibited or expurgated in the Church's indices. We can find in Renaissance Catholicism some examples of belief that the Book of Nature contained all that was sufficient for salvation. Raymond Sebond, as we shall see, made the point, as did *The Myrroure of the Worlde* (1481) published by William Caxton (c.1415-c.1492) and reprinted thrice by 1527:

Thenne late vs praye the maker and creatour of alle cratures, God all myghty, that at the begynnyng of this booke [of nature]...we may lerne...so parfyght science and knowleche of God, that we may gete therby the helthe of our sowles, and to be partyners of his glorye permanent and without ende in heuen.²⁵¹

Even the Tridentine Catechism was, notwithstanding its pronouncement of the triple necessity of grace, Scripture and Sacrament, somewhat ambivalent or ambiguous on the matter. Consider, for instance, that the Catechism explained that the human mind 'illuminated by the light of nature, could never have been able to know or perceive *for the most part* [*maximam partem*] those things in which eternal salvation consists.'²⁵² It is hard to imagine anything like this caveat being written by orthodox sixteenth-century Protestants.

Catholic theologians had another argument that reconciled both (i) the requirement that, for God to be just and man's will to be free, salvation had to be accessible by nature; and (ii) the doctrine that salvation required the supernatural grace of God. It was the principle encapsulated by the maxim, *facienti quod in se est Deus non denegat gratiam* ('God will not deny grace to those who do what is in them'). By the time of Aquinas, as Alastair McGrath reports, this axiom had become dogma, part of the Church's settled synergistic doctrine of justification. Given great precedence by Gabriel Biel (d. 1495) in the late fifteenth century, the maxim 'remained a commonplace in the early sixteenth century' and throughout late Renaissance Catholicism.²⁵³ God's action was the giving of grace (salvation and the beatific vision); man's preceding action was given variously as an act of penitence, an act of consent to the reception of grace, or the removal of obstacles (moral or intellectual) to grace. The significance of the doctrine for the current discussion is to note that

²⁵¹ William Caxton, *Mirroure of the Worlde*, edited by Oliver H. Prior (London, 1913), p. 8.

²⁵² '*Maximam* [tamen] *illorum partem*, quibus aeterna salus comparator...naturae lumine illustrata cognoscere, aut cernere numquam potuerit'. *Catechismus romanus ex Decreto concilii Tridentini: ad parochos*, *Catechismus romanus*, p. 1. My emphases and translation.

²⁵³ Aquinas, for instance, wrote that 'The light of grace is not given to anybody except those who prepare themselves for its reception.' ('*Lumen gratiae...non datur alicui nisi qui ad illud recipiendum se praeparavit*'). Thomas Aquinas, *Scriptum super sententiis*, Sancti Thomae Aquinatis Doctoris Angelici Ordinis Praedicatorum opera omnia ad fidem optimarum editionum accurate recognita, ed. Roberto Busa (Parma: Typis Petri Fiacchadori, 1856), Book II, dist. 28, q. 28, a. 4. Alastair McGrath reports that the precise verbal form of the maxim was finalized in the twelfth century. Alister E. McGrath, *Iustitia Dei: a history of the Christian doctrine of justification*, 3rd edn (Cambridge: Cambridge University Press, 2005), p. 108. The phrase and principle came to be associated particularly with the *via moderna* nominalist tradition championed by William of Occam (d. 1347) and Robert Holcot (d. 1349), though it was featured in the medieval works not only of Dominican, but also of Franciscan theologians.

both repentance, consent, and the removal of intellectual impediments were considered achievable by the natural man by virtue of his natural knowledge of God, self, moral law and religious obligation.

First, therefore, to do *quod in se est* meant to repent. Man could not be redeemed by an infusion of divine grace while he remained in a state of unforgiven sin. Man had the moral obligation and natural ability to both discern his guilt and implore God's assistance. God was then bound (in a manner of speaking) to grant his forgiveness and begin the process of justification.²⁵⁴ The second meaning that *quod in se est* carried was man's inherent ability to grant his *consent* to the reception of God's grace. In contrast to the Protestant doctrine that came to be known as the 'irresistibility of grace,' Catholics held that God justified only those who, by a movement of their natural free will, consented to the saving grace He offered. Once a man had consented (*quod in se est*), God surely did not deny the grace He had promised. This provides a link therefore between grace first offered (prevenient and universal) and effected as saving grace. Natural man responded to the first grace (in the act of penitence and consent) in order to receive the second – the infused habitual grace conferred by God into the soul and by which he was ultimately justified.²⁵⁵

Third, doing *quod in se est* could also mean the utmost exercise of man's natural faculties to the ends of moral performance and spiritual knowledge. It meant the disposition of both reason and will in pursuit of theoretical and practical knowledge of God. Aquinas thought that the use of the *naturale lumen rationis* in tandem with the *libero arbitrio* was the condition of doing *quod in se est*.²⁵⁶ If man tried his best in regard to natural knowledge of God, he could approximate to the Christian doctrine of God and his attempt would prompt God to reveal the full truth to him. In a commentary on Peter Lombard's *Sentences* that was reprinted in Catholic Europe at least ten times between 1480 and 1586, Robert Holcot argued that,

²⁵⁴ Gabriel Biel explained repentance as the removal of an obstacle to grace: 'The soul, by removing this obstacle, ceases from acts of sin and consent to sin, and thus elicits a good movement towards God as its principle and end; and does 'what lies within its powers' (*quod in se est*). Therefore God accepts...this act of removing an obstacle and a good movement towards God as the basis of the infusion of grace.' *In II Sent.* dist. 27, q. unica a. 2 conc. 4. Gabriel Biel, 'Collectorium circa quattuor libros Sententiarum', in Wilfrid Werbeck, Udo Hofmann, Hanns Ruckert, Martin Elze and Renata Steiger eds., (Tubingen: Mohr, 1973), vol. II, p 517-18. Quoted and translated in McGrath, *Iustitia Dei*, p. 115.

²⁵⁵ 'Respondeo dicendum quod gratia dupliciter potest accipi: vel quodcumque excitativum voluntatis exhibitum homini ab ipsa divina providentia, qua omnibus rebus gratis impendit ex sua bonitate ea quae ipsis conveniunt: vel aliquod donum habituale in anima receptum, quod gratis a Deo confertur. Si ergo primo modo accipitur gratia, nulli dubium est quod homo sine gratia Dei non potest se praeparare ad habendum gratiam gratum facientem.' Aquinas, *Scriptum super sententiis*, Book II, dist. 28, q. 1, a. 4.

²⁵⁶ Ibid. Book II, dist. 28, q. 1, a. 4., cited in McGrath, *Iustitia Dei*, p. 110.

In this proposition, nature stands for God. For He ordered all of nature according to the good pleasure of His will and it must [therefore] be granted that it [nature] is not deficient in necessary things. Therefore if man does what is in him [*quod in se est*] there is sufficient information about that which is necessary for his salvation.²⁵⁷

Doing *quod in se est* was therefore penitence for sins done, consent for grace to come, and obedience to the natural moral law. All of these dispositions were 'within him' – that is, they were *natural* to him. What is more, God was bound to respond to these natural efforts by the infusion of grace. Though some were loath to tie God's hands with the language of obligation, His granting of grace to the meriting who did *quod in se est* was, so to speak, inevitable since God had freely bound Himself. The *facienti quod in se est* doctrine allowed Catholics to steer the difficult course between anthropological optimism and Pelagian heresy. Strictly speaking, though man's preceding acts precipitated God's response, man did not contain within himself the efficient cause of his justification (which was, ultimately, Calvary). The natural preparation was more like the opening of a shutter so that the sun's light could enter the room of the soul. The shutter's opening was not the efficient *cause* of the room's illumination, but merely what had given occasion for it.²⁵⁸ Similarly, a man's preparation for grace was the cause of his justification not 'on account of its own nature (*ex natura rei*), but only on account of the value ascribed to it by God (*ex pacta divino*).'²⁵⁹

The doctrine epitomized by *facienti quod in se est Deus non denegat gratiam* suggested another solution to the thorny question of how the virtuous heathen could be saved. A heathen doing *quod in se est* (exercising his natural faculties of reason and will to the utmost to achieve a theology that was as extensive and accurate as nature allowed and living in accordance with the moral and spiritual truth he discerned) prompted God's infusion of grace (since *Deus non denegat gratiam*). That grace might be habitual saving grace itself, but it might be a supernatural revelation of Christ's passion in a vision that precipitated 'Christian' faith. Examples of this belief can be found in medieval Scotism, Occamism, and Thomism.²⁶⁰ Aquinas himself demonstrated his approval of this principle in his commentary on Lombard's Sentences, the

²⁵⁷ 'Ab primum dicendum quod in ista propositione natura supponit pro deo. Ille enim est qui Omnia naturalia ordinat secundum beneplacitum sue voluntatis et concedendum est quod non deficit in necessariis. Nam si homo facit quod in se est satis informabitur de illis que sunt necessaria ad salutem suam.' My translation. Robert Holcot, *Super libros Sapientiae* (Hagenau, 1494), sig. 28v., qu. in Heiko A. Oberman, 'Facientibus quod in se est Deus non denegat Gratiam: Robert Holcot, O.P. and the Beginnings of Luther's Theology', *The Harvard Theological Review* 55 (1962), pp. 317-42, at p. 323.

²⁵⁸ This metaphor was employed by the twelfth century French theologian, Alan of Lille (c.1128-1203). The (natural) act of penitence the '*causa sine qua non* and the *ocasio*, but not the *causa efficiens* of justification,' See McGrath, *Iustitia Dei*, p. 109.

²⁵⁹ *Ibid.*, p. 114.

²⁶⁰ Alastair McGrath gives the example of the thirteenth century *Summa Fratris Alexandri* which, he paraphrases, argues that the 'good pagans, who are ignorant of the Christian faith,...if they do *quod in se est* – which is clearly understood as a purely natural act – God will somehow enlighten them, in order that they may be justified.' *ibid.*, p. 110. Robert Holcot also believed that those heathen who obeyed the natural law, doing *quod in se est*, were somehow given the gift of faith by God so that they would possess the requisite knowledge for salvation.

Scriptum super Sententiis: 'to anyone born in a heathen nation, who did what was in him [*quod in se est faciat*], God Himself would reveal that which is necessary to salvation to him, either by inspiration, or by sending a teacher.'²⁶¹

It was common to link explicitly natural theology and doing *quod in se est*. Scotus, for instance, explained that his doctrine of the ability of man to be saved due to his natural knowledge of God and religion depended upon positing 'a simultaneity in infusion,' of grace and faith at the moment that God chose to reward the good deeds and right natural theology of the virtuous heathen. God 'gives grace to him who, lacking infused faith, uses well that [knowledge] which he can have by following natural reason and his own acquired faith, even having acquired nothing from being taught.'²⁶² In the sixteenth century, the Catholic theologian Claude Guillaud explained how the *lumen naturale* could contribute the first steps in meriting grace: nature possessed the tools for both speculative knowledge (true theology) and practical knowledge (true religion) of God. Even though nature without grace did not effect salvation, acting in accordance with the knowledge available through contemplation of the creation prompted God's infusion of saving grace: 'For to him who does what lies in his power (*Facienti enim quod in se est*) say the theologians, God does not deny grace.'²⁶³

All this is an expression of the Catholic doctrine of synergistic justification. Man had his part to play in his own justification – this was doing his best within his natural powers. God also had His part to play, in the supernatural gift of faith and grace for salvation. The synergism of the doctrine is elegantly summed up by Oberman in a way that brings to light the soteriological value of natural theology:

If man goes halfway, God will meet him with the gift of grace. Without this gift of grace man is helpless; but it is just as true that without the full use of man's own natural powers, the offer of grace is useless.²⁶⁴

The doctrine sharply distinguishes Renaissance Catholic synergistic justification from Protestant monergism and has important implications for understanding the differing views on the potential spiritual utility of natural theology. The competing soteriological systems probably constituted the most significant theological battle line of the Reformation. The maxim we have just been considering itself had a prominent role in the early history of the Reformation, featuring clearly at the moment of Martin Luther's (1483-1546) conversion. As late as 1515, Luther, borrowing heavily from the nominalist tradition, used the maxim *Facienti quod in se est*

²⁶¹ 'Unde dicitur, quod si aliquis in barbaris natus nationibus, quod in se est faciat, Deus sibi revelabit illud quod est necessarium ad salutem, vel inspirando, vel doctorem mittendo.' My translation. Aquinas, *Scriptum super sententiis*, Book II, dist. 28, q. 1, a. 4 ad 5.

²⁶² My translation of '...si sine illa det gratiam qua habens bene utatur quantum ad velle quod potest habere secundum naturalem rationem et fidem acquisitam, vel sine omni acquisita si doctor desit,' in Scotus' *Ord.* I, prologue, I, 55; in Scotus ed. *Opera Omnia*, p. 34.

²⁶³ Guillaud, *Collatio*, p. 10, *CER*, p. 124.

²⁶⁴ Oberman, 'Facientibus quod in se est', p. 328.

Deus non denegat gratiam in connection with the doctrine of justification approvingly. Commentating on Psalm 113:1, Luther wrote, 'here the Doctors say rightly, that the man who does what is in him, God always gives grace.'²⁶⁵ But Luther came to reject completely the maxim at the moment of his conversion. His 1517 *Disputatio contra scholasticam theologiam* specifically singled out this maxim for censure, Luther writing 'it is false that "to do what is in one [*facere quod in se est*]" is to remove obstacles to grace.'²⁶⁶ Henceforward, Luther thought that *Facienti quod in se est Deus non denegat gratiam* was anathema to authentic Christianity. Natural man could contribute nothing to justification – doing *quod in se est* was necessarily only sin, which condemned, rather than than commended him, in the sight of God.

Facienti quod in se est Deus non denegat gratiam and the synergistic doctrine of justification it represented therefore explains why natural theology had a prominent place in the Catholic economy of salvation: man's natural cogitations about God, religion and morality, based on his natural faculties and the visible world, constituted the preparation to the reception of God's grace that effected his justification. But in the Protestant confessions, the idea that something within the powers of natural man (i.e. natural theology) could accrue any sort of merit and necessitate any beneficial spiritual result was rejected: natural theology, therefore, fits into Catholic soteriology but not Protestant.

While, as we have seen, natural theology had a potential positive role in Catholic soteriology, contributing a moral and intellectual preparative to grace, it also had an important negative role in the same doctrinal area, i.e. those who did not satisfy God's demand for righteousness were held justly accountable for their failure. St Paul's letter to the Romans was the foundation for this apologetic: 'the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse.'²⁶⁷ Natural theology therefore was used since the time of the Church Fathers to establish the culpable guilt of men according to what they could have known and done in the light of nature.²⁶⁸ In the sixteenth century, Philibert Haresche clarified that man was inexcusable not on account of ignorance of God or his failure to look sufficiently deeply into the revelation of nature, but because of his ungodliness and unrighteousness in the face of the knowledge he did have. Claude Guillaud, while allowing for natural religion to lead to salvation, said that one end

²⁶⁵ 'Hinc recte dicunt Doctores, quod homini facienti quod in se est, deus infallibiliter dat gratiam.' Commentary on Psalm 113:1, in Martin Luther, *D. Martin Luther's Werke: kritische Gesamtausgabe*, 121 vols. (Weimar: H. Böhlau, 1883-2009) vol. IV, p. 262. Excerpted from Oberman, 'Facientibus quod in se est', n. 89.

²⁶⁶ 'Falsum et illud est, quod facere quod est in se sit removere obstacula gratie.' Luther, *Werke*, vol. I, 225. Quoted in Oberman, 'Facientibus quod in se est', p. 335, n. 73. My translation.

²⁶⁷ Rom 1:20 (KJB).

²⁶⁸ Ambrosiaster explained that 'the knowledge of God is plain from the structure of the world' such that 'the human race is made guilty by the natural law.' Augustine explained that the unbelief of the gentiles was their own voluntary choice. Chrysostom attributed the failure of the heathen to act in accordance with the sufficient revelation of nature to the sin of pride. Bray, *Romans*, Romans 1:18-9, 22, 36.

of the knowledge of God 'irradiated' to all mortals was 'to take from us all excuse.'²⁶⁹ Despite this, the idea that natural theology primarily existed for the purpose of God's judgment was not central to Catholic doctrine as it was to Protestant. Many prominent Catholic theologians did not make the just judgment of God an end of natural theology at all. As M. A. Screech notices, many Catholic writers in the sixteenth century entirely omitted the final clause of Romans 1:20 (that the pagans are 'without excuse') when they cited that Biblical foundation-text of natural theology. Alongside Michel de Montaigne, whose *Essays* Screech is introducing, he cites the example of Alessandro della Torre, the Bishop of Sittià, who cited the verse three times in his *Triumph of Revealed Theology* (1611), always omitting its second clause.²⁷⁰ To this we can add Cardinal Cajetan. Parker reports that in his commentary on Romans, *ita ut sint inexcusabiles*, was simply glossed over without any attempt at exposition.²⁷¹ The Catholics were often wont, with their optimistic view of the spiritual potential of natural theology, to mitigate or mute what the Protestants saw as the main thrust of St Paul's argument.

At this point it is worth raising the question of whether natural theology was intended as a tool to convert atheists. Notwithstanding the way in which natural theology constituted a 'preparative to grace,' it is my contention that what modern thinkers assume to have been the point of natural theology – to persuade by arguments drawn from nature that God exists – is somewhat wide of the mark, at least for the late Renaissance. Without doubt in the eighteenth century and thereafter, Christian philosophers and theologians spent much intellectual effort on proving the existence of God to atheists, sceptics and doubters. Moreover, it is true that many of their natural arguments, such as 'the argument from design,' were borrowed from the same patristic and Medieval sources that I have considered as part of sixteenth-century Catholic doctrine. Nevertheless, in late Renaissance Europe there was simply not the occasion nor appetite for trying to prove the existence of God by natural arguments. First, there were no theoretical atheists to speak of, nor any novel theoretical atheist arguments advanced in the period.²⁷² The oft-voiced concerns about the rise of atheism expressed by writers from the late sixteenth century onwards were concerns about *practical* atheism – that some were living as if there were no God – rather than a theoretical commitment to the non-existence of a deity and an entirely naturalistic explanation of creation.²⁷³ Atheism, therefore, was a moral failing rather

²⁶⁹ Guillaud, *Collatio*, p. 10, *CER*, p. 124.

²⁷⁰ Screech, 'Introduction', p. xxix.

²⁷¹ '*Ita ut sint inexcusabiles* has had no place in the first part [of his commentary] and it does not govern the second. It is, at best, a bridge between the two parts' (*CER*, p. 100), concerning Cajetan, *Epistolae Pauli*.

²⁷² There is little evidence for theoretical atheism in the sixteenth and even seventeenth centuries. Alan Charles Kors notes the incredulity of the learned community when, in the eighteenth century, theoretical atheism really arose for the first time (Alan Charles Kors, 'Theology and atheism in early modern France', in Ann Blair and Anthony Grafton eds., *The transmission of culture in early modern Europe*, Shelby Cullom Davis Center series (Philadelphia: University of Pennsylvania Press, 1990), pp. 238-75, at p. 239).

²⁷³ The theoretical positions (rather than moral) that were sometimes described as 'atheist' were the denial of the provability of the immortality of the soul, too much attribution to secondary, natural causes in

than an intellectual decision: the will, rather than the reason, was culpable and that was therefore the faculty which needed correcting.²⁷⁴

Second, the polemical energy of the Catholic Church was spent on the sectarian conflict; there was no ecumenism of purpose between the warring sects against those who did not believe in God. No one in the late sixteenth century was championing a Christianity devoid of confessional features. Works of natural philosophy that included elements of a discussion of natural revelation and natural theology invariably sought to vindicate a confessional view of nature and man. The target of natural theological arguments in the sixteenth century was not the atheist, nor even the Jew or Muslim, but the confessing Christian, perhaps the other side of the sectarian divide. For instance, Pierre Charron's (1541-1603) apologetic version of Montaigne's sceptical argument, *Les Trois Véritez* (Bordeaux, 1593) reveals in its very structure the polemical purpose of his natural theological argument.²⁷⁵ The eponymous 'three truths' were, first, that God exists, second, that Christianity is the true religion, and third, that the *Catholic Church is the One True Church*. It is addressed to atheists, pagans, Jews, Muslims and lastly, the 'Heretiques & Schismatiques' – i.e. the Protestants – this latter being the main, if not exclusive, target of the work.²⁷⁶ Tommaso Campanella's *Atheismus Triumphatus* (written in 1606-07 in Italian under the title *Recognoscimento della vera religione*, but not published until expurgation for semi-Pelagianism in Rome, 1631) was dedicated to Kaspar Schoppe (1576-1649) who had converted to Catholicism from Lutheranism in 1599. The book has many Catholic, optimistic and pre-fideal characteristics, such as the natural knowableness of the Trinity and Incarnation, the principle that all men in exercising their reason appropriated much of the truth of Christian faith and merit before God (Campanella even went so far as to call such men *de facto* Christians), and the way in which Christian theology and religion built upon an intrinsic and natural foundation. But

accounting for natural phenomena, questioning the authority of the Bible, denying trinitarianism or Christ's divinity. In none of these cases, however, did proponents claim to disbelieve in the existence of God. While, as Nicholas Davidson has argued, 'the materials for a fully developed atheism were, in a sense, already to hand' implicit in these heresies, an atheism of God's non-existence (against which natural arguments could be proposed) did not, apparently, exist (Nicholas Davidson, 'Unbelief and atheism in Italy, 1500-1700', in M Hunter and David Wooton eds., *Atheism from the Reformation to the Enlightenment* (Oxford: Clarendon, 1992), pp. 55-85, at p. 71).

²⁷⁴ The appearance in textbooks of the question, 'an sit Deus' is therefore little more than a scholastic exercise. The disputation format necessitated that when one made a positive statement, one would go on to paraphrase opposing arguments in order to refute them and establish the statement as proven. Atheism, therefore, as Alan Charles Kors recognised, had its voice and prominence in scholastic philosophy only as a formal 'sed contra' to the philosophical-theological statements of natural theology. That an argument rebutted an ostensible atheist argument necessitated neither the existence of an atheist nor the recent expression of the argument. Indeed, as Kors explains, 'the criticisms of their own demonstrations of God's existence', were paraphrased by theologians and philosophers 'for purposes of reassuring resolution.' Kors, 'Theology and atheism', p. 238.

²⁷⁵ Pierre Charron, *Les Trois Veritez contre les Athees, idolatres, luifs, Mahumetans, heretiques, & schismatiques*, etc. (Bordeaux, 1593).

²⁷⁶ In fact, Charron's *Trois Veritez* was a response to the French Calvinist Philippe de Mornay (1549-1623). Charron's targets were Philippe de Mornay, *Le Traité de l'Eglise* (London, 1578) and, more likely, Philippe de Mornay, *Traité de la vérité de la religion chrétienne contre les athées, épicuriens, payens, juifs, mahométans et autres infidels* (Antwerp, 1581), available in English translation by 1592.

in addition, as Campanella explained in a letter to Paul V in 1607, it had a *polemical* intent: 'in the world over,' he boasted, 'I will never encounter a sectarian I could not convince of the falsity of his faith.' Campanella intended in his book, from 'the natural law of first Reason,' to show how *Catholic* theology was 'in accord with the law of nature.'²⁷⁷

Arguments from nature were also rarely proffered with the aim of converting Muslims, Jews and pagans. Though the Turk, Jew or pagan might ostensibly be addressed as the target of a particular reasoned argument, Christian theologians and philosophers in the late Renaissance were not really expecting to engage with the arguments of other religious. If it were the case that those who professed another religion were the true target of reasoned arguments from nature, one would expect to find evidence of study into the religions that were supposedly disproven by the witness of nature. But as Noel Malcolm has conclusively shown in his recent Trevelyan Lectures on 'Early Modern Europe's encounters with Islam,' (Cambridge, 2010) scholarship on other religions was extremely rare with Europeans remarkably ignorant of Islamic theology. There was, however, the existence of an apologetic defending the *reasonableness* of Christian doctrines on the basis of nature. That which was commonly defended in this natural theological way was primarily the Trinity and various Christological doctrines from the Incarnation to the Atonement. Arguments were made to vindicate the philosophical possibility and actuality of these doctrines but without the aim or expectation that by these natural arguments the heathen would be converted.²⁷⁸ One exception in sixteenth-century Catholic Europe is the French polymath Guillaume Postel (1510-1581). Postel, inspired by his travels in the Middle East, suggested in *De orbis terrae Concordia* (Basle, 1544) that Jews, Muslims and pagans could be won for Christianity by showing the latter's congruence with man's natural religious instinct and insight.²⁷⁹ Postel's imprisonment for insanity and heresy, however, show that his views were hardly representative of orthodox Renaissance Catholicism. In view of confessional conflict,

²⁷⁷ See Tommaso Campanella and Germana Ernst, *L'ateismo trionfato, ovvero Riconoscimento filosofico della religione universale contra l'antichristianesimo macchiavellesco*, vol. I, 2 vols. (Pisa: Scuola normale superiore, 2004). Quoted in Germana Ernst, *Tommaso Campanella: the book and the body of nature* (Dordrecht & New York: Springer, 2010), p. 128.

²⁷⁸ I am speaking here about the late Renaissance. In the Middle Ages, some did try to convert the Gentiles through the use of natural reason. Aquinas' *Summa contra gentiles* is arguably an example of his thirteenth-century evangelistic enterprise. Ramon Lull's natural theology was certainly evangelistic. His books, published in Latin, Catalan and Arabic, were aimed at converting Muslims and Jews to Christianity by reasoned argument. The *Ars magna* sought to render those intellectual stumbling-blocks of the Trinity and Incarnation reasonable and discoverable. The process of proper contemplation on the perfections of the creatures (discussed above) would surely lead to confession of the true, Christian God. Lull's evangelistic zeal in his writings was matched by the physical effort he went to in order to convert Muslims, travelling widely in Europe and the Mediterranean to preach to the heathen. See Lohr, 'Metaphysics', p. 540 ff.

²⁷⁹ *De orbis terrae Concordia* was a refutation of Islam, Judaism and paganism and a rational defense of Christianity. William Bouwsma describes it as 'a basic manual for missionaries' to effect 'the conversion of the world to the Catholic faith,' based on his conviction that 'the fundamental method for the communication of religious truth must be rational demonstration.' William J. Bouwsma, *Concordia mundi: the career and thought of Guillaume Postel 1510-1581*, Harvard Historical Monographs (Cambridge, MA: Harvard University Press, 1957), pp. 9-10.

sixteenth-century Christendom instead of being concerned to evangelise the heathen by natural arguments, was intellectually introverted.

Natural theology constituted a preparative for grace for the non-Christian, providing the natural means for realizing his higher, spiritual end. But nature also provided the basis of the spiritual life of the Christian. As we have seen, faith was superior to reasoned knowledge of God and religion in terms of merit, excellence and experience. But the higher plane on which faith operated was not so much a separate, parallel plane as it was an *additional* plane. In other words, faith was an accretion upon that which was established by nature. Where nature and reason ended, grace and faith began. For this reason, the paradigm 'grace *perfects* nature' became a Catholic commonplace – but was never (to my knowledge) endorsed in sixteenth-century Protestantism. An example of the principle at work in the Catechism of Trent concerns marriage:

As grace perfects nature, and as that was not first which is spiritual, but that which is natural; afterwards that which is spiritual, the order of our matter requires that we first treat of Matrimony as a natural contract, imposing natural duties, and next consider what pertains to it as a Sacrament.²⁸⁰

The physical institution is the foundation; the spiritual signification is an additional dimension that 'perfects' the natural. This was symptomatic also of the Catholic doctrine of justification: a man born without the superadded graces he would have had but for original sin, would have in justification his natural, intrinsically good, self perfected by the addition of grace. As Costello puts it, 'grace supernaturalizes a natural goodness.'²⁸¹ Just as we observed regarding the process of justification, the pattern is nature first, and necessarily so; grace and faith second as an additional, spiritual truth. Within the setting, therefore, of grace perfecting nature, we must set the whole corpus of the Catholic theology of nature. It is important – *foundational* even – to knowledge of God; it is true – according much merit and progress toward the right worship of the true God; it is good – enabling the living of a moral life; it is the basis of a truly spiritual life. None of these could be said of Protestant theology. Instead of grace building upon, or perfecting, nature, Protestant theology strictly contrasted the spiritual state of nature and the spiritual state of grace. For Protestants, spiritually speaking, nature was sin, curse, and judgment. Saving grace *obliterated* nature rather than perfecting it. But in Catholic theology, nature was the foundation for the accretions of spiritual reality.

There was, then, a marked continuity between the natural and spiritual life and between natural and revealed theology. The Catechism explained that it was lawful 'to pray for the goods and adornments of the mind, such as a knowledge of the arts and sciences, provided our prayers are accompanied with this condition, that they serve to promote the glory of God *and our own*

²⁸⁰ CR, p. 342.

²⁸¹ Costello, *Scholastic curriculum*, p. 115.

salvation.’²⁸² Remembering that in Catholic theology salvation was a process more than a status, we can see that the pursuit of knowledge that was not directly concerned with God as its object had considerable value in the ongoing process of justification.

Natural species also had a key pedagogical role. The reliance of all human cognition on the sensible necessitated that natural species be used to teach theology. As we have discussed, knowledge of God, for Aquinas, could only come through knowledge of the creatures applied analogously.²⁸³ Cardinal Bellarmine in the early seventeenth century endorsed the Thomist view: ‘For us mortal men it seems that no ladder of ascent to God can lie open except through the works of God.’²⁸⁴ Tommaso Campanella took the reliance of knowledge on the sensory and reasoned perception of the visible world to mean that the detailed study of nature was absolutely essential in order to understand the ways of God and the articles of Christian faith. From the first, exhibited in the example of Adam whose only book from which to draw theology was the Book of Nature, man had to practise natural philosophy in order to have a comprehensive and holistic theology.²⁸⁵

The very words of the Scriptural revelation, in fact, made use of natural analogy in order to facilitate its comprehension. For instance, the mystery of the procession of the Holy Spirit was, the Catechism of Trent alleged, made known in natural language: ‘His emanation has no proper name simply because we are *obliged to borrow from created objects* the names given to God and *know no other created means* of communicating nature and essence than that of generation.’²⁸⁶ The Catechism thus applied the analogical relation of natural to spiritual truths to the very language of the Bible. One can also see in Catholic catechisms the pedagogical role of natural analogies to convey theological truths. To the question, ‘what goodness shall there be in life euerlasting?’ Bellarmine’s Master in his *Ample Declaration of Christian Doctrine* immediately replies, ‘I will teach you this mystery *by a similitude of the things in this world.*’²⁸⁷ In a preceding chapter, the doctrine of the Trinity had been taught by analogy to the waters in a spring, river and lake.²⁸⁸ The reliance on natural means to teach divine truths chimes with the Catholic defence of the use of images against the iconoclastic polemic of the Protestants who would, at the extreme, ban all religious imagery – even, as in the case of the Calvinist minister William Perkins (1558-1602), from the private imagination.²⁸⁹ For the Protestant, the inability of God to be represented to the

²⁸² CR, p. 488.

²⁸³ ‘Since we know God from creatures we understand him through concepts appropriate to the perfections creatures receive from him.’ Ia. 13, 5. Aquinas, *Summa*, p. 61.

²⁸⁴ Bellarmine, *De ascensione mentis*, p. 53.

²⁸⁵ See Tommaso Campanella, *The Defense of Galileo* (1622), trans. Grant McColley, Smith College studies in history (Northampton, MA, 1937), quoted in Fruchtbaum, ‘Natural theology and the rise of science’, p. 70.

²⁸⁶ CR, p. 89.

²⁸⁷ Bellarmine, *Ample declaration*, p. 79. My emphasis.

²⁸⁸ *Ibid.*, pp. 58-59.

²⁸⁹ See William Perkins, *A Warning against the Idolatrie of the last times. And an Instruction touching Religious, or Divine worship* (Cambridge, 1601).

senses by any corporeal form meant that not only were images inadequate means of learning about God, but wholly impious and idolatrous. But the Catholic had no such qualms. 'Many things are painted,' wrote Bellarmine, 'to make vs understand, not what they are in themselves, but what properties they haue, or what effects they vse to worke.'²⁹⁰ Pictures were a valuable pedagogical instrument and the lack of perfect similitude between the divine and the creatures only limited, rather than negated, the latter's efficacy in transmitting full knowledge. For this reason the relation between the Creator and his creatures made natural species fitting means to employ to teach Christian doctrine.

Man's inability, even in the light of grace, to perceive the things of God unmediated through natural things constituted a major part of Catholic sacramental theology. The Sacraments were instituted because, said the Catechism, 'we are so constituted by nature that no one can aspire to mental and intellectual knowledge unless through the medium of sensible objects.' It was 'in order...that we might more easily understand what is accomplished by the hidden power of God' that God 'ordained that His power should be manifested to us through the intervention of certain sensible signs.'²⁹¹ Taking the Mass as an example, the natural was linked through the sensible Sacrament to the spiritual. Moreover, belief in the spiritual benefit of partaking of the Host was commended to the mind by a natural analogy:

Observing, as we do, that bread and wine are every day changed by the power of nature into human flesh and blood [that is, simply the process of eating and drinking], we are led the more easily by this analogy to believe that the substance of the bread and wine is changed, by the heavenly benediction, into the real flesh and real blood of Christ.²⁹²

Not only could arguments and analogies of nature teach doctrine, but they could also defend it. After all, theology was, in the scholastic tradition, rational. Catholics in this period were much more likely than Protestants to stress the congruence of reason and nature with revelation. Arguments which undermined their congruence, such as scepticism and fideism, were often condemned by ecclesiastical authorities.²⁹³ In those matters of faith that exceeded the reach of reason, doctrines could at least be commended by appeal to principles learned from nature. Even those who, following Aquinas, thought reason incapable of proving faith held that natural reason could *probabilistically* support those things which faith proposed to the intellect.²⁹⁴ For instance, though the creation of the world in time could not be 'demonstratively proved,' a reasonable defence of the temporal creation was both possible and desirable. Sensory

²⁹⁰ Bellarmine, *Ample declaration*, p. 143.

²⁹¹ CR, p. 148.

²⁹² CR, p. 223.

²⁹³ Amos Funkenstein explains that scepticism and fideism undermined the whole basis of the scholastic view of theology: 'Whenever skeptical or fideistic arguments were invoked to undermine the faith in unaided reason, the medieval understanding of theology as a *rational* endeavor...was also undermined.' Funkenstein, *Theology and the scientific imagination*, p. 7.

²⁹⁴ Aquinas said that 'arguments of human reason reach no position to prove the things of faith,' Ia, 1, 8. Aquinas, *Summa*, p. 31.

observation allied to logical deduction could demonstrate that the creedal article that 'the world had a beginning...[was] credible.'²⁹⁵ Concerning the Trinity, though it was not discoverable by the natural intellectual faculties, natural philosophy had a responsibility to teach its possibility. Aquinas wrote, 'it suffices to prove that what faith teaches is not impossible.'²⁹⁶ In this vein, regarding the future bodily resurrection, the Catechism of Trent supplied 'Analogies from Nature' and 'Arguments drawn from reason' at some length to 'show from analogy and reason that what faith proposes is not at variance with nature or human reason.'²⁹⁷ The analogies from nature, the death and resurrection of the sun at sunset and dawn, of trees in autumn and spring, and of seeds by putrefaction and germination, are supposed to demonstrate that the death and resurrection of human beings resonates with the natural world. The observation of nature makes the doctrine more believable and certain. Further, three reasons are given in support of the doctrine. First, the immortal soul has a propensity to be united with the body and so its perpetual separation is in an unnatural (and therefore necessarily impermanent) 'state of violence.' Second, the punishments and rewards of God must be meted out to the body as well as the soul, as it was 'the partner of her crimes, or the companion of her virtues.' Third, since a part separated from the whole is imperfect, 'the soul separated from the body must be imperfect' and therefore, the fullest measure of human happiness (which must be possible) necessitates the resurrection of the body. These reasons, claim the Catechism, 'seem well calculated *to establish this truth*.'²⁹⁸ Scriptural proof of this doctrine and others like it was in some sense insufficient for the Tridentine Catechists, and the theology gleaned from an analogous reading of nature and the machinations of human reason contributed toward establishing the veracity of dogma. We have already seen how nature was read analogously to vindicate the number of the Sacraments and the doctrine of transubstantiation. That there were seven sacraments was based on the 'analogy that exists between the natural and the spiritual life' with the seven things necessary to man having a sacramental equivalent; for example birth finds its equivalent in the sacrament of the new birth (baptism), nutrition in the Mass, and death in Extreme Unction. Even the two species of the Eucharist was vindicated by an appeal to natural exempla.²⁹⁹ In these and other cases, nature was called upon as a witness to the veracity of Catholic doctrine.

²⁹⁵ Ia, 46, 2. Aquinas, *Summa*, p. 79.

²⁹⁶ Ia, 32, 1. The twentieth-century editor of Aquinas' *Summa*, Thomas Gilby, thinks that this apologetic role of natural theology defending the reasonableness of incredible dogmas resolves the tension in Aquinas' thought regarding natural knowledge of the Trinity (we recall that Aquinas insisted the Trinity was known only by revelation, but also said that the Trinity was discernable in every creature). Gilby suggests that Aquinas meant the mystery of the Trinity can only be *known* from revelation but can nevertheless be 'recommended to reason' by the investigations of natural philosophy. Gilby, Thomas, in *ibid.*, p. 57.

²⁹⁷ CR, p. 122.

²⁹⁸ CR, pp. 124, 122.

²⁹⁹ 'For as food and drink, which are two different things, are employed only for one purpose, namely, that the vigour of the body may be recruited; so also it was but natural that there should be an analogy to them in the two different species of the Sacrament, which should signify the spiritual food by which souls are supported and refreshed.' CR, p. 218.

Finally, the optimistic view of the veracity of natural theology in the absence of Scriptural revelation explains in part how Catholics were able to defend the use of pagan philosophy. Aquinas, who had inaugurated the use of Aristotle in Christian theology and philosophy, explained that sacred teaching uses the authority of philosophers because they 'have been able to perceive *the truth* by natural reasoning.'³⁰⁰ It was common in Catholic philosophy to sanctify the work of the ancients, claiming that they had somehow anticipated the revealed truth. Marsilio Ficino, for instance, claimed that Plato's was a foreshadowing of the doctrine of Christ, going so far as to commend the reading of Plato in Churches, his optimistic view of Plato's natural theology extending beyond an apologetic for appropriating his philosophy, to sanctifying Plato and his ideas with the stamp of almost revealed authority. The defence of pagan philosophers was necessitated by the challenge to their authority in the late Renaissance. The Aristotelian system as an overriding corpus of *scientia* was strongly challenged by the Protestants, particularly by Luther in the early Reformation, on religious grounds.³⁰¹ How could the unenlightened pagans be cited in philosophy, let alone theology, if – in their sinful blindness – they could know nothing true and useful about God and His relation to the creation? Aristotle's doctrines of the mortality of the soul and the eternity of the world were symptomatic, critics argued, of his utter blindness. But an optimistic view of the moral, spiritual and intellectual capability of natural man allowed Catholics to think that pagans like Aristotle could participate to a great extent in the truth and impart divine wisdom to the Church irrespective of their lack of special revelation. Going a step further with the argument that the theological philosophy of the pagans was relevant since they could by nature penetrate into divine and natural truth, and it is possible to see the Renaissance appeal of syncretism, defined by Ann Blair as, 'the idea of showing that each philosophical tradition was an incomplete manifestation of a single (Christian) truth.'³⁰² Not only could the theology and philosophy of Aristotle be 'baptised,' but so too could Plato, Zoroaster, the Hermetica and Cabala. All of these contained natural theologies that participated in some degree in a universal true theology that was revealed supernaturally in Scripture and could therefore be appropriated in Christian theology and philosophy. It is surely no coincidence that sixteenth-century philosophical syncretism was an overwhelmingly Catholic rather than Protestant phenomenon.³⁰³ The Catholic optimistic view of man's ability to do true theology from the philosophy of nature allowed for the truth to be

³⁰⁰ Ia. 1, 8. Aquinas, *Summa*, p. 31. My emphasis.

³⁰¹ See Blair, 'Natural philosophy'.

³⁰² *Ibid.*, p. 278.

³⁰³ Of course, Pico, Ficino and Cusanus were *de facto* Catholics as they were pre-Reformation figures. But their relevance to sixteenth century Catholic philosophy is hard to overstate. It is striking that their books – reprinted many times in the sixteenth century – were not prohibited by the Inquisition. Pope Innocent VIII was suspicious of Pico's *Conclusiones philosophicae, cabalisticæ, et theologicae* (Rome, 1486) but in his papal bull of August 1487, condemned only seven of the nine hundred theses (with a further six 'dubious'). The unacceptability of these theses was related to eschatology, Averroist philosophy and deviations from Church tradition – the late fifteenth century Church did not object, apparently, to Pico's theologico-philosophical syncretism.

attained without always necessitating the supernatural aid of Scripture. Protestants, certainly in the sixteenth century, supposed that the apparent congruence of aspects of ancient theologies with doctrines of Christianity such as the Incarnation and Trinity were either the fortuitous product of enough philosophical 'monkeys with typewriters' or else demonic illuminations. But a Catholic could trust the genius of the pagan philosopher and the clarity of the natural revelation and claim that, though dimly, the truth was being perceived and reflected in their writing. Theological syncretism was a logical extension of Catholic doctrine, whereas it could not be endorsed by orthodox Protestants.

Conclusion

Of central explanatory importance to the confessions' different view of the spiritual potential of natural theology was their different doctrines of the effect of the Fall. While Protestant lapsarian theology rendered man's mental faculties irrevocably deprived of both intellectual light and spiritual capacity, for the Catholic the curse of the Fall effected only a deprivation of the supernatural gifts with which man was originally imbued, leaving his natural faculties with their original powers. Reason retained the capacity to discern natural and spiritual truth, and the will its freedom to choose the good. Equipped, therefore, with this natural ability, man was naturally able to approach and apprehend the theological content of nature.

The outplaying of this is seen in four main areas:

i. Relative importance of natural revelation

Though creation's revelatory function was endorsed also in Protestant theology, the Catholic doctrine of revelation was able to incorporate nature as a source of true and valuable theology that, if not on a par with Scripture, certainly had an authority and autonomy far beyond that found in Protestant doctrine.

ii. The ability of man to discern natural theological content

Man had an innate sense of God and impulse to moral and spiritual living and was able to reason from the effects of Nature to their Cause, to make logically necessary deductions, to discern the hierarchical arrangement of being, to use natural allegory and analogy, and even effect a meditative method in order to attain a natural theology.

iii. *The extent of theological content in nature*

The limits of what could be learned from nature depended more upon the intellectual and moral capacity of the individual than upon any epistemological *caesura*. An extensive doctrine of God, man, and divine law could be attained from nature, often excluding, however, the doctrines of the Trinity and Incarnation.

iv. *The ends of natural theology*

Though Renaissance Catholics were, on the whole, keen to stress the necessity of grace for salvation, the doctrine of prevenient grace had the effect of giving natural man the ability to convert himself to his own justification. Within that context of synergistic justification, that which man could learn and effect in his natural state from the natural world was a preparation for grace that provoked, almost necessarily, God's response in providing the grace that effected the beginnings of intrinsic, saving righteousness. Despite this, it is overly simplistic and anachronistic to argue that natural theology was primarily concerned to convince atheists of the existence of God. For the Christian, natural theology could be applied to strengthen faith, render incomprehensible truths knowable, vindicate incredible doctrines, and defend the veracity of the pagan philosophers upon whom scholastic knowledge was built.

In contradistinction to the Protestant view of the theological value of nature, there was in Renaissance Catholicism no essential dichotomy between nature and grace, reason and faith, or natural and Scriptural revelation. Rather there was a scale that related each of the two terms: grace *perfected* nature, faith *clarified* reason, Scripture *completed* the revelation of nature. Natural theology, natural reason, and natural religion all participated to a considerable degree, in divine truth and merit.

It is not easy to answer some of the questions that Catholic natural theology provokes. Was the Trinity discernable by natural reason? Could the moral heathen be saved? Was the true end of man naturally known? All these questions and others elicited a range of responses whose orthodoxy is hard to categorically define. All in all, however, it can be confidently asserted that nature and natural reason had, in Counter-Reformation Catholicism, a theological value both in preparing for grace and establishing doctrine that far surpassed its role in Protestant doctrine.

II. Protestantism and natural theology

Introduction

In dealing with the subject of early modern Protestantism and natural theology, we are assailed by a rich and varied tradition.¹ Those names most closely associated with natural theology – from Robert Boyle (1627-1691) to William Paley (1743-1805) – were committed Protestants, and many historians have found occasion to describe, as Ann Blair does, natural theology as ‘a Protestant speciality.’² The great Protestant tradition in natural theology cannot be denied, but the historiographical account needs revising. Regarding its *confessional* dimension, historians have either assumed an uniform content, ecumenicity of purpose, or peculiarly Protestant predilection for natural theology – none of which do justice to the distinct confessional (sometimes polemical) character of the doctrine nor its integration, centrality and importance in early modern Catholicism. In what follows, I will demonstrate how Protestant natural theology was different in content and end to the Catholic doctrine. In addition to the need to give due attention to confessional differences, there also needs to be a revision of the *chronological* understanding of the doctrine of natural theology. Those who, like Harold Fruchtbaum, link the rise of natural theology to the Reformation, implying that Protestantism occasioned the creation of this particular tradition, ignore the extensive medieval and early modern Catholic inheritance from such paradigmatic figures as Thomas Aquinas, John Duns Scotus, Ramon Lull, and Raymond Sebond. There is indeed a chronological story to tell regarding early modern natural theology, but it is not this one. Rather, the proliferation of works specifically of natural theology from the second half of the seventeenth to the early nineteenth century has corresponded to a neglect of the doctrine in the sixteenth, when both Catholic and Protestant confessions were being settled and codified. The rise of Arminian theology, Deism and theoretical atheism begin

¹ In speaking of ‘early modern Protestantism,’ I am not, of course, denying the myriad differences between the churches, both Lutheran and Reformed. I am able, however, to represent Protestantism broadly speaking concerning natural theology, however; for on the whole the principles and doctrines that most interact with it do not precipitate a major point of contention. The differences that there are, are very modest and often merely a difference in emphases. Those areas of belief or practice that were most contentious among the Protestant churches, such as the Lord’s Supper, are not really germane to our current discussion. I will, however, ensure that sources wherever possible, are accurately described, at least as Lutheran or Reformed.

² Ann Blair, ‘Mosaic physics and the search for a pious natural philosophy in the late renaissance’, *Isis* 91 (2000), pp. 32-58, at p. 58. Harold Fruchtbaum found that ‘natural theology became particularly important in the Protestant world.’ Fruchtbaum presents a case that natural theology was a predominantly Protestant phenomenon in the early modern world and that its rise was a result of the religious and political effects of the Reformation. Fruchtbaum, ‘Natural theology and the rise of science’, p. lii.

to explain why natural theology comes to have the character it did in its eighteenth century heyday; a character which, I argue, historians have anachronistically projected backwards in time to the period under my particular consideration.

Any historian who presents natural theology as a Protestant phenomenon needs to engage with some theologians' influential claims that neither historic Calvinism nor Lutheranism had any space for natural theology. In a famous mid-twentieth-century controversy with Emil Brunner (1889-1966), the Swiss Reformed theologian Karl Barth (1886-1968) claimed that a complete *denial* of the legitimacy or even existence of natural theology was an essential characteristic of historic, sixteenth-century Reformed theology.³ While Barth's thesis has provoked prolonged debate in Divinity faculties, historians have rarely taken his point seriously.⁴ Similarly, historians need to engage with what Robert Koons calls 'the common or received opinion' that 'there is no place in Lutheran thought for natural theology.'⁵ Only an in-depth study of Protestant theology can reconcile the simultaneous endorsement and rejection of natural theology in historic confessional Protestantism.

In what follows there will be four main stages to the argument. The first concerns how and why sixteenth-century Protestants thought that any kind of theology undertaken by the 'natural man' – that is, the non-Christian using his natural faculties – was impossible. Second, I will examine how Scriptural, saving faith was thought to change fundamentally the ability of man to do natural theology. The third section examines Protestants' purposes for natural theology and the fourth applies some of the implications of the doctrine to late Renaissance natural philosophy. In order to establish the doctrine of natural theology according to orthodox sixteenth-century Protestants it is essential to examine the considerable confessional literature promulgated in the period: this chapter frequently references various Lutheran and Reformed confessions of faith.⁶

³ Barth wrote, 'As a Reformed theologian I am subject to an ordinance which would keep me away from "Natural Theology," even if my personal opinions inclined me to it.' Brunner and Barth, *Natural theology*, p. 75; qu. in Barr, *Biblical faith and natural theology*, p. 7.

⁴ In the *Cambridge Companion to Science and Religion* (2010), Barth's denial of natural theology is mentioned in two of the articles as a twentieth-century innovation, none of the contributors noticing that Barth's professed main reason for rejecting the idea was that he thought he owed it to the sixteenth-century Reformers who had established the doctrine in the first place.

⁵ Robert C. Koons, *The place of natural theology in Lutheran thought*, (2006), University of Texas, Available: www.thedivineconspiracy.org/Z5225B.pdf, at p. 2. It should be noted that Koons himself seeks to revise that received opinion. Regin Prenter in his article on 'Philosophical theology' in the *Historical dictionary of Lutheranism* (which he says is the name given to a doctrine called 'natural theology' in the Roman Catholic tradition) notices that 'philosophical theology never gained the same importance in the Lutheran tradition,' calling it 'much neglected' throughout the history of Lutheran theology (Gunther Gassmann, Duane H. Larson and Mark W. Oldenburg eds., *Historical dictionary of Lutheranism* (Lanham, MD & London: Scarecrow Press, 2001), pp. 1890-91).

⁶ The *Book of Concord*, first published in 1580 [Martin Chemnitz, Jakob Andreae, Martin Luther and Philipp Melancthon, *The Book of Concord: the confessions of the Evangelical Lutheran church*, ed. and trans. Theodore G. Tappert, Jaroslav Pelikan, Robert H. Fischer and Arthur C. Piepkorn (Philadelphia: Fortress Press, 1959) is a modern translation and printing – hereafter referred to as *BoC*], is a compendium of Lutheran doctrine from the start of the Reformation through to the establishment of mid- and late-sixteenth century orthodoxy. Its contents were, as the *Formula of Concord* (1577) declared, 'endorsed as official statements of

Definitive theological works of leading figures, such as Jean Calvin's (1509-1564) *Institutio Christianae religionis* (last edition, 1559), have also been consulted.⁷

i. The impossibility of pre-fideal natural theology

Protestants believed in the theoretical possibility of an extensive, accurate, and soteriologically effective natural theology. As we shall see, its *theoretical* possibility did not mean that man could penetrate theological truth from nature in actuality. Indeed, it is more accurate to say that Protestants believed in the theoretical *historical* possibility of natural theology. That is to say, that before the Fall, the progenitors of the human race were able to cognise the truth about God and true religion by using their natural faculties to contemplate the creation. Protestants, like Catholics, believed that the world was created as a revelation of God's nature and character and man's relation to him.

This uncontroversial doctrine has curiously caused some indignation. Arthur C. Cochrane, editor of a volume of sixteenth-century Reformed confessions, contends that 'having gained admission in the French Confession [of 1559], the virus of natural theology quickly spread,' only to be rejected when the original premises of the Reformed Confessions were reaffirmed in the twentieth century.⁸ The second article of that French Reformed Confession to which Cochrane took such exception, read, 'God reveals himself to men; firstly, in his works, in their creation, as well as in their preservation and control. Secondly, and more clearly, in his Word.'⁹ The idea that God's original creation was intended as a revelation of his nature, character and relationship to man is fully congruent with Reformed theology and is found with great clarity and frequency in Reformed works of theology and philosophy throughout the sixteenth century. Similar sentiments can be found in the very first article of John Knox's (1514-1572) *Scottish Confession of*

faith' ('Epitome' of the *Formula of Concord*, 1577; primarily authored by Jakob Andreä (1528-90) and Martin Chemnitz (1522-86), *BoC*, p. 465). The *Formula of Concord*, the summary of the confessions contained in *The Book of Concord* was subscribed to by about two-thirds of the German Lutheran church, including three electors palatinate. Two volumes of Reformed Confessions of the sixteenth century up to 1566, translated into English, have recently been edited by James Dennison, expanding on the twelve included in Arthur Cochrane's edition from 1966. See James T. Dennison, *Reformed confessions of the sixteenth and seventeenth centuries in English translation*, 2 vols. (Grand Rapids, MI: Reformation Heritage Books, 2008-2010) and Cochrane ed. *Reformed confessions*. References are also made to the Anglican *Articles of Religion* (1571) and the two official *Book of Homilies* (Cranmer, 1547; John Jewel, 1571) of the Church of England.

⁷ I have deliberately excluded the so-called Anabaptists, or radical Protestants, for issues of time, resources (of which there are fewer, particularly in English translation) and focus: there is a significant enough point to be made concerning the main confessional split between the magisterial reformers and counter-Reformation Catholicism without needing to provide an additional comprehensive focus on minority Protestant theologies.

⁸ Cochrane ed. *Reformed confessions*, p. 139. When cited for its printed translations of Reformed confessional literature, I will henceforth use the abbreviation CCH.

⁹ *The French Confession of Faith* (also known as the *Gallican Confession*, or the *Confession of La Rochelle*), 1559. CCH, p. 144. Cochrane was heavily indebted to Karl Barth, and probably wanted to signal his endorsement of the Barthian denial of natural theology in the Reformed tradition.

1560 and Guy de Bray's (1523-1567) *Belgic Confession* of 1561.¹⁰ Jean Calvin himself wrote that God 'in a manner communicates himself to us' in his visible works, giving natural revelation the chronological primacy: it is 'in point of order,' he said, the 'first evidence of faith.'¹¹ God intended 'to manifest his perfections in the whole structure of the universe,' as well as in each individual creature, such that the 'fabric of the world' was to be a 'school in which we might learn piety.'¹² Though the Protestant rejection of allegory as one of God's means of communication mitigated against a 'hieroglyphic conception of nature' in which each *individual* creature was invested with a particular divine message, the world was certainly thought to be a species of revelation.¹³ Moreover, that which nature preached was ubiquitous, perpetual and absolutely accurate, being in agreement with what was latterly revealed in Scripture.¹⁴ Given biblical passages that established the natural world as a revelation of God, Evangelicals could not deny that the visible creation was God's book, a mirror of the divine, laid open to all mankind, and sufficient in itself for some knowledge of God.¹⁵

Not only was the world reckoned a revelation of the true God and true religion, but man himself was divinely equipped to know God by nature. Since man bore God's image, His attributes were most manifest in him and could be known, therefore, by introspection.¹⁶ Calvin explained: 'to apprehend God, it is unnecessary to go farther than ourselves.'¹⁷ Man was originally 'a certaine notable patterne, of the wisdom, righteousness, and goodness of God.'¹⁸ Luther concurred that man was made to be a mirror of God's nature: 'In the remaining creatures God is recognized as by His footprints; but in the human being, especially in Adam, He is truly recognized,

¹⁰ God created and sustains the world 'for such end as His eternal wisdom, goodness, and justice have appointed, and to the manifestation of His own glory' (*The Scottish Confession of Faith* (1560, established by act of parliament in 1567) article I, *God*, CCH, p. 166). De Bray's *Belgic Confession* (1561) explained that man knows God 'first, by the creation, preservation, and government of the universe: which is before our eyes as a most elegant book, wherein all creatures, great and small, are as so many characters leading us to contemplate the invisible things of God' (*The Belgic Confession of Faith* (1561, approved and adopted in Geneva, Wesel, Emden, and Dort between 1566 and 1574, revised at the Synod of Dort in 1619), article II, *By what means God is made known unto us*, CCH, pp. 189-90).

¹¹ I.v.9 and I.xiv.20, *CAL*, pp. 19 and 101.

¹² I.v.1, *CAL*, p. 16. In the same section of the *Institutes*, Calvin lauded how 'on each of his works his glory is engraven in characters so bright, so distinct, and so illustrious.' The world as the school of piety is from II.vi.1, *CAL*, p. 212.

¹³ The phrase is Peter Harrison's. He describes the 'hieroglyphic conception of nature' as one in which 'all of the elements of the empirical world...are "figures" which have been invested with divinely instituted significance.' Harrison, *Rise of natural science*, p. 3.

¹⁴ Calvin said that God intended to 'daily place himself in our view, that we cannot open our eyes without being compelled to behold him,' I.v.1, *CAL*, p. 16. On the consistency of the original natural revelation and Scripture, see I.x.1-2, *CAL*, pp. 46-47.

¹⁵ Calvin claimed that Hebrews 11:3 'describes the visible worlds as images of the invisible, the elegant structure of the world serving us as a kind of mirror, in which we may behold God, though otherwise invisible.' I.v.1, *CAL*, p. 16.

¹⁶ The *Argument* at the beginning of the first book of Calvin's *Institutes* claims that 'it is in the creation of man that the divine perfections are best displayed.' *CAL*, p. 1.

¹⁷ I.v.3, *CAL*, p. 17.

¹⁸ Jean Calvin, *A commentarie of Iohn Caluine, vpon the first booke of Moses called Genesis: translated out of Latine into English, by Thomas Tymme, minister*, trans. Thomas Tymme (London, 1578), p. 42.

because in him there is such wisdom, justice, and knowledge of all things that he may rightly be called a world in miniature.’¹⁹ Moreover, man was created with an implanted instinctual knowledge, both of God himself, and the worship due to him, called by Calvin the *sensus divinitatis* and *semen religionis* respectively.²⁰ In addition to these inborn notions, man’s natural faculties originally had the ability to know God and true religion. His conscience testified to right and wrong, rendering him a moral agent with the free will to choose to obey or rebel against God’s law. Heinrich Bullinger (1504-1575) explained that God’s law ‘was at one time written in the hearts of men by the finger of God, and is called the law of nature.’²¹ This law was fully known in the soul in which it naturally inhered, and was fully sufficient for right living.²² The original condition of natural man was one in which, as Calvin put it, ‘the image of God was manifested by light of intellect, rectitude of heart, and the soundness of every part.’²³

This meant in the first place that prelapsarian Adam had a perfect, even encyclopaedic knowledge of nature.²⁴ His reason was furnished to be able to investigate nature and penetrate whatever revelation it contained: Nature was a book, and Adam could read it. Adam also met the second requirement for true and effective natural theology: he was created not only with perfect natural powers of intellection, but also with an upright will. Adam was not only able to know good and evil by virtue of his intellect, but also had the capacity to choose aright and accordingly enjoy the highest earthly and heavenly felicity.²⁵ In man’s original state, natural theology was an attainable, universal revelation that was sufficient for salvation.²⁶ As Calvin wrote,

In each of the works of God, and more especially in the whole of them taken together, the divine perfections are delineated as in a picture, and the whole human race thereby invited and allured to acquire the knowledge of God, and, in consequence of this knowledge, true and complete felicity.²⁷

¹⁹ Luther’s commentary on Genesis 1:27, in Martin Luther, *Luther still speaking. The Creation: a commentary on the first five chapters of the book of Genesis*, trans. Henry Cole (Edinburgh: T. & T. Clerk, 1858), p. 68.

²⁰ The *sensus divinitatis* gets its first mention in the *Institutes* at I.iii.1; the *semen religionis* at I.iv.1; in *CAL*, pp. 9 and 12 respectively.

²¹ *The Second Helvetic Confession* (1566, composed by Bullinger in 1561, was ‘the most widely received among Reformed Confessions’ according to Cochrane (*CCH*, p. 220)), article 12, *Of the Law of God*, *CCH*, p. 247.

²² ‘The whole will of God and all necessary precepts for every sphere of life are taught in this law.’ *The Second Helvetic Confession* (1566), article 12, *CCH*, p. 248.

²³ I.xv.4, *CAL*, p. 108.

²⁴ That Adam named the creatures was symptomatic of his perfect knowledge of their natures. Luther claimed that Adam’s enlightened reason comprised ‘perfect knowledge of the nature of the animals, the herbs, the fruits, the trees, and the remaining creatures.’ Luther’s commentary on Genesis 1:26, in Luther, *Luther still speaking*, p. 63.

²⁵ Calvin explained that ‘in this upright state, man possessed freedom of will, by which, if he chose, he was able to obtain eternal life.’ I.xvi.1, *CAL*, p. 114.

²⁶ In man’s ‘primitive condition,’ he had, according to Calvin, ‘reason, intelligence, prudence, and judgment’ that ‘enabled him to rise up to God and eternal happiness.’ I.xv.8, *CAL*, p. 111.

²⁷ I.v.10, *CAL*, p. 22.

It is certainly wrong to argue that the sixteenth-century Reformed tradition held that there was no revelation outside the Scriptures, that natural theology was not even a theoretical historical possibility.

Though the original state of both the world and man rendered a true natural theology possible, with the Fall all that changed. As a result of man's sin, both man and the world were cursed.²⁸ The world became vicious, chaotic and degenerate, subject to disorder, discord, and barrenness, assailed by droughts, famines and earthquakes and ruled over by the 'prince of this world' (the devil).²⁹ The French Calvinist Lambert Daneau (1535-1590) explained that sin caused natural things to be 'made mortall...by GOD appointed unto miserie and destruction,' such that they 'are now corrupted,' in a state of 'great and perpetuall changes.'³⁰ Though it retained some of its original beauty, order and abundance, it was no longer the 'very good' creation in which God originally placed man as ruler and steward. Instead, it was now a theatre of judgement as much as of blessing; a manifestation of God's wrath as much as His beneficence. The theoretical content of natural theology thus changed. As Calvin wrote,

The natural course undoubtedly was, that the fabric of the world should be a school in which we might learn piety, and from it pass to eternal life and perfect felicity. But [now] we are met by the divine malediction, which, while it involves innocent creatures in our fault, of necessity fills our own souls with despair.³¹

In its state of corruption, given over to decay and disease, the Book of Nature was confusing, or else revealed God's righteous anger. As Peter Harrison explains, by Adam's sin, 'Nature itself had fallen...deviating from the original plan and becoming less intelligible.'³² Sixteenth-century Lutherans, Robert D. Preus reports, thought 'by nature all men tend to be either Stoics or Epicureans,' not only because of their innate sinfulness, but also because of the apparent senselessness and disorder of the world.³³ Without knowledge of the Fall and its curse (known only by revelation) – man could not detect in nature the providence and beneficence of an omnipotent and loving God but only the indifference, impotence, or non-existence of the Deity. Moreover, while in Eden God had delighted in manifesting Himself directly to man, after the Fall, God withdrew His comprehensible presence from the creation in which He had been

²⁸ The biblical basis for the belief in the natural world itself being cursed is from Romans 8:20-22 (KJB): 'For the creature was made subject to vanity, not willingly, but by reason of him who hath subjected the same in hope, because the creature itself also shall be delivered from the bondage of corruption into the glorious liberty of the children of God. For we know that the whole creation groaneth and travaileth in pain together until now.'

²⁹ Calvin, *Genesis*, p. 48.

³⁰ Lambert Daneau, *The wonderfull woorkmanship of the world: wherein is contained an excellent discourse of Christian naturall philosophie, concernyng the fourme, knowledge, and vse of all thinges created: specially gathered out of the fountaines of holy Scripture, by Lambertus Daneus: and now Englished, by T.T.*, trans. Thomas Twyne (London, 1578), sig. F1r-F2r.

³¹ II.vi.1, *CAL*, p. 212.

³² Harrison, *Fall of man*, p. 12.

³³ Robert D. Preus, *The theology of post-Reformation Lutheranism*, vol. II: God and his creation, 2 vols. (St Louis & London: Concordia, 1972), pp. 196-97.

accustomed to walk incarnate (Gen 3:8). Instead of nature being a theatre in which God *revealed* himself to man, it now became a shroud behind which He hid Himself (part of Luther's doctrine of the *Deus absconditus*). Though God's self-shrouding was in part an act of mercy (if sinful man tried to contemplate God directly he would immediately perish), henceforth the revelation of his Word to the prophets and apostles was the only way to know Him. Trying to investigate God's majesty and glory where God had hidden Himself was, Luther explained, both vain and damnable: "'Let Me be hidden where I have not revealed Myself to you," says God, "or you will be the cause of your own destruction, just as Adam fell in a horrible manner; for he who investigates My majesty will be overwhelmed by My glory.'" ³⁴ Natural theology was doomed to failure at the point of its object. ³⁵

The possibility of natural theology was thwarted by the effects of the curse on the world but also by the effects of the curse on man. Though Protestants agreed with the Catholic position that the Fall precipitated the withdrawal of *super*-natural gifts (faith and original righteousness), ³⁶ that which divided their lapsarian theologies and therefore rived their view of postlapsarian, pre-fideal natural theology, concerned the effect of the Fall on man's *natural* condition. The Lutheran *Formula of Concord* (1577) rejected what they saw as a Pelagian error 'which asserts that man's nature is uncorrupted even after the Fall' and that original sin was merely 'splashed on externally,' while 'underneath man's nature has retained unimpaired its powers.' ³⁷ Instead, the effects of original sin were thought utterly pervasive and catastrophic for man's natural faculties and ability. ³⁸ The postlapsarian nature of man was one of innate, unremitting enmity against God. Original sin was 'so deep a corruption that nothing sound or uncorrupted has survived in man's body or soul, in his inward or outward powers.' ³⁹ The *French Confession of Faith* in 1559 said that Fall alienated man from God 'so that his nature is totally corrupt.' ⁴⁰ While man's

³⁴ Luther, *Genesis*, vol. V, p. 44.

³⁵ For this reason, the Lutheran scholar Carl-Heinz Ratschow dismisses the idea of God providing a *revelation* in nature as entirely alien to historic Lutheranism. God's natural law 'hides his will; it is equivocal and puzzling, like a false face or disguise' such that 'trying to understand the will and being of God on the basis of this universal Law is a futile task; the only reliable source is the biblical revelation.' Carl-Heinz Ratschow, 'Revelation,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 2051-53.

³⁶ See II.ii.12 and II.iii.2, in *CAL*, pp. 165, 178.

³⁷ *The Formula of Concord* (1577), *BoC*, pp. 467-68. Luther himself had deplored the Catholic view that 'after the fall of Adam the natural powers of man have remained whole and uncorrupted' (*The Smalcald Articles* (1537; drafted by Luther in response to Pope Paul III's calling a Church council – eventually the Council of Trent), part III, article I, 'Sin,' *BoC*, p. 302).

³⁸ 'Those who have defined original sin as the want of original righteousness...do not significantly enough express its power and energy.' II.i.8 in *CAL*, p. 153.

³⁹ *The Formula of Concord* (1577), *BoC*, p. 467.

⁴⁰ *The French Confession of Faith* (1559, drafted in Geneva in 1557, presented to King Francis II in 1560, confirmed by all the major Reformed churches of France at La Rochelle in 1571, ratified also in Wesel and Emden). Article IX, *CCH*, p. 147. There are a plethora of further examples. The *Belgic Confession* said man by the first sin 'corrupted his whole nature' (*The Belgic Confession of Faith* (1561), article XIV, *CCH*, p. 198). Article IX, 'Of original, or birth sin,' of the Church of England's *Articles* described original sin as 'the fault and corruption of the nature of every man' (*The Thirty-Nine Articles of Religion* (drafted in 1563 from Thomas Cranmer's *Forty-Two Articles* (1553) and ratified in 1571). Bullinger defined original sin as 'that

faculties were intended to be a mirror of God's attributes, the divine image was 'razed out in us by the fall of Adam.'⁴¹ The intrinsic corruption and condemnation of man's very nature was one of the most emphasized and recurring motifs in Protestant confessions.⁴²

More particularly, man's faculties of will and reason were essentially changed by the Fall. In the first place, man lost his natural knowledge of and instinct to the good. While the Catholic Fall introduced concupiscence which contended with right reason for influence over a will which remained free to choose good or evil, the Protestant Fall rendered man's moral faculty and decisions invariably arraigned against God and his own good. 'Our nature,' explained the *First Confession of Basel* (1534) 'became so inclined to sin that...man neither does not wants to do anything good of himself.'⁴³ In stark contrast to the Catholic, Aristotelian view, rather than naturally willing the good, postlapsarian man, as the article on original sin in *The Thirty-Nine Articles* (1571) put it, 'is of his own nature inclined to evil.'⁴⁴ As Philipp Melanchthon (1497-1560) remarked incredulously of the Catholics, 'they even attribute to human nature unimpaired power to love God above all things and to obey his commandments.'⁴⁵ The inherent evil of the natural will was akin to direct enmity toward God: for Bullinger the effects of original sin made man 'full of all wickedness, distrust, contempt and hatred of God,'⁴⁶ while the Lutheran *Formula of Concord* (1577) similarly declared that 'man's unregenerated will is not only turned away from God, but has also become an enemy of God.'⁴⁷ Man's natural hatred of God and the good meant that his will was often described as *enslaved* to sin and captive to the devil.⁴⁸ It was stupid, said

innate corruption of man' in *The Second Helvetic Confession* of 1566 (CCH, p. 235), while Calvin defined original sin as 'a hereditary corruption and depravity of our nature, extending to all parts of the soul' (II.i.8, CAL, p. 152).

⁴¹ Calvin, *Genesis*, p. 44.

⁴² The *Belgic Confession* said man by the first sin 'corrupted his whole nature' (*The Belgic Confession of Faith* (1561), article XIV, CCH, p. 198). Article IX, 'Of original, or birth sin,' of the Church of England's *Articles* described original sin as 'the fault and corruption of the nature of every man' (*The Thirty-Nine Articles of Religion* (drafted in 1563 from Thomas Cranmer's *Forty-Two Articles* (1553) and ratified in 1571). Bullinger defined original sin as 'that innate corruption of man' in *The Second Helvetic Confession* of 1566 (CCH, p. 235), while Calvin defined original sin as 'a hereditary corruption and depravity of our nature, extending to all parts of the soul' (II.i.8, CAL, p. 152).

⁴³ *The First Confession of Basel*, (1534, in four Latin editions between 1561 and 1647, subscribed to under oath by clergy and read weekly in Basel until 1826), article II, *Concerning Man*, CCH, p. 91. Calvin said man was 'incapable of one righteous desire' (II.ii.12, CAL, p. 165).

⁴⁴ Article IX, 'Of original, or birth sin'. Other examples of man's natural desire for evil include Martin Bucer, who wrote that the Scriptures 'ascribe nothing but sin and perdition to us' (*The Tetrapolitan Confession* (1530), chapter V, CCH, p. 60), and Calvin who asserted that 'all human desires are evil' (III.iii.12, CAL. 392).

⁴⁵ *Apology of the Augsburg Confession* (1531), BoC, p. 101.

⁴⁶ *The Second Helvetic Confession* (1566), CCH, p. 235.

⁴⁷ *The Formula of Concord* (1577), BoC, p. 470.

⁴⁸ John Knox's *Scottish Confession of Faith* (1560) said man 'became by nature hostile to God, slaves to Satan, and servants to sin' (Article III, 'Original Sin,' CCH, p. 167). Melanchthon's *Apology of the Augsburg Confession* (1531) argued that 'human nature is enslaved and held prisoner by the devil, who deludes it with wicked opinions and errors and incites it to all kinds of sins' (BoC, p. 106). The *French Confession of Faith* (1559) described man's will as 'altogether captive to sin' (article IX, CCH, pp. 147-48). The *Second Helvetic Confession* (1566) also described the postlapsarian will as 'enslaved' so that 'it serves sin, not unwillingly but willingly' (chapter IX, CCH, p. 237).

Luther in the *Smalcald Articles* of 1537, to think 'that man has a free will...to do good and refrain from evil.'⁴⁹ Man's natural enmity to God was an absolute block to man's genuine, humble and pious search for God through creation. He *would not* seek the God he hated by nature.

In fact, he *could not* either, for Protestant lapsarian theology rendered man's intellectual faculties utterly bankrupt. One's view on the powers of natural reason impacts profoundly upon one's attitude to the possibility of natural theology.⁵⁰ Tridentine Catholicism held to the Thomist position that reason was unaffected by the Fall, remaining the divine 'natural light' by which man was ever intended to cognise truth through sensory perception. In contrast, the Protestant doctrine that came to be known as 'total depravity' exempted none of man's natural faculties from the cancer of original sin.⁵¹ While Catholics regarded man's postlapsarian judgment as flawed only in physical and sensual matters, the Protestants insisted that it was also flawed in matters intellectual and spiritual. Melancthon rebuked his Catholic opponents who argued 'that the inclination to evil is a quality of the *body*' by highlighting 'the more serious faults of human nature' in man's alienation from God.⁵² Calvin deplored the dogma 'that man was corrupted only in the sensual part of his nature,'⁵³ while the *Formula of Concord* vehemently criticised according original sin as merely a sensual impediment to man's 'good spiritual powers.'⁵⁴ Man's highest faculty, his reason, was mortally corrupted by the curse. Concupiscence infected the intellect as much as it did the will, the soul as much as the flesh.⁵⁵ Reason was no longer 'right' in moral, spiritual or temporal matters. Bullinger, for instance, explained that 'in regard to goodness and virtue man's reason does not judge rightly of itself.' The depravity of that faculty was the root cause of man's inability to pursue the good: 'it is known that the mind or intellect is the guide of the will, and when the guide is blind, it is obvious how far the will reaches.'⁵⁶ Calvin constantly stressed that not only were the passions and appetites affected by the Fall, but also the will and intellect:

⁴⁹ *The Smalcald Articles* (1537), part III, article I, 'Sin,' BoC, p. 302.

⁵⁰ That the possibility of natural theology hinges upon the ability of reason has been noticed by a few historians. Peter Harrison claimed that 'the whole enterprise of natural theology was premised upon [an] optimistic view of the natural powers of the human intellect' (Harrison, *Fall of man*, p. 46). Scott Mandelbrote writes that in the seventeenth century, debates about natural theology were 'on the nature of human reason...and its application, as much as on the being and activity of God' (Scott Mandelbrote, 'The Uses of Natural Theology in Seventeenth-Century England', *Science in Context* 20 (2007), pp. 451-80, at p. 455.

⁵¹ According to Calvin, 'all the parts of the soul were possessed by sin, ever since Adam revolted' II.i.9, CAL, p. 153.

⁵² *The Apology of the Augsburg Confession* (1531), BoC, p. 101. My emphasis.

⁵³ II.ii.4, CAL, p. 160. See also II.iii.1, CAL, p. 177.

⁵⁴ *The Formula of Concord* (1577), BoC, p. 468.

⁵⁵ In fact, for Calvin, 'man is in himself nothing else than concupiscence.' II.i.8, CAL, p. 153.

⁵⁶ Bullinger, *The Second Helvetic Confession*, chapter IX, 'Of free will, and thus of human powers,' CCH, p. 238.

Speaking of corrupt nature, [St Paul] not only condemns the inordinate nature of the appetites, but, in particular, declares that the understanding is subjected to blindness, and the heart to depravity.⁵⁷

Reason and will remained in some measure, but, as Bullinger explained, 'they were so altered and weakened that they no longer can do what they could before the fall' because 'the understanding is darkened, and the will which was free has become an enslaved will.'⁵⁸ What remained was, as Calvin described it, 'a shapeless ruin' of what God had created in man.⁵⁹ Some aspects of its functioning remained, including its instinct to seek after truth, but it was ultimately frustrated; its pursuit never (in its natural strength) successful, its results never with genuine lasting value.⁶⁰ With God's help, however, man was able to achieve some things in the arts and sciences including natural philosophy. Residual reason in particular was sufficient for societal living: both natural instinct and the light of reason led man to understand and obey principles of government and law so that he could live in civil harmony.⁶¹ This was a manifestation of God's *common* grace to mankind: 'these are most excellent blessings with the Divine Spirit dispenses to whom he will for the common benefit of mankind.'⁶² But in its own strength, man's reason was unable to perceive any truth, being what the *French Confession* called 'blinded in mind.'⁶³

Autonomous reason was not only blind, but evil: Luther famously described reason as 'the Devil's greatest whore' – something that no Catholic writer could countenance.⁶⁴ A lower view of man's postlapsarian intellect is hardly possible. Man was especially naturally ignorant regarding divine knowledge. The *Formula of Concord* put it starkly: 'in spiritual matters man's understanding and reason are blind...he understands nothing by his own powers.'⁶⁵ For this area of knowledge God withheld the assistance he might have provided by an act of common grace in other areas: 'The light [man] has,' explained the *French Confession*, 'becomes darkness when he seeks for God, so that he can in nowise approach him by his intelligence and reason.'⁶⁶ Moreover, both Lutheran and Reformed theologians maintained that man by nature did not only lack divine knowledge but also the ability to house it. Melancthon, for instance, not only denied 'the existence...of actual fear and trust in God but also of the *possibility* and gift to

⁵⁷ II.i.9, *CAL*, p. 153.

⁵⁸ *The Second Helvetic Confession* (1566), chapter IX, *CCH*, p. 237.

⁵⁹ II.ii.12, *CAL*, p. 165.

⁶⁰ *The Formula of Concord* (1577), for instance, explained that 'In natural and external things which are subject to reason, man still possesses a measure of reason, power, and ability, although greatly weakened since the inherited malady has so poisoned and tainted them that they amount to nothing in the sight of God' (part II, article I, 'Original sin,' *BoC*, p. 510).

⁶¹ See II.ii.13, *CAL*, p. 166.

⁶² II.ii.16, *CAL*, p. 167.

⁶³ *The French Confession of Faith* (1559), article IX, *CCH*, p. 147.

⁶⁴ Luther's sermon in Wittenberg on 17 January 1546. The German original can be found in the Weimar edition of *Luther's Works*, vol. LI, p. 126.

⁶⁵ *The Formula of Concord* (1577), *BoC*, p. 470. Calvin also described 'the human mind' as 'dull and blind in heavenly mysteries.' I.v.12, *CAL*, p. 23.

⁶⁶ *The French Confession of Faith* (1559), article IX, *CCH*, p. 147.

produce it.' Original sin comprised both 'ignorance of God' and 'inability to love him.'⁶⁷ Even the sharpest minds of the philosophers could not, as most Catholics tended to argue, by their superior intelligence and mental perspiration, begin to penetrate divine mysteries, but constantly betrayed, as Calvin said, 'their stupidity and want of sense.'⁶⁸ In fact, if anything, without faith there was only a negative correlation between learning and theological accuracy!⁶⁹ 'The more zealously and diligently they want to comprehend these spiritual things with their reason,' said the *Formula of Concord*, 'the less they understand or believe.'⁷⁰ Because of the effects of the Fall on his will and reason, natural theology – possible in man's integrity – was impossible in man's lapsed condition.

Though man was blind regarding spiritual truth, Protestants did not dispense of the idea that he had some kind of residual instinctive knowledge of God. The 'utterly defaced,'⁷¹ divine self-image left an important trace in man's soul: what Calvin called the *sensus divinitatis* and *semen religionis* and Melancthon and Martin Chemnitz (1522-1586) called the *notitia insita*, continued to be some kind of internal witness to man's divine origin, supernatural end, and religious and moral responsibilities.⁷² The conscience, curtailed in accuracy and effect as it was, continued to sometimes distinguish good and evil, to convict of guilt and to testify to God's judgement and the immortality of the soul.⁷³ Man could 'still discern good and evil,' according to the *French Confession*, but this knowledge could in no way lead to knowledge of God.⁷⁴ The extent of the residual innate knowledge of God was a matter of debate. At the negative extreme, even the knowledge of the existence of a Creator was naturally absent from man's mind, being known only by revelation.⁷⁵ At the other extreme, a list of God's metaphysical attributes could be logically deduced from the instinctual knowledge of His existence. For Calvin, the *sensus divinitatis* was 'indelibly engraven on the human heart,' inescapable except through an exercise

⁶⁷ *Apology of the Augsburg Confession* (1531), BoC, pp. 101, 102. My emphasis. Man simply did not have the natural capacity to cognise, or even attempt to cognise, the true God in any degree. Melancthon here was vindicating the claim in the *Augsburg Confession* that 'all men are...unable by nature to have true fear of God and true faith in God' (article II, 'Original sin,' BoC, p. 29). Calvin too argued man was 'void of all power of spiritual intelligence' (II.ii.19, CAL, p. 169) and with Farel in *The Geneva Confession* (1536) that man was so 'darkened in understanding, and full of corruption' that 'he has no power to be able to comprehend the true knowledge of God' (article 1, 'Natural man,' CCH, p. 121).

⁶⁸ I.v.11, CAL, p. 23.

⁶⁹ See, for instance, II.v.12, CAL, p. 23.

⁷⁰ *The Formula of Concord* (1577), part II, article II, 'Free will or human powers,' BoC, p. 521.

⁷¹ John Knox's *Scottish Confession of Faith* (1560), article III, 'Original Sin,' CCH, p. 167. Calvin said 'anything which remains [of the divine image in man] is fearful deformity' (I.xv.4, CAL, p. 107).

⁷² The *notitia insita* was distinct from *notitia acquisita* – the notion of God that could be acquired by investigation and teaching. See Preus, *Theology of post-Reformation Lutheranism*, p. 22.

⁷³ See I.xv.2, CAL, p. 105.

⁷⁴ *The French Confession of Faith* (1559), article IX, CCH, p. 147.

⁷⁵ Two seventeenth-century Lutheran theologians, Johann Gerhard (1582-1637) in his *Loci communes theologici* (1610-22) and Abraham Calov (1612-1686) both denied Thomas Aquinas' assertion that the existence of God was a preamble to the articles of faith, instead maintaining that it was the first article of faith, knowable only from Scriptural revelation and Spiritual transformation (Preus, *Theology of post-Reformation Lutheranism*, pp. 36-38).

of doublethink involving its active deliberate suppression.⁷⁶ That innate knowledge extended as far as monotheism, the immortality of the soul and a sense of justice.⁷⁷ While Luther held to the theoretical possibility that *synteresis*, the innate natural knowledge of God and religion – if unsuppressed and obeyed – could have availed unto salvation, he explained that at the moment man applied his fallen *ratio* to this instinct, ‘they erred,’ being ‘led to idolatry.’⁷⁸ Whatever the extent of that inner light, it remained ultimately impotent. As the *First Helvetic Confession* of 1536 explained: ‘reason cannot follow what it knows nor can the mind kindle a divine spark and fan it.’⁷⁹ Martin Chemnitz’ *Formula of Concord* (1577) argued that while ‘man’s reason or natural intellect still has a dim spark of the knowledge that there is a God, as well as of the teaching of the law,’ such knowledge was in no way conducive to true theology and religion. Man’s fallen intellect was instead ‘so ignorant, blind and perverse that when even the most gifted and the most educated people on earth read or hear the Gospel of the Son of God and the promise of eternal salvation, they cannot by their own powers perceive this, comprehend it, understand it, or believe and accept it as truth.’⁸⁰ However true in itself the instinctual knowledge of God was, any possible beneficial effect was obviated by man’s fallen mind.

When man attempted to achieve knowledge about God and religion by the contemplation of nature, he was met by two self-inflicted problems. First, his natural reason perceived nature wrongly, drawing conclusions full of error – its poverty most pronounced when employed on divine matters. Such was the state of man that Matthias Flacius (1520-1575) and Daniel Hoffmann (1538-1621) argued that all natural knowledge of God was *necessarily false*.⁸¹ Since whatever was cognised from nature was wrong, natural theology was entirely *vain* – man’s effort in this regard was pointless. Calvin explained,

Bright...as is the manifestation which God gives both of himself and his immortal kingdom in the mirror of his works, so great is our stupidity, so dull are we in regard to these bright manifestations, that we derive no benefit from them.

In vain, therefore, does Creation exhibit so many bright lamps lighted up to show forth the glory of its Author...they are altogether insufficient of themselves to lead us into the right path.⁸²

⁷⁶ I.iii.3, *CAL*, p. 10.

⁷⁷ I.x.3 and I.v.5 in *CAL*, pp. 47, 18.

⁷⁸ Martin Luther, *Lectures on Romans*, ed. Wilhelm Pauck (Louisville, Kentucky: Westminster Press, 1961), p. 24. The following footnote in Pauck’s edition provides background to the ‘practical syllogism’ of which Luther spoke concerning the *synteresis*, *ratio* and *conscientia*: ‘According to later medieval Scholasticism...the ‘practical’ syllogism...consisted of the following three parts: major premise, *synteresis*; minor premise, *ratio* (*iudicium*); conclusion, *conscientia*. Synteresis...was defined as a ‘natural inclination’ of the soul toward the good, an inextinguishable spark (*scintilla*) of reason, an inborn *habitus*.’

⁷⁹ *The First Helvetic Confession* (1536), article 8, ‘Concerning original sin,’ *CCH*, p. 102.

⁸⁰ *The Formula of Concord* (1577), part II, article II, ‘Free will or human powers,’ *BoC*, p. 521.

⁸¹ Preus, *Theology of post-Reformation Lutheranism*, p. 24.

⁸² I.v.11, 14 *CAL*, pp. 22, 24.

Luther similarly argued that all natural attempts to 'learn what God is and what he thinks and does...never succeeded in the least.'⁸³ The second problem was the turpitude of a will enslaved to sin which invariably suppressed and distorted any truth received from nature. From nature, man framed a theology prejudiced by his evil desires. His natural pride and 'innate self-love,' predisposed him to cast off reliance on God.⁸⁴ The desire to relegate God to a peripheral role with a minimal claim on man's life often manifested itself, according to Calvin, in a natural philosophical setting, in 'substituting nature as the architect of the universe,' with the result of 'disproving the immortality of the soul, and robbing God of his rights.'⁸⁵ Those who worshipped a god framed by their intellect, 'merely worship and adore their own delirious fancies.'⁸⁶ Natural theology was therefore necessarily both vain and evil.

It is for these reasons that Protestant theology actually linked natural theology to idolatry. Natural theology 'does not lead one to the true God,' wrote the Lutheran theologian Nicolaus Selnecker (1532-1592), 'but only to shadows.'⁸⁷ The Bible was the unique route to knowledge of the true God.⁸⁸ Any god conceived, therefore, outside of Scripture was necessarily an idol.⁸⁹ Worship of the god cognised by natural theology was both a departure from His self-revelation in Scripture and a concession to the erroneous and aberrant human mind. According to Calvin, those who use nature as a guide to knowledge of the deity, 'do not conceive of him in the character in which he is manifested, but imagine him to be whatever their own rashness has devised.'⁹⁰ Man's reason, unable to cognise the true God, created a god fitted to its intellectual limitations. A corporeal god, for instance, though 'palpably repugnant to the order of nature,' was nonetheless 'natural to man' because of the vanity of his intellect.⁹¹ To want of intellect was added turpitude of will in the effecting of the naturally-conceived idol.⁹² Men imagined from nature gods that gave moral license and claimed only a ritual devotion. Of those ancients whose intellectual religion was often commended in Medieval and Renaissance Catholic texts, Calvin's analysis was that 'the plain object is to form an unsubstantial deity, and thereby banish the true

⁸³ Martin Luther, *The Large Catechism* (1529), BoC, p. 419.

⁸⁴ II.i.2, CAL, p. 148.

⁸⁵ I.v.4-5, CAL, p. 18.

⁸⁶ I.iv.3, CAL, p. 13.

⁸⁷ Quoted in Preus, *Theology of post-Reformation Lutheranism*, p. 35.

⁸⁸ 'One cannot deal with God or grasp him,' said Melancthon, 'except through the Word.' *Apology of the Augsburg Confession* (1531), BoC, p. 116.

⁸⁹ *The Heidelberg Catechism* (1563) defined an idol as something 'in which to put one's trust in place of or beside the one true God who has revealed himself in his Word' (question 28, CCH, p. 308). According to Calvin, St Paul 'condemns all the gods celebrated among the Gentiles as lying and false, leaving no Deity anywhere but in Mount Zion where the special knowledge of God was professed.' I.v.13, CAL, p. 24.

⁹⁰ I.iv.1, CAL, p. 12.

⁹¹ I.xi.4, CAL, p. 52.

⁹² 'To the darkness of ignorance,' Calvin wrote, 'have been added presumption and wantonness, and hence there is scarcely an individual to be found without some idol or phantom as a substitute for Deity.' I.v.12, CAL, p. 23.

God whom we ought to fear and worship.’⁹³ There was no sense in which they imperfectly worshipped the true God: ‘it is not him they worship, but, instead of him, the dream and figment of their own brain.’⁹⁴ Luther gave a more involved analysis to his dictum that ‘everyone made into a god that to which his heart was inclined,’ saying, for example, that those who lusted after dominion chose Jupiter as their god, those who desired riches, Hercules, and those who sought sensual pleasure, Venus.⁹⁵ Behind such vain appearances of religion lurked a diabolic influence. Luther, in his *Commentary on Jonah*, wrote that ‘reason never finds the true God, but it finds the devil or its own concept of God, ruled by the devil.’⁹⁶ Natural theology and natural religion did not result in a limited participation in knowledge and worship of the true God as the Catholics believed, but in the casting off of the true God and the substitution of an idol, forged in the wicked mind, in His place.

Natural theology’s leading inevitably to idolatry was a sign of mankind’s damnation. Catholics spoke approvingly of the piety and theological insight of the pagans of old who, lacking the Book of God’s Word, attempted to compensate by diligent and laborious enquiry in natural theology, which accrued them a degree of religious merit, perhaps mitigating God’s judgement or even provoking His grace. Not so for Protestants. Among Reformed theologians, the pagans were considered as undifferentiated reprobates – their natural theology and natural religion was not evidence of genuine insight, repentance and piety, but rather evidence of the justice of their damnation for insincerity, transgression of their own moral law, and idolatry. The ‘natural man,’ was defined by Calvin as ‘the man who trusts to the light of nature,’ who ‘has no understanding in the spiritual mysteries of God.’ This was not because of his sloth, but because knowledge of divine things are ‘altogether hidden from human discernment, they are made known only by the revelation of the Spirit.’⁹⁷ Natural theology was therefore the theology of the reprobate. The *duplex cognitio Dei* (initially referring to the *objective* difference in how the character of God was manifested in creation and in Christ) came to signify the *subjective* difference between the elect and the reprobate. Those who ‘knew’ God through nature were those who were damned: those who knew God through the Scriptures and through Christ were saved. For Pierre du Moulin (1568-1658), for instance, the *duplex cognitio Dei* signified, as Richard Müller writes, ‘the doctrinal distinction between the natural fruit of the *semen religionis* and the saving knowledge of God in

⁹³ I.v.5, *CAL*, p. 19.

⁹⁴ I.iv.1, *CAL*, p. 12. The idea of an idol of the mind is particularly associated with Calvin and his followers, but something similar concerning the mind’s creation of idols must have been in Luther’s mind when we wrote that ‘Everyone has set up a god of his own, to which he looked for blessings, help and comfort’ (*The Large Catechism* (1529), *BoC*, p. 367).

⁹⁵ Martin Luther, *The Large Catechism* (1529), *BoC*, p. 366.

⁹⁶ Martin Luther, *Commentary on Jonah* (1:4-5), in Martin Luther, *Minor Prophets*, Luther’s works, ed. Jaroslav Pelikan, vol. II (St. Louis, Philadelphia: Concordia, 1974), p. 206.

⁹⁷ II.ii.20, *CAL*, p. 170.

Christ.⁹⁸ Peter Martyr Vermigli (1499–1562) similarly divided the general, natural knowledge of God, which, though comprising His power, wisdom, and majesty, was ‘frigid’; from the knowledge of God through redemption and justification by Christ and the Scriptures, which was ‘effectual’.⁹⁹ Natural theology was identified with unbelief; true, effective knowledge came only by supernatural revelation.

In Lutheranism, there was a sense in which natural instinct and deduction led man to cognise something approaching knowledge of the disposition of *Law*. The natural man could to some extent know the existence and character of God (in particular His omniscience, omnipotence and justice); His moral law, man’s transgression of it, and God’s righteous anger at its being broken; and the need to make satisfaction for sin. This was the practical result of the *notitia insita*. Melancthon’s list of what might be known about God in man’s natural mind might appear, at first glance, to be fairly optimistic regarding its extent and truth:

There flashes in the mind the knowledge which affirms not only that there is one God...but also teaches what kind of God He is, namely, wise, beneficent, just, One who assigns like things to like things, truthful, One who loves moral purity, One who demands that our obedience conform to this His will, and One who punishes with horrible punishments those who harshly violate this order.¹⁰⁰

In fact, however, the attributes of God that are known by ‘flashes in the mind’ all concern law – they are of His moral purity, order, justice, intrinsic goodness and omniscience; of His impossible demands and superlative standards; and of the terrible judgement that is due to man as a result. Natural instinct knows nothing of grace, longsuffering and mercy. Even when the natural knowledge of God appears more extensive than in other Protestant equivalent, it is knowledge of *Law*, not *Gospel*.¹⁰¹ This ‘knowledge’ was, moreover, lopsided, incomplete, and impious. Natural man could only perceive of God as what Luther called ‘an angry and terrible Judge.’¹⁰² Moreover, man did not know the full requirements of the law: he could dimly perceive

⁹⁸ Another example is Amandus Polanus von Polansdorf (1561–1610) who divided practical knowledge of God into natural knowledge on one hand, and saving knowledge on the other. These examples are from Richard A. Müller, ‘*Duplex cognitio dei* in the theology of early Reformed orthodoxy’, *Sixteenth Century Journal* 10 (1979), pp. 51–62, at pp. 57–59.

⁹⁹ See Stephen John Grabill, *Rediscovering the natural law in Reformed theological ethics*, Emory University studies in law and religion (Grand Rapids, MI: Eerdmans, 2006), ch. 3.

¹⁰⁰ ‘Fulget in mente humana notitia, quae adfirmat non solum esse unum Deum, opificem totius mundi et ordinis, in tota natura, sed etiam docet, quails sit, scilicet sapiens, beneficus, iustus, aequalia aequalibus tribuens, verax, amans casititatis, postulans ut ad hanc suam voluntatem nostra obedientia congruat et puniens horribilibus poenis hunc ordinem atrociter violantes, sicut universa historia generis testator.’ From *Initia doctrinae physicae* (1550); Latin from Philipp Melancthon, *Opera quæ supersunt omnia*, Corpus reformatorum, ed. Carl Gottlieb Bretschneider and Heinrich Ernst Bindseil, vol. XIII, 28 vols. (1846), p. 198; translation in W. Elert, *The structure of Lutheranism*, trans. Walter A. Hansen, vol. I: The theology and philosophy of life of Lutheranism especially in the sixteenth and seventeenth centuries, 2 vols. (St Louis, Philadelphia: Concordia, 1962), p. 52.

¹⁰¹ Werner Elert summarised that in Lutheran dogma, ‘the whole natural knowledge of God is to be made subordinate to the “knowledge of the Law (*notitia legis*)” – meaning both natural laws by which God created and preserves the universe as well as moral law. Elert, *Structure of Lutheranism*, p. 52.

¹⁰² Martin Luther, *The Large Catechism* (1529), BoC, p. 419.

only the second table (pertaining to his relationship with fellow man). He knew neither the extent of his sin, the depth of his depravity, nor the gravity of his due punishment. The ‘damage’ of original sin was considered by Lutherans ‘so unspeakable that it may not be recognized by a rational process.’¹⁰³ Knowing instinctively the economy of reward and punishment, and not knowing the true nature and depth of his sin, man imagined that by the performance of good works he could get right with God. ‘By nature,’ wrote Melanchthon, ‘men judge that God ought to be appeased by works,’ this being ‘the only righteousness that reason can see.’ The false hope of works-righteousness was therefore at the heart of all non-Christian religions – the result of cogitations by ‘the Pharisees, philosophers, and Mohammedans.’¹⁰⁴ Man thought that by good works he could attain not only forgiveness, but credit with God.¹⁰⁵ This was the one answer to the problem of sin that reason could come up with. Luther described works of satisfaction as ‘an artificial and imaginary idea evolved by man’s own powers without faith.’¹⁰⁶ It was deeply engrained in man’s fallen nature: ‘this legalistic opinion clings *by nature* to the minds of men,’ wrote Melanchthon, ‘and it cannot be driven out unless we are divinely taught.’ Even to the extent that reason arrived at true knowledge, it was knowledge only of a *curse*, since ‘the law works wrath...it only accuses; it only terrifies consciences.’ Whatever was known of the curse of the law, instead of leading to repentance and pleading for mercy, led people ‘to feel angry at the judgement of God’ and to ‘a doctrine of despair.’¹⁰⁷ Knowledge of justification by faith – the Gospel – came only by the external Word applied by the indwelling Spirit. The Gospel transformed the view of the Law so that it became a blessing: with the requirements of the law fulfilled by Christ, a Christian’s spiritual obedience out of *gratitude* now pleased their heavenly Father. In sum, then, the Law and Gospel dichotomy which so characterised Lutheran systematic theology translated onto the distinction between natural and revealed theology.¹⁰⁸ To do natural theology was to be under the curse of the law.¹⁰⁹ Man’s natural condition and spiritual ‘knowledge’ of God was not propaedeutic, but antithetical, to Christian faith. As *The Formula of Concord* put it,

¹⁰³ *The Formula of Concord* (1577), BoC, p. 467. This doctrine is, according to Elert, ‘not strange to Melanchthon either,’ who, like the later *Formula of Concord* ‘ascribes to sin the fact that man does not acknowledge the wrath of God’ (Elert, *Structure of Lutheranism*, p. 51).

¹⁰⁴ *Apology of the Augsburg Confession* (1531), BoC, pp. 167, 139.

¹⁰⁵ Melanchthon reported how ‘reason thinks that it pleases God if it does good.’ *Apology of the Augsburg Confession* (1531), BoC, p. 150.

¹⁰⁶ *The Smalcald Articles* (1537), article III, ‘Repentance,’ BoC, p. 306.

¹⁰⁷ *Apology of the Augsburg Confession* (1531), BoC, pp. 146, 144, 217, 153.

¹⁰⁸ On Law and Gospel as an explanatory medium for all theology, consider Melanchthon’s *Apology of the Augsburg Confession* (1531), ‘All Scripture should be divided into these two chief doctrines, the law and the promises’ (BoC, p. 108). The *Formula of Concord* (1577) demanded that ‘the distinction between law and Gospel is an especially glorious light that is to be maintained with great diligence in the church’ (BoC, p. 478).

¹⁰⁹ Robert Preus summarized the position of the late sixteenth century Lutheran theologians: ‘Only judgement and hell awaited those who possessed merely a natural knowledge of God.’ Preus, *Theology of post-Reformation Lutheranism*, p. 29.

In spiritual and divine things the intellect, heart, and will of unregenerated man cannot by any native or natural powers in any way understand, believe, accept, imagine, will, begin, accomplish, do, effect, or cooperate, but that man is entirely and completely dead and corrupted as far as anything good is concerned.¹¹⁰

Natural knowledge of God in the Protestant position, both Reformed and Lutheran, was therefore *contrasted* with saving knowledge of God. Rather than nature providing a preparation for faith, natural theology was arraigned *against* true theology and was a sign of the divine decree to blind the reprobate from knowledge of God and curse mankind under the standards of divine law. As Calvin put it, natural theology produced only a 'shadow of religion' that was 'false and vain,' completely opposed to 'that piety which is instilled into the breasts of believers.'¹¹¹ For these reasons, many scholars have argued that natural theology was anathema to Lutheran and Reformed doctrine. Surely knowledge of God must be sought 'not in man...not in the frame of the world...but in Scripture'? Surely 'one cannot deal with God or grasp him except through the Word' (Melanchthon)?¹¹² Surely there was only a *via per revelationem* and no *via per creaturas* for knowledge of God? Indeed, the impossibility of natural theology according to Protestant doctrine demonstrates an historiographical paradox that must be solved: the definition of natural theology as an activity of reason without Scripture leading to belief in God's existence and certain of his attributes, and the observation that natural theology tended to be a Protestant phenomenon, cannot be reconciled in the light of Lutheran and Reformed lapsarian anthropology. And yet those scholars like Barth who flatly deny the existence of a natural theology in confessional sixteenth century Protestantism must be corrected. By attending in turn to the threefold state of man – (i) his original created innocence, (ii) his postlapsarian sinfulness and condemnation, (iii) his redeemed and regenerate Christian state,¹¹³– we can see that in the first state, nature was a Book revealing God's character and demands that Adam could read and obey. It is in that second state of man that natural theology was a vain and damned activity. We must turn next to examine the third state of man.

¹¹⁰ *The Formula of Concord* (1577), Part II, article II, 'Free will or human powers,' BoC, p. 521.

¹¹¹ I.iv.4, CAL, p. 14.

¹¹² *Argument* at the beginning of Book I in CAL, p. 3, and *Apology of the Augsburg Confession* (1531), BoC, p. 116.

¹¹³ *The Second Helvetic Confession* (1566) taught that 'a threefold condition or state of man is to be considered' – namely 'what man was before the fall,' 'what man was after the fall' and 'the regenerate.' Chapter IX, 'Of free will, and thus of human powers,' CCH, p. 237.

ii. The effect of faith for natural theology

The Fall was the death of natural theology, but regeneration by faith was its resurrection. Faith gave sight to blind eyes: it was, said Calvin, 'a pure gift of God which God alone of his grace gives to his elect,'¹¹⁴ in order that they apprehend true and saving knowledge of God and religion.¹¹⁵ Faith was not, as the schoolmen alleged, simply a species of knowledge with God as its object.¹¹⁶ It involved not only 'the bare simple assent of the understanding' (as Calvin charged the schoolmen with teaching) but also the complete transformation of the human heart.¹¹⁷ Faith transformed both desire and knowledge, intellect and will. For Melancthon 'to have faith means to want and to accept the promised offer of forgiveness of sins and justification.'¹¹⁸ It was an imparted comprehensive knowledge of God's existence, attributes, character, and will toward the saints.¹¹⁹ True faith was Christocentric, Scriptural, and Spiritual. Christ uniquely revealed God when He had been hidden.¹²⁰ Theologians both Lutheran and Reformed agreed that faith came only by the twin efficient causes of the Word of God being illuminated by the Holy Spirit.¹²¹ Bullinger, for instance, defined faith in terms of the biblical revelation – it was 'a most certain apprehension of the truth of God *presented in the Scriptures*.'¹²² The Spirit (as the *Formula of Concord* explained) 'opens the intellect and the heart to understand the Scriptures and to heed the Word,'¹²³ enabling the trust in Christ's propitiatory death that comprised saving faith.

¹¹⁴ *The Second Helvetic Confession* (1566), article XVI, 'Of faith and good works,' CCH, p. 257.

¹¹⁵ III.ii.6, CAL, p. 359. Salvation was an unmerited gift; faith was the means by which the gift was received. For instance, *The Belgic Confession* (1561) clarified that 'we do not mean that faith justifies us, for it is only an instrument with which we embrace Christ our righteousness' (article XII, 'Of our justification through faith in Jesus Christ,' CCH, p. 204).

¹¹⁶ See III.ii.1, CAL, p. 352.

¹¹⁷ III.ii.33, CAL, p. 377. Carl-Heinz Ratschow suggests in fact that Calvin 'strongly stressed the knowledge-element of faith,' understanding the Bible as 'basically as information transmitted to us,' whereas the Lutheran tradition had a greater emphasis on the Word of God and on faith not so much 'intellectual, cognitive' but 'primarily trust and confidence in God.' Ratschow seriously overstates the difference between the confessions on this point: the 'Word of God,' 'revelation' and 'the Scriptures' are essentially synonymous terms in the sixteenth century; and both traditions considered faith to consist both in revealed truths and a subjective persuasion and practical outworking. Ratschow, 'Revelation,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 2051-53.

¹¹⁸ *Apology of the Augsburg Confession* (1531), BoC, p. 114.

¹¹⁹ Faith accorded knowledge of the 'divine will in regard to us, as ascertained from his word.' III.ii.6, CAL, p. 359.

¹²⁰ Luther explained that Christ was the revelation of the *Deus absconditus*: by knowing the Son the Father became truly known. Christ will 'gradually also reveal the hidden God; for "He who sees Me also sees the Father"' (Luther, *Genesis*, vol. V, p. 46).

¹²¹ The 'only two efficient causes' of faith according to the *Formula of Concord* (1577) were 'the Holy Spirit and the Word of God as the Holy Spirit's instrument whereby he effects conversion' (BoC, p. 472). Christian faith was defined in the *Geneva Confession* (1536) as receiving 'Jesus Christ as he is offered to us by the Father and described to us by the Word of God' (article 11, CCH, p. 123). *The Belgic Confession* (1561) said faith was 'wrought in man by the hearing of the Word of God and the operation of the Holy Ghost' (article XXIV, 'Of man's sanctification and good works,' CCH, p. 205).

¹²² *The Second Helvetic Confession* (1566), article XVI, CCH, p. 257.

¹²³ *The Formula of Concord* (1577), BoC, p. 526.

The effects of faith were not restricted to the effective apprehension of redemption: faith *enlightened* and *renewed* the mind.¹²⁴ The Holy Spirit restored both intellect and will to their proper function and station, exchanging an enlightened for dark reason and an obedient for a resisting will.¹²⁵ Now the intellect, ‘irradiated by the light of the Holy Spirit,’ as Calvin expressed it, could desire and apprehend spiritual truths where before ‘it was too stupid and senseless to have any relish for them.’¹²⁶ Luther, so vehemently opposed to natural reason having any role in religion, believed that ‘human reason...strives not against faith, when enlightened, but rather furthers and advances it.’¹²⁷ The Spirit caused the will to repent of its evil predilections and become, as Farel and Calvin put it, ‘conformable to God’s will...and to seek what is pleasing to him.’ By regeneration, all the powers of man’s faculties were effectively restored: in Christ we ‘recover all of which in ourselves we are deficient.’¹²⁸ ‘Whatever we have lost in Adam,’ said John Knox ‘is restored to us again.’¹²⁹ Man’s rebirth was nothing short of a re-creation, repairing the divine self-image and restoring the wisdom, light and righteousness with which Adam had originally been invested.¹³⁰ For Luther, even the faculty of imagination – by nature trained on evil continually – was redeemed for the Christian believer, sanctioning (within certain bounds) the pedagogical use of religious imagery.¹³¹ Moreover, in contradistinction to Catholic doctrine, man’s justification – his forgiveness, righteousness, the restoration of spiritual sight and the beginning of sanctification – was held to occur at the instant of conversion. As Martin Bucer (1491-1551) expressed it, God ‘offers the truth and his Gospel’ to the elect and ‘causes a beam of light to arise at the same time in the darkness of our heart.’¹³² By regeneration, the Christian’s sight in matters divine, once totally blinded, was totally restored. As Bullinger explained, ‘in regeneration the understanding is illumined by the Holy Spirit in order that it may understand both the mysteries and the will of God.’¹³³

¹²⁴ According to *The French Confession of Faith* (1559), ‘we are *enlightened* in faith by the secret power of the Holy Spirit’ (my emphasis), article XXI, CCH, p. 151. Also see II.ii.20, CAL, p. 170.

¹²⁵ See *The Formula of Concord* (1577), BoC, p. 526.

¹²⁶ III.ii.33, in CAL, p. 377.

¹²⁷ Martin Luther, *Tischreden* (1569), in Martin Luther, *The table talk of Martin Luther: Luther's comments on life, the church and the Bible*, trans. Johann Aurifaber (Fearn: Christian Heritage, 2003), section CCXCIV.

¹²⁸ *The Geneva Confession* (1536), articles 6 and 8, ‘Salvation in Jesus’ and ‘Regeneration in Jesus’ (CCH, pp. 121-22).

¹²⁹ *The Scottish Confession of Faith* (1560), article VIII, ‘Election,’ CCH, p. 169.

¹³⁰ Calvin thought the excellence of man’s original reason, senses and will comprised the divine self-image: ‘spirituall regeneration is nothing else, but a repairing of the same image’ (Calvin, *Genesis*, p. 44). On this idea in Lutheran orthodoxy, see Preus, *Theology of post-Reformation Lutheranism*, p. 189.

¹³¹ This optimism regarding the potential religious use of imagination set the Lutheran tradition apart from the Reformed which remained utterly hostile to the use of images for worship. According to Zapalac, ‘images presented no threat to the Lutheran heart because it understood and accepted its limitations, and accepted the concept that the gap between the creator and his creation was unbridgeable except by the action of the creator himself’ (Kristin Eldyss Sorensen Zapalac, *In his image and likeness: political iconography and religious change in Regensburg, 1500-1600* (Ithaca, NY: Cornell University Press, 1990), p. 22).

¹³² *The Tetrapolitan Confession* (1530), chapter III, ‘Of justification and faith,’ CCH, p. 58.

¹³³ *The Second Helvetic Confession* (1566), chapter IX, ‘Of free will, and thus of human powers,’ CCH, p. 238.

The medium for the restored spiritual sight was Scripture, God's complete revelation of Himself, of right living and acceptable worship – it was, as the *French Confession* called it, 'the rule of all truth, containing all that is necessary for the service of God and for our salvation.'¹³⁴ Scripture was supreme, sufficient, and perspicuous. Since God was a perfect and clear communicator who intended in His Word to make Himself known, there was no need either for hermeneutical tools, such as allegory, or authorised expert analysis. Though Scriptural revelation was perfect, the natural man could not understand or implement its teachings without the inner illumination of the Holy Spirit. Though the Word itself, Calvin said, 'ought to be amply sufficient to produce faith,' the corruption of the natural mind meant that 'without the illumination of the Spirit the word has no effect.'¹³⁵ It was necessary to receive both God's Word and Spirit to see spiritual truth: this was the case even for the patriarchs living after the Fall and before the committing of God's Word to writing.¹³⁶ The Spirit-illuminated Scripture banished the darkness of ignorance, vanity and evil. By it, blind eyes were given clear sight: for this reason Calvin talked of the 'Spectacles of Scripture.'¹³⁷ Protestants believed that Scripture set man's mind right about all on which it touched, not just the way of salvation. Therefore, the Bible gave the Christian the right theological understanding of the natural world. It was by virtue of Scripture's exegesis of nature that natural theology was a redeemed and useful exercise, appropriate for a Christian's study.

'Post-Scriptural' natural theology

A true natural theology had to be both 'post-fideal' and 'post-Scriptural'. Its objective truth depended on Scripture; its subjective effect depended on saving grace. Just as it was by the illumination of the Spirit that the Book of God's Word was rightly understood, so too regarding the theology of nature both the Bible and the Spirit were required to read the Book of God's Works aright. Natural theology could only be done by the Christian. Calvin expounded the verse, 'through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear' (Heb 11:3) to mean that 'the invisible Godhead is indeed represented by such displays...but we have no eyes to perceive it until they are enlightened through faith by internal revelation from God.'¹³⁸ The method to achieve a true natural theology was to *begin with Scripture* and from that basis approach nature scripturally 'bespectacled'. The supreme explanation of this necessity is surely Calvin's:

¹³⁴ *The French Confession of Faith* (1559), article V, CCH, p. 145.

¹³⁵ III.ii.33, CAL, p. 377.

¹³⁶ See I.vi.1, CAL, p. 27.

¹³⁷ 'For as...those whose sight is defective...when aided by glasses, begin to read distinctly, so Scripture, gathering together the impressions of Deity, which, till then, lay confused in our minds, dissipates the darkness, and shows us the true God clearly.' I.vi.1, CAL, p. 26.

¹³⁸ I.v.14, CAL, p. 25.

God, foreseeing the inefficiency of his image imprinted on the fair form of the universe, has given the assistance of his Word to all whom he has ever been pleased to instruct effectually, [so] we, too, must pursue this straight path, if we aspire in earnest to a genuine contemplation of God;—*we must go, I say, to the Word, where the character of God, drawn from his works is described accurately* and to the life; these works being estimated, not by our depraved judgment, but by the standard of eternal truth.¹³⁹

God's *word* was what made true and worthwhile natural theology possible for the elect. Scripture explained what could be known from creation about God, and how. Similarly, in Lutheran doctrine, Gospel *precedes* Law. Throughout the sixteenth and seventeenth centuries, Lutheran theologians taught that the Gospel – the revelation of Christ through Scripture – was the necessary pedagogical precondition for understanding the natural revelation. The Lutheran scholars Carl-Heinz Ratschow and Robert Preus rightly maintain that natural revelation had this *sola scriptura* quality throughout the age of Lutheran orthodoxy.¹⁴⁰ It is a mistake to argue that the necessity of faith and Scripture to set right the Christian's ability to do natural theology was unique to Calvinists.¹⁴¹ Protestants of both hues insisted that the Book of God's Word expounded the Book of God's Works. Whenever a theological lesson is applied from the creation, it is backed up with a plethora of biblical precedents. Natural theology was ever legitimised, anticipated and interpreted by Scriptural authority. We can see the pattern of 'post-Scriptural natural theology' at work in Calvin's treatment of Psalm 145. 'Every perfection' contained therein 'may be contemplated in creation' so that 'such as we feel him to be when experience is our guide, such he declares himself to be by his word.'¹⁴² The authority and reliability of contemplation of the natural world and the testimony of experience is derived from its anticipation in the Bible.

A post-Scriptural pattern of natural theology began even with the most basic and foundational aspects of natural theology; it was remarkably common for Protestants to derive the proofs of the existence of God in nature from God's revealed word. Johann Gerhard (1582-1637) in his *Loci theologici* (1610-22), for instance, established the existence of God not by autonomous formal proofs but on the basis of Scripture which 'supplies more numerous and more certain proofs for

¹³⁹ I.vi.3, *CAL*, p. 28. My emphasis.

¹⁴⁰ Carl-Heinz Ratschow describes the doctrine of natural revelation in early modern Lutheran theology: 'When one approaches the question of how to know God from the way in which he rules the world, then certainly the Gospel precedes the Law. Only he who appreciates the Gospel can have some insight into this Law' (Carl-Heinz Ratschow, 'Revelation,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 2051-53). Preus agrees that natural knowledge of God was, in orthodox Lutheran theology, established exclusively 'on the basis of statements from Scripture' (Preus, *Theology of post-Reformation Lutheranism*, p. 21).

¹⁴¹ Kusakawa argues that Calvin's conception of faith and Scripture 'reclaiming' natural knowledge so that it could be a reliable source for knowledge of God differed from Melancthon's view that natural reason could rightly read the natural revelation ((Kusakawa, *Transformation of natural philosophy*, p. 205).

¹⁴² I.x.2, *CAL*, p. 47.

God's existence.¹⁴³ Jacob Heerbrand (1521-1600) and Nicolaus Selnecker demonstrated how the Scriptures directed men to the creation as prime evidence of God's existence.¹⁴⁴

But post-Scriptural natural theology extended far beyond God's mere existence. By a Scriptural natural theology the Christian could know God as Creator, Judge and Father. This corresponded to the first half of the Reformed system of the *duplex cognitio Dei*. Scripture was the only way not only to knowledge of God as Redeemer (the second half of the *duplex cognitio*), but also to knowledge of God as Creator, Judge and Father (the first half).¹⁴⁵ In fact, in some ways it is impossible to delineate between biblical exegesis and post-scriptural natural theology. Calvin, for instance, wrote that 'the invisible God, whose wisdom, power, and justice, are incomprehensible, is set before us in the *history of Moses as in a mirror*, in which his living image is reflected.'¹⁴⁶ The actual Mosaic *historia creatoris* cannot be separated from the way in which God's works functioned as the visible mirror of the invisible divine attributes. Many of these attributes could be known by a Scripturally-guided investigation of nature. Through the spectacles of Scripture the Christian knew, for instance, that the existence of the created world evidenced the Creator's power (Heb 11:3), that the firmament demonstrated His glory (Ps 19:1),¹⁴⁷ that the order of creation and the movements of the heavenly bodies revealed His wisdom (Gen 1; Ps 19:1),¹⁴⁸ its beauty reflected His beneficence, its disorder and pain His wrath (Rom 8), its perpetual movement His sustaining, its vastness and tumultuousness His power, its chain of causes His law, its subjection to man his dignity in the image of God, and its provision of the necessities of life His love. In sum, all the attributes of God as Creator could, with spiritual sight restored by the Holy Spirit illuminating Scripture, be seen in creation. Rightly understood, therefore, the Book of God's Works was in full accord with the Book of God's Word. Calvin noted that 'in Scripture the Lord represents himself *in the same character* in which we have already seen that he is delineated in his works,' so that 'the perfections thus enumerated [in Scripture] are just those which we saw shining in the heavens, and on the earth – compassion, goodness, mercy, justice, judgment, and truth.'¹⁴⁹ Through Scripture, God's providence – His effected will in natural and human history and His sustaining His creation by natural law –

¹⁴³ Cited in Preus, *Theology of post-Reformation Lutheranism*, p. 37.

¹⁴⁴ See *ibid.*, pp. 34-39.

¹⁴⁵ Calvin dedicated a chapter of the first book of his *Institutes* to 'the need of Scripture, as a guide and teacher, in coming to God as a *Creator*.' I.vi, *CAL*, p. 26 ff. My emphasis.

¹⁴⁶ I.xiv.1, *CAL*, p. 91.

¹⁴⁷ E.g. I.vi.4, *CAL*, p. 28. It is worth noting, as a further example of the 'post-Scriptural' natural theology that I am saying marked the Protestant approach that Calvin says that while Psalm 19 begins with 'the heavens declare the glory of God,' he notes that it immediately turns to talk about the Word of the Lord. Calvin used this to argue that natural revelation was never divorced from verbal revelation in Scripture.

¹⁴⁸ I.xiv.21, *CAL*, p. 102.

¹⁴⁹ I.x.1-2, *CAL*, p. 47. My emphasis. There is no problem with Calvin's use of the word 'already': natural theology must, in view of man's depravity, be post-Scriptural; but, as Calvin said, in 'point of order,' that is, in terms of chronology, those attributes of God *qua* Creator were 'already' written in the Book of Nature before He committed them to writing.

could also be known.¹⁵⁰ Discerning God's providence in nature – in the context of faith – was, Kusakawa has contended, a peculiarly Lutheran activity. It was on the basis of the Lutheran conviction (not shared in Zwinglian theology) that 'spirituality lay in material things,' that for theologians such as Melancthon, 'nature was a theatre in which God's Providence unfolded.'¹⁵¹

Knowledge of God as Judge encompassed knowledge of His truth, righteousness, purity, and wrathfulness at sin.¹⁵² Though the world was created sinless (therefore without occasion for divine judgement) God's office as Judge was, in *potentiality* at least, part of the first creation, as evinced by the presence of the Tree of Knowledge with its attendant command and warning. Informed by Scripture's anticipation of celestial and terrestrial portents, evidence of the natural world pointed toward the future day of judgment wherein the creation would be destroyed and recreated.¹⁵³

Knowledge of God as Father was knowledge of His moral and relational qualities – beneficence, goodness, liberality, love, and interest in the affairs of men. It was as Father that God's character in creation was most obscured due to the effects of the Fall's curse on the natural world. Calvin explained that 'although God is still pleased in many ways to manifest his paternal favour towards us, we cannot, from a mere survey of the world, infer that he is a Father.'¹⁵⁴ There was too much suffering and chaos in the physical world to discern God's paternal love without knowledge of the Fall, God's forbearance despite it, and His mercy since it. To know God as Father, knowledge of Christ's passion was needed. 'We could never come to recognise the Father's favour and grace' explained Luther, 'were it not for the Lord Christ.' 'Apart from him,' Luther went on, 'we can see nothing but an angry and terrible Judge.'¹⁵⁵ Though there were still grounds in nature for knowing God as Father (His providence and provision), the testimony of nature was not sufficient to know this aspect of God's character without Christ 'holding forth

¹⁵⁰ Martin Chemnitz's *Loci theologici* (1591) argued that God's providence, displayed in the natural realm, were only accessible to the Christian possessing the Scriptural perspective of God's dealing with humanity. See Preus, *Theology of post-Reformation Lutheranism*, p. 206.

¹⁵¹ Kusakawa, *Transformation of natural philosophy*, p. 202.

¹⁵² Calvin's list of in what the first half of the *duplex cognitio Dei* consisted is given at I.ii.1 (*CAL*, p. 7): 'we must be persuaded not only that as he once formed the world, so he sustains it by his boundless power, governs it by his wisdom, preserves it by his goodness, in particular, rules the human race with justice and judgment, bears with them in mercy, shields them by his protection; but also that not a particle of light, or wisdom, or justice, or power, or rectitude, or genuine truth, will anywhere be found, which does not flow from him, and of which he is not the cause; in this way we must learn to expect and ask all things from him, and thankfully ascribe to him whatever we receive.'

¹⁵³ Seventeenth-century Puritan millenarianism could perhaps be seen as post-Scriptural natural theology: since the Bible said that 'the last days' would be preceded by signs in the heavens and earth, the examining of nature for signs of coming judgement was a legitimate application of examining God's visible creation in the light of His revelation.

¹⁵⁴ II.vi.1, *CAL*, p. 212.

¹⁵⁵ Martin Luther, *Large Catechism* (1529), BoC, p. 419.

God to us as a Father' in his death on the cross.¹⁵⁶ The *notitia Dei naturalis* was a notion only of God's wrath. God had decided, according to Luther, to hide His goodness and mercy in creation, so that He could make them known to those only whom He willed.¹⁵⁷

Scriptural natural theology also included knowledge of the dispensation of Law. The intrinsic witness of man's conscience, once corrupted by the Fall, was regenerated at conversion and re-educated by God's Word and indwelling Spirit. The verbal revelation of natural law in the Decalogue 'by its sure attestations,' said Calvin, 'removes the obscurity of the law of nature.'¹⁵⁸ God had, since Israel's infancy, supplied His chosen people with a verbal restatement of the originally innate natural knowledge of moral and religious law. With the Word and Spirit, not only was knowledge of right and wrong restored, but the Christian could understand fully the doctrine of natural law, seeing its deeper spiritual application in Christ's preaching and the hopelessness (indeed, impossibility) of good works as a means of satisfying for original and actual sin. The Christian could also, through Scripture, see the doctrine of the Fall in nature and in mankind. Evidences of the Fall in the world, soul, and human history, were observable, physical, natural phenomena (such as earthquakes, drought, and death) capable of being rightly interpreted as the manifestation of God's curse due to sin. Yet the curse of the Fall and utter depravity of man was something that philosophy had never penetrated because, without the revealed history of the original creation and man's fall from grace, the philosophers had conflated the original condition of mankind with what they saw around them.¹⁵⁹ The heathen extrapolated the current state of the world to all ages past and therefrom derived either an optimistic view of man's nature (God made man like this, so this must be 'good' and capable of whatever God would have man do) or an impious view of God (either God must be impotent in creation or indifferent to human foibles). The doctrine of original sin was necessary to correct these heresies, but it could be learned, as the *Formula of Concord* maintained, only from the Bible:

What kind of accident is original sin? No philosopher, no papist, no sophist, no human reason, be it ever so keen, can give the right answer. Holy Scripture alone can lead to a right understanding and give a correct definition.¹⁶⁰

While Scripture illuminated the Book of Nature, it only illuminated what that book contained. The natural theology of the Christian, though enlightened by the Holy Spirit and Scripture, was limited in extent to only half of the *duplex cognitio Dei*. The phrase itself was Calvin's, introduced for the first time in his last edition of the *Institutio Christianae religionis* in 1559:

¹⁵⁶ II.vi.1, *CAL*, p. 212. Of course the Jews could know God as their Father without knowing Christ. But Calvin explains that they believed in the Mediator (i.e. the priesthood, Davidic kings, sacrifices, and promised Messiah) that was a type of Christ ahead of the incarnation.

¹⁵⁷ For Luther, 'the goodness, mercy, and power of God cannot be grasped by speculation but must be understood on the basis of experience.' Luther, *Genesis*, vol. VII, p. 175.

¹⁵⁸ II.vii.1, *CAL*, p. 234.

¹⁵⁹ See I.xv.7, *CAL*, p. 110.

¹⁶⁰ *Formula of Concord* (1577), *BoC*, p. 519.

Since, then, the Lord first appears, as well in the creation of the world as in the general doctrine of Scripture, simply as a Creator, and afterwards as a Redeemer in Christ, a twofold knowledge of him hence arises.¹⁶¹

From the Scriptural contemplation of nature, man could truly know God as Creator; but natural theology could never lead to knowledge of God as Redeemer.¹⁶² A twofold division of natural and the exclusively Scriptural knowledge of God was paradigmatic in sixteenth-century Reformed theology.¹⁶³ As we have seen, even knowledge of God as Creator required Scriptural attestation since man's lapsed faculties were incapable of discerning the truth of God in nature. The second half of the *duplex cognitio Dei*, however – that God was to be known as the Redeemer – was never part of the natural revelation. God's saving will and power was only necessitated in the world inhabited by sin and its curse that gave rise to the occasion for God's act of redemption and with it – in Christ – the revelation of His mercy, grace, and sovereign predestination. The difference between God's self-revelation through the Book of His Works and the Book of His Word was not only quantitative as in Catholicism (the Scriptures being a fuller expression of his creating and sustaining activity and attributes), but qualitative. While Scripture and nature revealed God as Creator; only Christ revealed Him as Redeemer. It was only the 'simple and primitive knowledge,' of God as beneficent Creator, explained Calvin, 'to which the mere course of nature would have conducted us, had Adam stood upright,'¹⁶⁴ and it was only knowledge of God in this office that pertained to post-Scriptural natural theology. The content of natural revelation had not changed, only man's ability to read it. While Protestants restricted the content of natural theology to knowledge only of God as Creator, Judge and (in the light of original sin and Calvary) Father, denying that nature could reveal anything pertaining to God's salvation, there was no such systematic block in Catholic theology. As we have seen, it was not uncommon for Catholics to claim that nature contained signs of the Trinity and principles that pointed to the Incarnation and even Atonement, such that even the pagan philosophers had anticipated them. But Protestants taught that nature contained no witness whatsoever to Christ's incarnation, redemption and mediation. The motive, manner and means of redemption were all supernatural, independent of the machinations of the world and above man's comprehension.

¹⁶¹ I.ii.1, *CAL*, p. 7. My emphasis.

¹⁶² Richard Müller summarises Amandus Polanus von Polansdorf's posthumous *Syntagma theologiae christianae* (1612) as explaining that 'We know God from the world as the author of providence, as creator, and as the giver of earthly blessings. But only in Christ do we recognize him as Father and as the God who wills redemption from sin, the devil, and the power of eternal death' (Müller, 'Duplex cognitio dei', p. 58).

¹⁶³ The *duplex cognitio Dei* was used to divide natural revelation from Christ's revelation in the works of Lambert Daneau (1535-1590), Matthieu Virel (dates unknown, published *Dialogue de la religion chrestienne* in 1582), Gulielmus Bucanus (d. 1603), William Ames (1576-1633), Pierre du Moulin (1568-1658), and was used by Robertus Massonius in his 1576 edition of Peter Martyr Vermigli's (1499-1562) *Loci communes* (for a discussion, see Müller, 'Duplex cognitio dei').

¹⁶⁴ I.ii.1, *CAL*, p. 7.

We have seen that, for Protestants, the Book of God's Word expounded the Book of God's Works. The reverse, however, was not true. Protestants believed, in contradistinction to medieval Catholic tradition, that the natural world did not expound and explain revealed truths of Scripture. While it was customary in Catholicism to allegorise and analogise nature in such a way that it could be seen to manifest in a mystical manner certain aspects of revealed theology, Protestant hostility to allegorical hermeneutic extended from the Bible to the Book of Nature.¹⁶⁵ In the scholastic Catholic understanding, as we have seen, the whole basis of natural theology was the analogical relation of God to his world. Words and things acted as mutually referential signs. But for Protestants, allegory was not an admissible hermeneutic: 'it is evident,' wrote Melancthon, 'that allegory does not prove or establish anything.'¹⁶⁶ The doctrines of the perspicuity and sufficiency of Scripture cut directly against any requirement or need to look for obscured theological mysteries both within and without the plain reading of the Bible. Advanced exegesis would still be useful for interpreting God's revealed will, but the tools of exegesis were linguistic, historical, and above all, Scriptural – nothing was deemed necessary nor admissible from outside. Protestant exegetical science, as Peter Harrison has found, 'could find no place for the symbolic interpretation of the book of nature.'¹⁶⁷ Nature, like Scripture, spoke plainly: there was a 'new, non-symbolic conception of the nature of things' that echoed the literalism of biblical exegesis. The hermeneutic technique for nature excluded analogy and allegory: without these tools of interpretation the extent of Protestants' natural theology, even when enlightened by spiritual and Scriptural guidance, was strictly curtailed in methodology compared to that of Catholics'.

With all these things in mind, the notion that natural theology must be defined in *contrast* to God's verbal revelation (that it is something independent of, or antecedent to Scripture) stands in desperate need of revision.¹⁶⁸ While self-conscious independence from Scriptural authority characterises the *Theologia naturalis* (first published in Lyon, 1484) of Raymond Sebond and the *Natural Theology* (1802) of William Paley,¹⁶⁹ we are not at liberty to take a shortcut between the pre- or un-scriptural natural theologies from before the Reformation and after the Enlightenment. Sixteenth-century Protestantism held the absolute necessity, given man's total

¹⁶⁵ Peter Harrison describes Catholic allegory as 'a process through which the reader was drawn away from naked words to the infinitely more eloquent things of nature to which those words referred' – that 'would terminate in speculations about the manifold meanings of creatures' (Harrison, *Rise of natural science*, p. 3).

¹⁶⁶ *Apology of the Augsburg Confession* (1531), BoC, p. 256.

¹⁶⁷ Harrison, *Rise of natural science*, p. 92.

¹⁶⁸ Regin Prenter, for instance, in the *Historical Dictionary of Lutheranism* believes that philosophical, or natural, theology 'does not...take its starting point within the biblical revelation,' but in fact 'deliberately takes its stand outside the world of biblical revelation.' Regin Prenter, 'Philosophical theology,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 1890-91.

¹⁶⁹ Paley deduced the existence and attributes of God from the observation of nature and made no mention of Scriptural precedent in its arguments: strikingly the footnotes within it to external sources were to the latest published scientific theories. Only in its conclusion did it mention revelation, useful to 'the disclosure of many particulars.' William Paley, *Natural theology: or, evidences of the existence and attributes of the Deity, collected from the appearances of nature*, 2nd edn (London: R. Faulder, 1802), p. 579.

postlapsarian depravity, of Scripture to guide the theological investigation of nature. Natural theology in late Renaissance orthodox Protestantism, was a highly Scriptural affair.

iii. The purpose of natural theology

We have now explored the Protestant position on natural theology in regard to the three states of man – innocent, fallen, and redeemed. While, as discussed above, man in the first state could truly know God the Creator through nature, that was an historical dispensation. What was the purpose, therefore, of the two remaining natural theologies of the fallen non-Christian and that of the Christian? That both the Christian and the non-Christian attempted to do natural theology was obvious: as Calvin observed, ‘this method of investigating the divine perfections, by tracing the lineaments of his countenance as showed forth in the firmament and on the earth, is common both to those within and to those without the pale of the Church.’¹⁷⁰

We begin, then, with the natural theology of the non-Christian. In examining what uses this doctrine was put to, we must begin in fact with a series of statements about what was *not* its purpose. First, natural theology was not about convincing atheists of the existence of God. Three reasons can be adduced. The first is not a confessional one but a contextual one: there were no theoretical atheists. We have already discussed the lack of evidence for any significant theoretical atheism in the period; some scholars such as Leif Dixon (researching ‘atheomastical’ texts in sixteenth- and seventeenth-century England) have advocated refocusing the locus of debate from a fruitless search to identify early modern speculative atheists to consider instead what ‘anti-atheism’ reveals about contemporary perceptions.¹⁷¹ The spectre of the atheist – the target of much vitriol in print in all the confessions – stood for the misbeliever rather than disbeliever; the ‘practical,’ rather than the speculative atheist. Calvin describes the atheist thus:

The Psalmist introduces them as distinctly denying that there is a God, because although *they do not disown his essence*, they rob him of his justice and providence, and represent him as sitting idly in heaven...every man who indulges in security, after extinguishing all fear of divine judgment, *virtually* denies that there is a God.¹⁷²

Arguments of Protestant natural theology were not directed at convincing the theoretical atheist because such a figure ostensibly did not exist. The English Puritan Henry Smith in the opening pages of his *Gods Arrow Against Atheists* (1593) even explains that atheism (as philosophical commitment to unbelief) does not exist – citing the ubiquity of religious belief all over the world, thereafter leaving the figure of the atheist entirely behind and entering a stringent apologetic for

¹⁷⁰ I.v.6, *CAL*, p. 19.

¹⁷¹ Leif Dixon, ‘William Perkins, ‘Atheisme,’ and the crises of England’s long Reformation’, *Journal of British Studies* (Forthcoming) (2012), pp. TBC

¹⁷² I.iv.2, *CAL*, p. 13.

the moderate Calvinism of the Church of England.¹⁷³ For Smith, atheism was simply wrong religion – of an ilk with Islam, Judaism, and Catholicism. It was not atheist for denying the *existence* of a god but for doubting the character of the revealed God and the authority of His Word. When William Perkins turned his attention to atheism, he also did not engage with philosophical atheist theories, but supplied polemical arguments denouncing the views of his Catholic opponents that, he argued, tended ultimately to unbelief.¹⁷⁴ The same lack of engagement with theoretical atheism can be observed in Lutheranism.¹⁷⁵

Not only in the context of the late sixteenth century did the theoretical atheist *not* exist, but according to many Protestants (especially emphasized by Calvin), the theoretical atheist *could* not exist. The innate knowledge of God, the *sensus divinitatis*, though obscured and distorted, remained a constant testimony to God's existence in the hearts of all men. The *Formula of Concord* maintained that, even in his depravity, 'man's reason or intellect still has a dim spark of the knowledge that there is a God.'¹⁷⁶ Those who tried to maintain that there was no God, said Calvin, 'whether they will or not...occasionally feel the truth which they are desirous not to know.'¹⁷⁷ Natural knowledge of God's existence was in fact *inescapable*: those who denied it were guilty of deliberately suppressing the knowledge they had by nature. As Calvin put it, they 'stifle the light of nature, and intentionally stupefy themselves.'¹⁷⁸ The Lutherans, on the basis of the *notitia Dei*, agreed that there could not actually exist a true atheist.¹⁷⁹ Finally, the Fall meant that postlapsarian man was so intellectually blind and morally depraved that he simply *could not* perceive the truth about God unless enlightened by the Spirit through Scripture. They were 'blinder than moles' regarding knowledge of divine things and this darkness could not be dispelled by mere argumentation.¹⁸⁰ The vehicle of conversion could never be the exercise of his natural faculties, nor the reading of the Book of Nature. We recall that nature's lamps were 'altogether insufficient of themselves to lead us into the right path.'¹⁸¹ Any apologetic, evangelistic drive had to be effected by God's grace through the preaching of His Word rather than His Works. As we have seen, this led to some arguing proofs of God's existence from the Bible, to engage with atheism not by meeting it on its own terms of natural reason, but by demonstrating its falsity from the perspective of biblical faith. In contrast to Catholic scholastic

¹⁷³ This point taken from Dixon, 'Perkins and "Atheisme"'.
¹⁷⁴ William Perkins, *The workes of that famous and voorthy minister of Christ in the Vniuersitie of Cambridge, Mr. William Perkins*, vol. I, 3 vols. (London, 1608), 480; cited in Dixon, 'Perkins and "Atheisme"'.
¹⁷⁵ Preus claims that in early modern Lutheranism the doctrine of creation was never used to reply to 'questions which man poses about the origin of things' as the questions were never genuinely raised. Preus, *Theology of post-Reformation Lutheranism*, p. 175.
¹⁷⁶ *The Formula of Concord* (1577), part II, article II, 'Free will or human powers,' BoC, p. 521.
¹⁷⁷ I.iii.2, CAL, p. 10.
¹⁷⁸ I.iv.2, CAL, p. 13.
¹⁷⁹ Preus observes that in historic Lutheranism, 'no man is a speculative atheist by nature...The *habitus*, the innate religiosity, has not been eradicated but stifled.' Preus, *Theology of post-Reformation Lutheranism*, p. 26.
¹⁸⁰ II.ii.18, CAL, p. 169.
¹⁸¹ I.v.14, CAL, p. 24.

tracts, the question of whether God exists rarely entered Protestant systematic theologies.¹⁸² For Protestants, there was no point (and little to no effort spent) in trying to use nature and reason to philosophically prove the existence of God to atheists.

The three principles that the atheist cannot truly exist, that saving faith is built purely upon the Scriptures and not on reason, and that man's fallen mind in any case was so perverse that it could not seek after nor believe God without its being supernaturally regenerated mean that sixteenth-century Protestant preachers made no attempt to engage atheistic arguments with proofs drawn from nature. Protestant natural theology was not about proving the existence of God. These contextual and confessional reasons must therefore occasion a serious re-evaluation of some scholars' treatment of early modern natural theology.¹⁸³ When the context changed with the advent of mechanical natural philosophy, Deism and the Enlightenment, such that there existed a theoretical atheism in print, then there would have been occasion for natural proofs of the existence of God. Moreover, when Protestantism came under the influence of a more optimistic view of man's natural state in the shape of Arminianism, a theological basis for natural theology to convert atheists was established. The idea that the point of natural theology was to convince atheists, however, is anachronistic regarding sixteenth-century Protestantism.

In addition to not proving God to atheists, the point of natural theology was also *not* to prepare for faith or grace. Catholic theology, as we have seen, held that by natural theology natural man could supply himself (i) the epistemological and pedagogical foundation for the 'higher mysteries' of the Christian faith, (ii) repentance, which was the moral precondition for grace, and (iii) good works and true worship by which they could begin to effect their own justification. All three propaedeutic roles that natural theology was thought to perform in Catholicism were, however, completely denied in sixteenth-century Protestantism.

For Protestants, natural theology could not be *intellectually* propaedeutic. All principles of true theology – including its 'foundational principles' such as even the existence of God were, as we have seen, thought to be founded only in Scripture. An extra-scriptural intellectual preparation was illegitimate. Moreover it was ineffective: the bankruptcy of man's fallen mind, especially when exercised in trying to cognise matters concerning God and religion, meant that man's reason could effect nothing – not even preparatory steps – toward knowledge of God. Natural

¹⁸² For example, William Perkins, *A Golden Chaine, or the Description of Theologie; Containing the order of the causes of Salvation and Damnation, according to Gods word* (London, 1591) does not even consider the question of the existence of God but begins with the doctrine of Scripture, while Perkins in his *Exposition of the Symbole of the Creede of the Apostles* (1595; in William Perkins, *The workes of that famous and vvorthy minister of Christ in the Vniuersitie of Cambridge, Mr. William Perkins*, vol. II, 3 vols. (London, 1612), vol. II) summarily dismisses the question of whether God exists, turning immediately to what God is. See Dixon, 'Perkins and "Atheisme"'.

¹⁸³ E.g. Regin Prenter describes natural theology as being the proof of God from the standpoint of speculative atheism (in 'Philosophical theology,' Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 1890-91).

reason was not even desirous of the truth, but antithetical to it. Reason, said Luther, 'being blind, deaf, impious, and sacrilegious in all the words *and works* of God,' was *offended* by the truth about God.¹⁸⁴ There was no place for natural theology in establishing the groundwork for faith. As Richard Müller reports, the Calvinist apologist Pierre Viret (1511-1571) 'set aside the philosophical examination of the divine attributes' as he thought 'such speculation has no soteriological value.'¹⁸⁵ The strength of natural reason made no difference. Instead of the philosophers' approaching the truth of revealed religion by their own investigations, as Calvin said, 'not one of them even made the least approach to that assurance of the divine favour...To the great truths, what God is in himself, and what he is in relation to us, human reason makes not the least approach.'¹⁸⁶ The late sixteenth-century professor of natural philosophy at the university of Altdorf, Nicholas Taurellus (1547-1606), well familiar with the ancients' metaphysics, concluded that 'the ancient philosophers did not know *anything* certain about God,' and chronically misunderstood the attributes of the Creator.¹⁸⁷ There was such a fundamental difference between the god of the philosophers and the God of Christian faith that the former was a stumbling-block rather than an aid to true knowledge of God. Luther argued that reason's attempt at knowledge of God would be in vain since no mind could ever link the metaphysical properties of an awesome Creator to the humility and suffering of the cross. While the wisdom of the world sought to find God by elevating the mind to the glories of divine and transcendent essence and by contemplating His glorious and miraculous works and acts, the only way to know Him truly was in the suffering and humiliation of Calvary.¹⁸⁸ As far as true knowledge of God was concerned, natural theology created more blocks than it supposedly overcame.

The Protestant understanding of what 'faith' was also prevented natural theology performing any propaedeutic role. Faith was defined in opposition to that which was seen. Faith, said Luther, taking his lead from Hebrews 11:1, 'has to do with things not seen' – the visible, demonstrable and experiential could not produce faith, so, 'in order that there may be room for faith, it is necessary that everything which is believed should be hidden.'¹⁸⁹ Anything that could be examined with natural eyes could not form the basis of saving faith. Protestants, in rejecting the notion that faith was simply a species of knowledge whose object was God, argued that it could not be founded on any scientific basis. It was an *objective* truth, unknowable in any measure except through the Scripture, and a *subjective* truth, unknowable except with the Spirit.

¹⁸⁴ Martin Luther, *The bondage of the will*, trans. Henry Cole, Henry Atherton and Edward Vaughan (Michigan: Eerdmans, 1931), section LXXXII. My emphasis.

¹⁸⁵ Müller, 'Duplex cognitio dei', p. 55.

¹⁸⁶ II.ii.18, *CAL*, p. 169.

¹⁸⁷ Nicholas Taurellus, *Synopsis Aristotelis metaphysices* (Hanau 1596), paragraph 82; translated in Blank, 'Existential dependence', p. 8.

¹⁸⁸ 'God can be found only in suffering and the cross.' Martin Luther, *Career of the Reformer*, Luther's works, ed. Jaroslav Pelikan (St Louis, Philadelphia: Concordia, 1957), vol. XXXI, p. 52.

¹⁸⁹ *Ibid.*, vol. XXXIII, p. 62.

Faith was a gift of grace, coming exclusively by the preached Word and the power of the Holy Spirit. It had nothing in common with species of knowledge accumulated by diligent enquiry and the power of reason. Faith gave knowledge of God, self, and the world – but its basis was, as Calvin put it, ‘rather...a belief of the divine veracity than taught by any demonstration of reason.’¹⁹⁰ Faith was not additional to natural knowledge, but opposite to it. William Perkins explained that faith could not be founded upon sensory deduction and experience, but only on the Word of God: ‘In natural things experience is first, and then faith comes afterward,’ wrote Perkins, ‘But God must be trusted, though that which he saith be against reason and experience.’ No *natural* basis in the world nor the faculties of man could effect this Word-centred conversion because ‘Gods word is flat contrarie to the nature and disposition of man.’¹⁹¹ There was then *no* intellectual preparation that could be conducted in the light of nature that would give any foundations to the Christian faith.

The second propaedeutic role – that man was able to cognise from nature his sin and God’s righteousness and, therefore, was able to begin the process of *repentance* – was also rejected in sixteenth-century Protestantism on the grounds that man was unable by nature to repent. Repentance implied a proper *knowledge* of what was good and what was evil, *fear* of due punishment, *sorrow* for evil done, *hatred* of what was evil, *desire* to turn from evil to good, and the *reforming* of life. Protestants believed that natural man was incapable of every step. He could neither, as we have seen, know his good, perceive original sin, nor confess his own actual sin.¹⁹² Knox said that ‘by nature we are so dead, blind, and perverse’ we cannot even ‘feel when we are pricked [by conscience].’¹⁹³ By nature man did not detect the extent of God’s wrath, but minimized, ignored, or dismissed it. There was, as Melancthon put it in his *Loci communes theologici* (1543), ‘a kind of negligence and rejection of God *and his anger*.’¹⁹⁴ Man could not even *want*, much less effect, repentance.¹⁹⁵ Instead, repentance was part of God’s gift of saving faith. This was an essential part of the Protestant monergistic doctrine of justification. Calvin rebuked the Schoolmen’s doctrine of cooperating grace because ‘it insinuates that man, by his own nature, desires good in some degree,’ whereas he was in actuality completely bent on evil.¹⁹⁶ Repentance was, as the *Second Helvetic Confession* described it, ‘a sheer gift of God and not a

¹⁹⁰ III.ii.14, *CAL*, p. 365.

¹⁹¹ William Perkins, *How to live, and that well* (1601), in Perkins, *Workes*, vol. I, 474, 481, quoted in Dixon, ‘Perkins and “Atheisme”’.

¹⁹² ‘So blinded with self-love,’ said Calvin, man was ‘unable to...humble and abase himself, and confess his misery.’ II.viii.1, *CAL*, p. 234.

¹⁹³ *The Scottish Confession of Faith* (1560), article XII, ‘Faith in the Holy Ghost,’ *CCH*, p. 171.

¹⁹⁴ Philip Melancthon, *Loci communes rerum theologicarum seu hypotyposes theologicae: tertia eorum actas* (1543-44), ‘De Peccato Originis.’ The Latin reads, ‘Plana et perspicua sententia est, quae affirmat in homine esse et in hac mortali vita manere quiddam negligens aut fugiens Deum et irascens ei.’ My translation and emphasis. Latin in Philipp Melancthon, *Opera quæ supersunt omnia*, Corpus reformatorum, ed. Carl Gottlieb Bretschneider and Heinrich Ernst Bindseil, vol. XXI, 28 vols. (1854), p. 672.

¹⁹⁵ Calvin explained that man ‘cannot of his own nature aim at good either in wish or actual pursuit.’ II.iv.1, *CAL*, p. 190.

¹⁹⁶ II.ii.6, *CAL*, p. 161.

work of our strength.’¹⁹⁷ In the Protestant estimation, repentance and regeneration were synonymous.¹⁹⁸ For the will to want and pursue righteousness, it needed to be ‘wholly transformed and renovated.’¹⁹⁹ Instead of being the precondition or preparation for faith, therefore, ‘repentance not only *always follows faith*, but is produced by it.’²⁰⁰ Contrition was effected by knowledge of God’s moral standards from Scripture and the conviction of conscience by the movement of the Holy Spirit. That which natural man was sometimes capable of – which resembled contrition – was merely an ‘initial fear,’ resulting from the condemnation of the conscience but which did not avail for the mortification of the flesh and the turning in obedience to God.²⁰¹ In his *Apology of the Augsburg Confession* (1531), Melanchthon responded to the claim that Catholicism also posited the necessity of faith before repentance:

When our opponents talk about faith and say that it precedes penitence, they do not mean justifying but the general faith which believes that God exists, that punishments hang over the wicked, etc. Beyond such “faith” we require everyone to believe that his sins are forgiven him...This faith follows on our terrors, overcoming them and restoring peace to the conscience.²⁰²

Melanchthon’s Catholic opponents thought that the fear of judgment experienced by non-Christians implied faith in the existence and wrath of God. But Melanchthon interestingly completely separates this ‘general faith’ – which we can describe as the faith of natural theology – from genuine faith. Similarly, the ‘initial fear’ of which Calvin talked, was completely excluded from the economy of repentance, conversion, and justification. There was a qualitative, not just a quantitative difference between the mere anguish, guilt and despair that some rare persons could come to by nature, and genuine repentance. In Lutheran doctrine, there were two species of conviction under the Law – one natural and one super-natural. The latter was awakened by the Spirit in the hearing of Scripture during conversion. It is only in this context that natural law was linked to repentance in Lutheran dogma. The former – natural knowledge of being under God’s curse – was emphatically not a penitent preparation for faith. While Werner Elert recognises that in the foundational texts of historic Lutheranism, an ‘anguish in conscience’ was thought to be felt by individuals ‘by nature,’ he is wrong to say that Lutheran dogmatics treated ‘this “natural” knowledge merely as the first step towards the knowledge of faith.’²⁰³ It was not even that. In Protestant theology, repentance was not a natural preparation for or precondition

¹⁹⁷ *The Second Helvetic Confession* (1566), chapter XIV, ‘Of repentance and the conversion of man,’ CCH, p. 251. This doctrine is found frequently throughout sixteenth-century Protestant theology. For instance, ‘God alone can give repentance and true sorrow for sins,’ (*The Tetrapolitan Confession* (1530), article XX, ‘Of confession,’ CCH, p. 79).

¹⁹⁸ See III.iii.9, CAL, p. 390.

¹⁹⁹ II.iii.6, CAL, p. 182.

²⁰⁰ III.iii.1, CAL, p. 386. My emphasis.

²⁰¹ III.iii.2, CAL, p. 387.

²⁰² *Apology of the Augsburg Confession* (1531), BoC, p. 190.

²⁰³ Elert, *Structure of Lutheranism*, p. 50.

of saving grace, but part of that grace – synonymous with regeneration and concurrent with conversion.

The third propaedeutic role in Catholicism was the principle that man could do *quod in se est* – discerning and obeying natural law and practising a sincere (though ignorant) natural religion – that constituted man’s cooperation with prevenient grace and the beginnings of justification. This was certainly what the early Protestants understood to be Catholic teaching. Luther’s *Smalcald Articles* described the ‘error and stupidity’ of the scholastic theologians who taught that ‘if man does what he can, God is certain to grant him his grace.’²⁰⁴ Melanchthon summarised his scholastic opponents as teaching ‘men to merit the forgiveness of sins by doing what is within them.’²⁰⁵ Protestants held it was simply impossible for natural man to perceive and obey the natural law, thereby accruing credit with God. The *Augsburg Confession* condemned as Pelagian heretics those who taught that ‘by the power of nature alone, we are able to love God above all things, and can also keep the commandments of God.’²⁰⁶ Protestants did believe that man, due to common grace, had some knowledge of the natural law that referred to human matters – the so-called second table of the law – so that he could live in political society.²⁰⁷ It was this temporal sphere, that concerning man’s natural life alone, in which the heathen could have an outward appearance of virtue. The Lutheran *Augsburg Confession* conceded only that ‘man possesses some measure of freedom of the will which enables him to live an outwardly honourable life and to make choices among the things that reason comprehends.’²⁰⁸ Melanchthon called this ‘carnal righteousness’ as it was limited to the outward performance of things pertaining to natural and societal living, rather than anything to do with religion. Even this, he added, was extremely rare.²⁰⁹ Despite Melanchthon’s high estimation of pagan virtue, it is far too strong to argue, as Elert has, that for Melanchthon, ‘philosophical morality...is identical with the divine Law’ merely employing ‘grounds based on reason’ to teach the divine will regarding virtue and vice. The mistake is more seriously perpetuated in Schrey’s account of Lutheran natural law doctrine when he misrepresents Melanchthon as interpreting ‘the religious and moral insights of paganism as part of the training toward Christ.’²¹⁰ In Reformed theology, even this civil virtue was merely the effect of God’s effecting an ‘internal restraint’ on the potentiality of evil within

²⁰⁴ *The Smalcald Articles* (1537), part III, article I, ‘Sin,’ BoC, p. 302.

²⁰⁵ *Apology of the Augsburg Confession* (1531), BoC, p. 108.

²⁰⁶ *The Augsburg Confession* (1530), article XVIII, ‘Freedom of the will,’ BoC, p. 40.

²⁰⁷ See, for instance, II.ii.13, CAL, p. 166. Calvin did insist, however, that ‘even here [the second table of the law] there is something defective’ (II.ii.24, CAL, p. 172).

²⁰⁸ *The Augsburg Confession* (1530), BoC, p. 39. This was reiterated in the ‘Solid declaration’ of the *Formula of Concord* in 1577: ‘To some extent reason and free will are able to lead an outwardly virtuous life’ (BoC, p. 526).

²⁰⁹ *Apology of the Augsburg Confession* (1531), in BoC, p. 225.

²¹⁰ Elert, *Structure of Lutheranism*, p. 52; Schrey, ‘Natural law,’ in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 1710-12.

the natural man by an act of common grace.²¹¹ Without that grace, a natural man 'left by God to what he is by nature,' wrote Farel and Calvin, 'is only able to live in ignorance and to be abandoned to all iniquity.'²¹² Man's postlapsarian blindness regarding spiritual matters was untouched by the common grace that afforded him some knowledge in the temporal sphere. The whole first table of the law (those commandments relating to worship of God) was therefore held by both Lutheran and Reformed theologians to be completely beyond natural comprehension.²¹³ Melanchthon argued that 'the real works of the first table,' such as faith, trust, reverent fear, 'the human heart cannot perform without the Holy Spirit' since 'the man who uses only his natural powers, "does not perceive the things of God."²¹⁴ Luther insisted that no one could keep a single one of the Ten Commandments, 'for they are beyond human power to fulfil.'²¹⁵ Any teaching that 'by the power of nature alone' man was able to 'keep the commandments of God in so far as the substance of the acts is concerned' was denounced as thinly-masked Pelagianism.²¹⁶ The justice of God's requiring something that man was unable to do was preserved by appeal to man's ability to do so in his original condition. In answer to the question, 'Is not God unjust in requiring of man in his Law what he cannot do?' the *Heidelberg Catechism* replied, 'No, for God so created man that he could do it...man by deliberate disobedience, has cheated himself and all his descendants out of these gifts.'²¹⁷ Natural man was utterly unable to satisfy any of the true requirements of divine-natural law. Like repentance, the ability to rightly understand and obey the law in any measure (though still not part of justification) was a gift of regeneration that was concurrent with the gift of true, saving Christian faith.²¹⁸

Not only was it impossible for man by nature to perceive and keep the natural law, but he could also not merit grace by the performance of 'good works.' In the first place, the Catholics were wrong to think that man's pre-fideal works could be *good* at all. It was a mainstay of Protestant doctrine (which the Catholics found particularly unpalatable) that *everything* preceding

²¹¹ This is the subject of II.ii.3 in *CAL*, pp. 179-180.

²¹² *The Geneva Confession* (1536), article 4, 'Natural man,' *CCH*, p. 121. The dependence on God's restraint was implied also in the Lutheran *Augsburg Confession* (1530): 'as soon as God withdraws his support, the will turns away from God to evil' (*BoC*, p. 40).

²¹³ Reason could not apprehend the first table of the law according to Melanchthon in the *Apology of the Augsburg Confession* (1531), *BoC*, p. 112. Concerning God, Melanchthon wrote that man can only 'talk about God and express its worship of him in outward works' (*BoC*, p. 225). Man's 'natural sense' knowledge of natural law, according to Calvin, 'certainly attains not to the principal heads in the First Table, such as, trust in God, the ascription to him of all praise in virtue and righteousness, the invocation of his name, and the true observance of his day of rest.' II.ii.24, *CAL*, p. 172.

²¹⁴ *Apology of the Augsburg Confession* (1531), *BoC*, pp. 225-26.

²¹⁵ Martin Luther, *The Large Catechism* (1529), *BoC*, p. 408.

²¹⁶ *The Augsburg Confession* (1530), and Melanchthon's *Apology* (1531); *BoC*, pp. 40 and 225.

²¹⁷ *The Heidelberg Catechism* (1563), question 9, *CCH*, p. 306.

²¹⁸ 'We cannot keep the law unless we have been reborn by faith in Christ' (Melanchthon in the *Apology of the Augsburg Confession* (1531), *BoC*, p. 144).

justification – all actions and thoughts of the natural man – ‘have the nature of sin.’²¹⁹ Without God’s imputation of Christ’s righteousness and the Spirit’s inner dwelling, none could please God in any measure.²²⁰ Every motion of the natural man’s mind and body ‘before he is reconciled to God by faith,’ said Calvin, ‘is cursed, and not only of no avail for justification, but merits certain damnation.’²²¹ Even the so-called virtues, ‘if they do not bear reference to God’ were, said Calvin, ‘mere abomination in heaven.’²²² The philosophical virtues, instead of being lauded, were damned as false and reprobate.²²³ As the *Augsburg Confession* made explicit, even the celebrated philosophers were unable to do good works: ‘we see this in the philosophers who undertook to lead honourable and blameless lives; they failed to accomplish this, and instead fell into many great and open sins.’²²⁴

True Christian faith was the necessary precondition for pleasing God.²²⁵ As Bullinger expressed it, ‘our love and our works could not please God if performed by unrighteous men,’ therefore, he continued, ‘it is necessary for us to be righteous before we may love and do good works.’²²⁶ In the Protestant estimation good works were only ever, as the *Articles of Religion* put it, ‘the fruits of faith and follow after justification.’²²⁷ The process of inner moral reformation – sanctification and its fruit of good works – flowed from his being justified.²²⁸ They were a sign of, rather than a cause of, justification. Works were in any case – as the *Formula of Concord* expressed, ‘completely excluded from a discussion of the article of man’s salvation as well as from the article of our justification.’²²⁹ Christians were justified *sola fide* by the external imputation of Christ’s righteousness: there was no requirement for good works, since the work had been once for all accomplished by the Son incarnate. Moreover, justification by grace through faith was diametrically opposed to justification by works.²³⁰ The ‘legalistic opinion’ of the righteousness

²¹⁹ Article XIII of *The Thirty-Nine Articles of Religion* (1571): ‘Works done before the grace of Christ and the inspiration of the Holy Spirit, are not pleasant to God...neither do they make men meet to receive grace, or (as the School authors say) deserve grace of congruity...but that they have the nature of sin.’ Also see *The First Helvetic Confession* (1536), that starkly pronounced ‘from ourselves there is nothing but sin and damnation’ (*The First Helvetic Confession* (1536), chapter 9, ‘Concerning freedom of choice which is called free will,’ CCH, p. 102).

²²⁰ For example, *The Augsburg Confession* taught that ‘without faith and without Christ, human nature and human strength are much too weak to do good works, call upon God, have patience in suffering, love one’s neighbour, diligently engage in callings which are commanded, render obedience, avoid evil lusts, etc’ (BoC, p. 46). See also Calvin at II.ii.25 (CAL, p. 173).

²²¹ III.xiv.4, CAL, p. 505.

²²² III.iii.7, CAL, p. 390.

²²³ *The Second Helvetic Confession*, for instance, boasted that ‘we diligently teach true, not false and philosophical virtues’ (chapter XVI, ‘Of faith and good works,’ CCH, p. 260).

²²⁴ *The Augsburg Confession* (1530), article XX, ‘Faith and good works,’ BoC, p. 45.

²²⁵ ‘Without faith it is impossible to please God.’ *The Tetrapolitan Confession* (1530), article XXVI, ‘Of baptism,’ CCH, p. 74.

²²⁶ *The Second Helvetic Confession* (1566), chapter XIV, ‘Of the true justification of the faithful,’ CCH, p. 256.

²²⁷ *The Thirty-Nine Articles of Religion* (1571), article XII, ‘Of good works.’

²²⁸ See III.xi.11, CAL, p. 483.

²²⁹ *Formula of Concord* (1577), BoC, p. 476.

²³⁰ *The Ten Theses of Berne* (1528) considered it ‘a denial of Christ when we acknowledge another merit for salvation and satisfaction for sin’ (thesis III, CCH, p. 49). Also see Calvin’s *Institutes* III.xi.17, in CAL, p. 487.

and forgiveness of sins that comes by works that seemed so reasonable to man's mind, said Melanchthon, was opposite to the message of the Scriptures: 'the mind must be turned from such fleshly opinions to the Word of God.'²³¹

In view of this, to Protestants there was no merit whatsoever in practising a religion derived from man's natural sense. The Catholic doctrine of justification allowed that sincerity of belief and observance in a non-Christian religion could accrue merit in the sight of God. In contrast, Protestants insisted that every manifestation of natural religion was utterly anathema. Reason did not lead to a theology whose doctrines were partly true or to a worship that approximated to true religion, but took man ever further from God. The Catholic teaching enraged Calvin: 'They deem it enough,' he wrote, 'that they have some kind of zeal for religion, how preposterous soever it may be, not observing that true religion must be conformable to the will of God as its unerring standard.'²³² John Knox similarly abhorred 'the blasphemy of those who hold that men who live according to equity and justice shall be saved, no matter what religion they profess.'²³³ The Church of England's *Thirty-Nine Articles* made explicit the inability of *natural* religion to merit salvation: 'They are also to be had accursed that presume to say that every man shall be saved by the law or sect which he professeth, so that he be diligent to frame his life according to that law and the *light of nature*.'²³⁴ For William Perkins, 'the light of naturall reason' was akin to 'the blind Divinitie of the world' and was therefore, instead of tending toward piety, a chief cause of *unbelief*.²³⁵ While Catholics when writing about natural theology often praised the sincerity and piety of the pagans of old, Protestants very seldom spoke of the religion of the ancients in any but critical terms. Luther wrote that without the supernatural Word, Spirit and Church, 'all is lost,' there was 'no forgiveness, and hence no holiness.'²³⁶ There was also no 'sliding scale' of truth on which various theologies derived from nature could be compared to one another in degrees of approximation to the Christian truth. No bridge straddled the epistemological-spiritual gulf that separated reason's guesswork from revelation's comprehension, nature's falsity from divine truth. By nature, man could participate to no extent in spiritual truth – he was, as Calvin put it, 'very far from forming any correct knowledge of it.'²³⁷ In contrast to Catholic doctrine, sixteenth-century confessional Protestantism held

²³¹ *Apology of the Augsburg Confession* (1531), BoC, p. 146.

²³² I.iv.3, CAL, p. 13.

²³³ *The Scottish Confession* (1560), article XV, 'The perfection of the law and the imperfection of man,' CCH, p. 175.

²³⁴ *The Thirty-Nine Articles of Religion* (1571), article XVIII, 'Of obtaining eternal salvation only by the name of Christ.' My emphasis.

²³⁵ William Perkins, *How to live, and that well* (1601), in Perkins, *Workes*, p. 479.

²³⁶ Luther, *The Large Catechism* (1529), BoC, pp. 416 and 418.

²³⁷ II.viii.1, CAL, p. 234.

consistently to the principle that any kind of natural theology and natural religion conducted without Christian faith and verbal revelation was uniformly impossible and execrable.²³⁸

The religion precipitated by natural theology, moreover, was not ignorant worship of the true God, but outright, deliberate, and wicked idolatry. God was justly angry that an idol had usurped the worship due to Him. As Calvin explained, 'with such an idea of God, nothing which they may attempt to offer in the way of worship or obedience can have any value in his sight, because it is not him they worship, but, instead of him, the dream and figment of their own heart.'²³⁹ There could be no spiritual merit according to the purported theological accuracy of the god and religion imagined by natural means. Calvin even argued that monotheism accrued no more merit or excusability than polytheism! 'It makes little difference,' he wrote, 'whether you hold the existence of one God, or a plurality of gods, since, in both cases alike, by departing from the true God, you have nothing left but an execrable idol.'²⁴⁰ The Spirit and Scriptures were necessary for any participation at all in true worship of God. Due to the debt of sin and the evil that inhered in the human soul, it was, moreover, necessary that Christ function as the Mediator to make it possible to approach God. 'The heavenly Father alone is to be invoked,' according to *The Tetrapolitan Confession* (1530), 'through Christ as the only Mediator.'²⁴¹ Even the patriarchs were saved by their faith in Christ yet to come. 'The Old Testament is not contrary to the New' insisted the *Thirty-Nine Articles*, 'for both in the Old and the New Testament everlasting life is offered to mankind by Christ, who is the only Mediator.'²⁴² Only religious sincerity spent in true worship of God through Christ and the Scriptures was looked upon with favour.²⁴³

There was, then, no ranking of excusability according to what theological insights and moral behaviour were attained from the study of the natural world and the natural self. All that man conceived from such was, in fact, sin – and grave sin at that. John Knox even said that 'in religious matters and the worship of God, those things which have no other warrant than the

²³⁸ To this thesis, the views of the Swiss Reformer Ulrich Zwingli are a notable and curious exception. In Zwingli's *Exposition of the faith* (1531) the Swiss included some 'noble heathen' in his vision of heaven and asserted that they might be saved despite ignorance of the propitiation of Christ due to their love and pursuit of religious truth and the sincerity of their ignorant worship. But the vehemence of the explicit distancing of the rest of the Protestant confessions – both Lutheran and Calvinist – from what they saw as Zwingli's heresy only serves to show how fundamentally inconsistent with their theological systems it was seen to be by the overwhelming majority of Protestant dogmatists. Preus argues that it was 'the *most important concern*' of Lutheran dogmatists treating of natural knowledge of God 'to confute the ideas of Zwingli and particularly [and latterly] Lord Herbert of Cherbury (1583-1648)' (Preus, *Theology of post-Reformation Lutheranism*, p. 27).

²³⁹ I.iv.1, CAL, p. 12.

²⁴⁰ I.iv.3, CAL, p. 13.

²⁴¹ *The Tetrapolitan Confession* (1530), article XI, 'That one God is to be worshipped through Christ,' CCH, p. 66.

²⁴² Article VII, 'Of the Old Testament' of *The Thirty-Nine Articles of Religion* (1571).

²⁴³ Bullinger said 'God is to be adored and worshipped as he himself has taught us to worship...not with any superstition, but with sincerity, according to his Word' (*The Second Helvetic Confession* (1566), chapter V, 'Of the adoration, worship and invocation of God through the only mediator Jesus Christ,' CCH, p. 230).

invention and opinion of man' were 'evil works.'²⁴⁴ Though not all those who attempted to do natural theology without the light of Scripture descended to the most depraved levels of idolatrous religion (such as human sacrifice) or the most ridiculous notions of deity (such as polytheism or anthropological corporeality), no natural theology approached the truth and none was more acceptable or more excusable before God. 'All worship of man's device is repudiated by the Holy Spirit as degenerate,' wrote Calvin. 'Any opinion which man can form in heavenly mysteries, though it may not beget a long train of errors, is still the parent of error.'²⁴⁵ Melancthon even argued that so-called piety based on the principle of works-righteousness only heaped up the scale of God's wrath: 'the rites of the heathen...were condemned *precisely because*, in their ignorance of the righteousness of faith, they believed that by these they merited the forgiveness of sins and righteousness.' This theology of works-righteousness – the only one that man by nature could come up with – was 'establishing the kingdom of Antichrist.'²⁴⁶ By his natural faculties and the contemplation of the natural world, none could come to the preambles of faith, none could truly repent, and none could accrue merit in God's eyes by the observance of natural law, performance of good works, or sincerity of worship spent in unenlightened religion. In sum, then, as Calvin put it at his most vociferous, 'Away, then, with all the absurd trifling which many have indulged in with regard to preparation!'²⁴⁷

Catholic doctrine admitted a genuine soteriological role to the natural cognition of God and religion. The universal gift of 'prevenient' grace restored to man's natural intellect and will the ability to effect his own conversion by cooperating with God's grace and meriting salvation through good works. But this synergistic doctrine of justification was utterly denied by Protestants with fatal consequences for natural theology having a spiritually beneficial, pre-fideal role. Sixteenth-century Protestants opposed the idea of prevenient grace and therefore admitted natural man no power whatsoever to take moral or spiritual steps toward God. As the *Thirty-Nine* articles insisted, man 'cannot turn and prepare himself, by his own natural strength and good works, to faith and calling upon God.'²⁴⁸ Postlapsarian man had no ability, as the *Formula of Concord* explained, to 'make himself ready for the grace of God or to accept the proffered grace.'²⁴⁹ Instead of man's cooperation, conversion was possible only when that pertaining to the mind of the natural man was destroyed: 'We cannot be trained to the fear of God, and learn the first principles of piety, said Calvin, 'unless we are violently smitten with the

²⁴⁴ *The Scottish Confession* (1560), article XIV, 'The works which are counted good before God,' CCH, p. 174.

²⁴⁵ I.v.13, CAL, p. 24.

²⁴⁶ *Apology of the Augsburg Confession* (1531), BoC, p. 217.

²⁴⁷ II.ii.27, CAL, p. 175.

²⁴⁸ *The Thirty-Nine Articles of Religion* (1571), article X, 'Of Free Will.' Although many scholars regard the 1571 articles as less Protestant than the 1553, the addition in the article on free will of the doctrine of the inability of natural man to prepare for faith intensifies the monergistic character of the doctrine of justification in the Church of England's articles.

²⁴⁹ *Formula of Concord* (1577), 'Solid declaration,' BoC, p. 521.

sword of the Spirit and annihilated.’²⁵⁰ Even knowledge of the ‘first principles’ of true religion was the gift of saving grace effected entirely by God, invariably through His Word.²⁵¹ Faith was a pure gift, with no preparation or merit taken into account, consisting in the personal apprehension of the full and sufficient righteousness of Christ.²⁵² Since justification was wholly achieved by grace apprehended by faith, there was no propaedeutic role for any intellectual or moral effort of the natural man. In contradistinction to the Catholic notion, therefore, that the beginnings of justification were in doing *quod in se est*, Calvin and Farel’s *Geneva Confession*, for instance, argued that ‘since man is naturally deprived and destitute *in himself* of all the light of God... he must look *outside himself* for the means of salvation.’ Doing what lay within his natural powers would only lead man to provoke the ‘wrath and malediction of God.’²⁵³ Together, the condition of man and the economics of salvation mitigated against natural theology having any use as a preparation for saving faith.

What then, was the effect of the natural theology of non-Christians if it were participatory in truth and tending to theistic belief? How did Protestants explain the existence of elements of naturally-discerned apparently true theology that needed little or no correction? We have seen that, through the spectacles of Scripture, God could be known in nature as Creator, Judge, and Father. But with those spectacles taken away, to what extent could He be truly known from the examination of His works? Did man’s intellectual and spiritual depravity prevent natural man’s being able to speak accurately of God’s attributes? Empirically, it evidently did not, for many heathen had surmised theories of a divine Creator – even One eternal, immutable and incorporeal. But that was not so much *knowledge* (as their reasons for positing it were insecure) as *true opinion*. Calvin likened the true opinion of philosophers concerning the deity to a ‘bewildered traveller,’ who might occasionally stumble upon the right path in his darkened, groping travails, but all the time utterly lacking the ability to direct his path toward the end he seeks and know when he accidentally hit upon the true way.²⁵⁴ The Lutheran Nicolaus Selnecker similarly argued that while the pagans might describe the creator in terms that were occasionally fitting to His nature, their arguments did not lead to the true God in any measure, ‘but only to shadows’ – in contrast to the knowledge of the Creator through special revelation, these musings were merely the ‘“infinite opinions” of heathen speculation.’²⁵⁵ Even if – as the Calvinist Pierre du Moulin believed – some might develop the *sensus divinitatis* to the extent of forming a comprehensive metaphysics of deity, this knowledge (albeit far more extensive than earlier

²⁵⁰ III.iii.8, CAL, p. 390.

²⁵¹ The *Augsburg Confession* (1530) insisted that the Holy Spirit did not come ‘to us through our own preparations, thoughts, and works without the external word of the Gospel’ (article V, ‘The office of the ministry,’ BoC, p. 31).

²⁵² Faith is described as a ‘pure of God’ in both the first and second *Helvetic Confession* (1536 and 1566), CCH, pp. 104 and 257.

²⁵³ The *Geneva Confession* (1536), article 4, ‘Natural Man,’ CCH, p. 121.

²⁵⁴ II.ii.18, CAL, p. 18.

²⁵⁵ Cited in Preus, *Theology of post-Reformation Lutheranism*, p. 35.

Reformed theologians were prepared to admit) remained, as Richard Müller paraphrases, 'useless speculation even if true.'²⁵⁶ Whatever true opinion the philosophers might have had about god, it was invariably attended by much fallacy (the god of metaphysics was not one with a personal interest in humanity, neither was he involved in creation, and he was certainly not triune) and had no beneficial effect. Luther wrote that 'there is a vast difference between knowing that there is a God and knowing who or what God is. Nature knows the former – it is inscribed in everybody's heart; the latter is taught only by the Holy Spirit.'²⁵⁷ Only in Christ could knowledge of God's office as beneficent, fatherly Creator be had. Therefore, as Calvin explained, while some in antiquity 'boasted that they worshipped the Supreme Deity, the Maker of heaven and earth' – that is, they had some true opinion concerning a divine creator – 'yet as they had no Mediator,' their belief never translated into true knowledge of God.²⁵⁸ Despite occasional resemblances between the attributes of the creator god of pagan philosophy and the Creator God of the Bible, these limited coincidences did not comprise any knowledge and had no practical use.

It is true that in some sense, God's moral law was written on the hearts of unbelievers as well as believers. Following Romans 2, the conscience of natural man, though ultimately blinded, still witnessed to some degree to God as Judge and to man's transgression of His law.²⁵⁹ Even if the knowledge were irrevocably suppressed and spiritually impenetrable, the Ten Commandments were still 'inscribed in the hearts of all men.'²⁶⁰ While the *content* of God's moral law was obscured without the knowledge that came from Scripture; that there was law and that man had broken it was thought by many Protestants to be naturally knowable. Knowing that there was law implied knowledge of a Lawgiver. Man's instinct for justice was sufficient evidence that his own conduct would be scrutinized by an omniscient Judge: 'Shall we,' asked Calvin, 'by means of a power of judging implanted in our breast, distinguish between justice and injustice, and yet there be no judge in heaven?'²⁶¹ Calvin conceded, therefore, that 'every man, being stung by the consciousness of his own unhappiness, in this way necessarily obtains at least some knowledge of God.'²⁶² By natural theology God could be known as the wrathful Judge, but this true perception did not conduce to love of God or true fear of him, but only resentment at His

²⁵⁶ Müller, 'Duplex cognitio dei', pp. 58-59.

²⁵⁷ Luther, *Minor Prophets*, p. 206.

²⁵⁸ II.vi.4, *CAL*, p. 216.

²⁵⁹ 'For when the Gentiles, which have not the law, do by nature the things contained in the law, these, having not the law, are a law unto themselves: Which shew the work of the law written in their hearts, their conscience also bearing witness, and their thoughts the mean while accusing or else excusing one another.' Rom 2:14-15 (*KJB*).

²⁶⁰ Luther, *The Large Catechism* (1529), *BoC*, p. 419.

²⁶¹ I.v.5, *CAL*, p. 18.

²⁶² I.i.1, *CAL*, p. 5.

judgement.²⁶³ Some Reformed theologians preferred to contrast knowledge of God as a Redeemer in Christ to knowledge of God as a *Judge* from nature rather than merely as a Creator (as Calvin had) in distinguishing between the *duplex cognitio Dei*.²⁶⁴ Even this true knowledge that God was a Judge was hideously distorted. It held, said Luther, that God was 'nothing but an angry and terrible Judge,'²⁶⁵ while for the Calvinist Pierre Viret natural knowledge only led to the flawed or 'unfaithful' perception of God as a tyrant.²⁶⁶ The law learned from nature without Scripture was nothing, said Melanchthon, 'but a doctrine of despair.'²⁶⁷ While a contemplation of nature could lead some to a true discernment of their spiritual status as a sinner deserving of punishment before a righteous Judge, this knowledge led only to vanity, hypocrisy, despair or hatred of God. Both the vain self-confidence of works-righteousness and despair at the realisation of its fallacy, were part of what the Protestants (particularly emphasized in Lutheranism) called the *curse* of the Law: natural theology, knowing only law and not gospel, was itself part of the dispensation of curse.

It is in fact that pre-fideal natural theology was part of the curse of the law that comprised its main application in Protestant apologetics. The overwhelming end of natural theology was to justify God's damnation of unbelievers. This was hinged on that same foundational text for natural theology – those few verses in the first chapter of St Paul's epistle to the Romans – in which the apostle explained how the 'invisible things' of God were clearly seen, '*so that they are without excuse*.'²⁶⁸ Emphasising this point, Protestants stressed the theoretical sufficiency of the material, both within and without, for natural theology. God, said Calvin, 'endued all men with some idea of his Godhead' which He 'constantly renews and occasionally enlarges.'²⁶⁹ The revelation of the natural world about its Creator was, in itself, plain and sufficient.²⁷⁰ There was no excuse, therefore, for ungodliness and unrighteousness, for the raw materials of a natural theology that could lead to true knowledge of God, true worship of, and obedience to Him, were established in the very fabric of the creation and the souls of men. This theoretical ability for

²⁶³ See Melanchthon's *Apology of the Augsburg Confession* (1531), BoC, p. 153. Without knowledge of grace, 'much more often they feel angry at the judgement of God.'

²⁶⁴ Pierre du Moulin's *De cognitio Dei tractatus* (1624) was, according to Müller, the work that definitively restored the *duplex cognitio Dei* to its meaning of distinguishing between the results of natural and revealed theology. Amandus Polanus von Polansdorf (1561-1610) had used the phrase to divide Christian doctrine and Christian life – i.e. the twofold speculative and practical knowledge of God. See Müller, 'Duplex cognitio dei', pp. 57-58.

²⁶⁵ Luther, *The Large Catechism* (1529), BoC, p. 419.

²⁶⁶ See Müller, 'Duplex cognitio dei', p. 55.

²⁶⁷ *Apology of the Augsburg Confession* (1531), BoC, p. 153.

²⁶⁸ 'For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who hold the truth in unrighteousness; Because that which may be known of God is manifest in them; for God hath shewed it unto them. For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse: Because that, when they knew God, they glorified him not as God, neither were thankful; but became vain in their imaginations, and their foolish heart was darkened.' Rom 1:18-21 (KJB).

²⁶⁹ I.iii.1, CAL, p. 9.

²⁷⁰ I.v.2, CAL, p. 17.

natural knowledge of God never (save Adam) led to theological accuracy or moral righteousness because of human sin. Man, blinded by his sin – original and actual – *suppresses* (KJB: ‘holds the truth in unrighteousness’) the truth that, without sin, he could have learned from nature. In the face of judgement, a plea of ignorance of the true God and His standards for religious and societal living was therefore a patently absurd plea to be excused from judgement for sin on account of the very effects of sin! Man’s natural inability to do natural theology was his own fault: ‘Though we are deficient in natural powers which might enable us to rise to a pure and clear knowledge of God,’ said Calvin, ‘as the dullness which prevents us is within, there is no room for excuse.’²⁷¹ ‘Let hym accuse hym selfe, or his owne sluggishness,’ wrote Lambert Daneau, ‘and not the hardnes of the booke which God hath layd before our eyes.’²⁷² The removing of the excuse of the ungodly was for Calvin the sole purpose of natural revelation in the fallen world. Regarding the *sensus divinitatis*, ‘these impressions, as to the unity of God...have had no further effect than to render men inexcusable.’ That which was reasoned about God from the creation has ‘no further effect than to render us inexcusable.’ Similarly, ‘the end of the natural law...is to render man inexcusable.’²⁷³ Others echoed Calvin’s sentiment. The only purpose given in *The Belgic Confession of Faith* in 1561 for the revelation of the creatures, was that it was ‘sufficient to convince men, and leave them without excuse,’ in contrast to the verbal revelation whose end was ‘his glory and our salvation.’²⁷⁴ William Perkins went so far as to say that the fallen faculty of reason, ‘is imperfect and erroneous and serues onley to make men without excuse.’²⁷⁵ The difference between the Catholic and Protestant emphases on the question of inexcusability is evidenced by their different treatments of the seminal New Testament biblical text for natural theology. As we have seen, many Catholics often quoted the first half of Romans 1:20, omitting the clause of inexcusability. It is inconceivable that a sixteenth-century Protestant would do so: the whole point of the theoretical possibility and postlapsarian actual impossibility of non-Christian natural theology was the inexcusability of the reprobate. Some Catholic exegetes argued that the target of St Paul’s rebuke was only the philosophers who, furnished with superior intellect and insight, had turned from what they knew from nature about God to a culpable idolatry.²⁷⁶ This interpretation therefore exempted from St Paul’s invective both the unlearned (on account of ignorance) and those philosophers who remained faithful to the natural theology they had perceived. But no Protestant accepted either of these

²⁷¹ I.v.14, *CAL*, p. 25.

²⁷² Daneau, *Wonderfull woorkmanship*, sig. S4v.

²⁷³ I.x.3, I.v.14, and II.ii.22 in *CAL*, pp. 47, 25, 171.

²⁷⁴ *The Belgic Confession of Faith* (1561), article II, ‘By what means God is made known unto us,’ *CCH*, p. 190. This was the confession to which the ‘virus of natural theology’ spread from *The French Confession* (1559) according to Cochrane ed. *Reformed confessions*, p. 138. Since the removal of excuse was the only end of natural revelation given in that confession, Cochrane’s scruples are surely out of place.

²⁷⁵ Quoted in Donald K. McKim, *Ramism in William Perkins’ theology*, *American university studies*, vol. XV: *Theology and religion* (New York: P. Lang, 1987), p. 87.

²⁷⁶ Examples include Philibert Haresche in his 1536 commentary, and Marino Grimani in his 1542 commentary (*CER*, pp. 112-13, 122).

exemptions: Paul's target was *all men*.²⁷⁷ Accordingly they stressed the *ease* with which a natural theology could have been achieved – were the cogitations of man's mind not darkened by sin – and the unilateral, undifferentiated condemnation that therefore came upon all natural men. 'The heavens and the earth present us with innumerable proofs,' said Calvin, 'which force themselves on the notice of the most illiterate peasant.'²⁷⁸ Protestants divided the world into sheep and goats: the elect on one hand and the reprobate on the other, whose own works were nothing but sin and whose knowledge of God and religion was not only ignorant but *culpable idolatry*. It is regarding this *purpose* of pre-fideal natural theology that most clearly separates the Protestant account of natural theology from the traditional Catholic understanding. The Catholic scholar F. X. Arnold argued that Luther's natural theology was almost indistinguishable from Aquinas' – both arguing that man by nature could know that God exists from the order manifest in creation.²⁷⁹ Even if, however, the extent and content of their natural theologies were similar (something I reject), the purpose to which the doctrine of natural law was primarily applied divides them hugely: for Aquinas there was a raft of positive, beneficial applications – but for Luther, it served only to underline man's cursed inability to live up to the standards of the law. Natural theology in sixteenth-century Protestantism was not so much to convert unbelievers as to show that God was fair in condemning them.

For the Christian, however, with the spectacles of Scripture and the illumination of the Spirit, the contemplation of God's creation became a true and reliable source of spiritual edification. In the first place, the Christian's meditating on his natural state elevated his sense of his dependence on God for his sustenance and counselled him to repentance.²⁸⁰ Recognising the depravity and limitation of his nature commended to the Christian's mind God's transcendent perfection and infinity.²⁸¹ For this reason, the law was still an appropriate topic for preaching, for, as Luther explained, it exposed 'sin and its wretched consequences,' engendering in the faithful an appropriate humility.²⁸² For the elect, the end of dwelling upon the law of nature was to teach his 'weakness, sin and condemnation' so that he might cling more firmly to Christ.²⁸³ This is far different to natural introspection precipitating a natural repentance that prepared the way for grace. That Law precedes Gospel in a manner of speaking in Lutheran theology is clear – but only Law spoken of in a Scriptural context. God's Word rather than his works preached the

²⁷⁷ For Calvin on the especial culpability of the philosophers see I.v.11-12 and I.x.3 (CAL, pp. 22-23, 48).

²⁷⁸ I.v.2, CAL, p. 16.

²⁷⁹ Franz Xaver Arnold, *Zur frage des naturrechts bei Martin Luther: ein beitrag zum problem der natürlichen theologie auf reformatorischer grundlage* (Munich: Max Hueber, 1937); argument cited in Schrey, 'Natural law,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 1710-12.

²⁸⁰ 'Self-knowledge consists in this, first...we perceive how great the excellence of our nature would have been had its integrity remained, and, at the same time, remember that we have nothing of our own, but depend entirely on God.' II.i.1, CAL, p. 147.

²⁸¹ 'The infinitude of good which resides in God becomes more apparent from our poverty.' I.i.1, CAL, p. 4.

²⁸² See, for instance, *The Heidelberg Catechism* (1563), question 3 (CCH, p. 305) and II.i.i, CAL, p. 147.

²⁸³ *The Second Helvetic Confession* (1566), chapter XII, 'Of the law of God,' CCH, p. 248.

natural law to the soul in an effective way to God's elect: it is the *Scriptural* exegesis of Law that precedes the Scriptural exegesis of Gospel in the explanation of the need for and potency of the grace offered in Christ. Self-contemplation assisted the Christian's lifelong repentance: discovering the depth of his sinful flesh and natural incapacity to reform propelled him ever more unto the mercy of God. It was useful to learn from the contemplation of our natural selves that, as Thomas Cranmer (1489-1556) put it, 'wee bee crabtrees, that can bring foorth no apples,' so that Christians would not be tempted to seek righteousness through works or puff themselves up with pride before man and God, but wholly and humbly depend on the work and grace of Christ.²⁸⁴

Second, natural theology provided an *a posteriori* buttress to Scriptural faith. Contemplating nature with the aid of Scripture provoked man to wonder and praise at God's glorious work in creation. The Book of God's Works was above all a demonstration of the great power of God set forth in the Scriptures. 'In regard to his power,' lauded Calvin, 'how glorious the manifestations by which he urges us to the contemplation of himself.'²⁸⁵ That natural phenomena could be interpreted as revelations of divine power was also legitimised by Scriptural precedent: 'those glowing descriptions of divine power, as illustrated by natural events,' Calvin said, 'occur throughout Scripture.'²⁸⁶ Peter Lake contends that late sixteenth-century English Puritan commonplace books regarded the demonstration of God's power as the chief spiritual benefit of contemplating the natural world.²⁸⁷ Although nature was primarily a revelation of God's power, the Christian could be encouraged by seeing several other of His attributes manifest, such as His wisdom, beneficence, infinity, eternity and goodness. With reason regenerated, all that which creation was originally intended to manifest concerning God was set before the Christian's eyes as the visible confirmation of Scriptural testimony. Moreover, as nature demonstrated God's tremendous power and, with the light of Scripture, divine justice and clemency, it could also lead to an increased confidence in God's providential oversight of His Church and hope in heaven. 'By the knowledge thus acquired' (that is, contemplating God 'in his works') said Calvin, 'we ought not only to be stimulated to worship God, but also aroused and elevated to the hope of future life.'²⁸⁸ Overall, therefore, the natural world was a buttress for faith first given and received: thus Calvin described the 'beautiful theatre' of the world 'the first evidence of faith.'²⁸⁹ The world was also a devotional tool: since the incorporeal, ineffable and incomprehensible God could not be contemplated directly, the godly were called to dwell upon

²⁸⁴ Thomas Cranmer, 'On the misery of all mankind,' homily II in *Certayne Sermons, or Homelies, Appoynted by the Kynges Maiestie, to Be Declared and Redde, by All Persones, Vicars, or Curates, Every Sondaie in Their Churches, Where They Have Cure* [The First Book of Homilies] (London, 1547), sig. C3v.

²⁸⁵ I.v.6, CAL, p. 19.

²⁸⁶ I.v.6, CAL, p. 19.

²⁸⁷ Peter Lake, *Moderate puritans and the Elizabethan church* (Cambridge: Cambridge University Press, 1982), p. 120.

²⁸⁸ I.v.10, CAL, p. 22.

²⁸⁹ I.xiv.20, CAL, p. 101.

His effects. Unlike artificial and imagined forms – utterly prohibited (according to Protestant exegesis) in Scripture – the Book of Nature was authored by God Himself to be the theatre in which His eternal properties were made manifest for the enjoyment of His people. The study of nature thus had a dignity and purpose in a post-iconoclastic Protestant world as the praiseworthy image of God's attributes. The post-Scriptural study of nature was a great store for the edification and delectation of the believer.

Normally, the study of nature to increase the love and praise of God made use of the ordinary processes of the natural world. There was, of course, a second species of natural theology in which the preternatural and supernatural, the miraculous and monstrous, were seen as evidences of God's attributes. This 'second class of God's works' – 'those which are above the ordinary course of nature,' were to Calvin, 'in every respect equally clear' evidences of his perfections.²⁹⁰ Early Protestantism was ambivalent and frankly confusing regarding the theological interpretation of supposed preternatural portents. Although the miracles of the biblical record were considered to be tangible signs in the visible world of God's nature and purpose, the early Lutherans rejected the occurrence of miracles in their own days, regarding claims of supernatural phenomena with great suspicion and more readily attributing such accounts to demonic imposture rather than divine decree. For these reasons, the Lutheran treatment of natural theology was on the whole restricted to the ordinary machinations of nature through the agency of God's secondary causes.²⁹¹ While it was uncontentious that the natural order revealed God's *general* will (order and righteousness), whether or not aspects of God's *particular* will (such as His directed wrath) were signed in nature was a matter of debate. Among the Reformed there was a marked ambivalence toward making theological claims based on unusual natural phenomena. Alexandra Walsham's *Providence in Early Modern England* charts the curious way in which Reformed antipathy toward astrology, for instance, existed alongside the use – in both godly sermons and popular print – of prodigies and portents of God's specific will regarding individuals, communities, and the nation. Calvin, at least, was clear in denouncing such an attempt. As he explained in his commentary on Genesis, natural signs were signs only of natural, and not supernatural, things: 'what other things doth Moses say are signed, but those which pertain to the order of nature?'²⁹² That is to say, the celestial bodies were indeed given by God to be read as signs, but their signification concerned nature (movements of the sun guide agriculturalists) or civil life (markings months and years). William Perkins agreed that astrology was nothing short of 'idolatrie, although it be couered with faire and golden shewes.'²⁹³ Calvin

²⁹⁰ I.v.7, CAL, p. 19.

²⁹¹ Preus, *Theology of post-Reformation Lutheranism* remarkably claims not to have found a single example in seventeenth-century Lutheran dogmatists referring to miracles of their own day (footnote 28, p. 238).

²⁹² Commentary on Genesis 1:14, Calvin, *Genesis*, p. 35.

²⁹³ William Perkins, *A Resolution to the Country-Man* (1585), in *Workes of that Famous and Worthie Minister of Christ William Perkins* (1616-1618), III, p. 653; qu. in McKim, *Ramism in Perkins*, p. 6.

and his English disciple in this way preserved the distinction between what was purposed by natural revelation in the original creation and what was made known only by the special revelation of God's word. And yet some Reformed extended the purview of the natural signification accessible to the Christian so that the world became the theatre for God's specific interaction with the church, the godly, and the wicked. Reading the Book of Nature became something of a prophetic office. As Walsham writes, this view came to permeate all levels of Calvinist divinity, from 'cheap print' to 'the correspondence of academics' – strange natural phenomena 'were widely acknowledged to be providential tokens of future misfortune, and were contemplated with a mixture of anxiety, astonishment, and awe.'²⁹⁴ It is unclear how this species of natural theology could fit in with other characteristics of Reformed doctrine. While on the one hand, provided that the theological message which the natural phenomena supposedly signified was anticipated in the Bible, God was surely free to communicate His pleasure or wrath toward individuals and nations through the physical world; on the other, the doctrine of the sufficiency of God's Word surely mitigated against the Book of Nature providing any supplementary revelation of His designs. Perhaps a majority of learned Calvinist divines resisted the excesses of the prophetic pretensions of the contemplation of nature though, as Walsham notes, 'even the godly themselves regularly succumbed to the temptation to read God's intentions inscribed in the physical environment.'²⁹⁵ Certainly, the portentous potential of nature was, even in sixteenth-century Protestant doctrine, an area attended with much confusion and controversy.

Though doctrines needed no further proof than Scriptural attestation itself, nature was sometimes called upon as demonstration. Once Scripture was accepted on faith as the only ultimate authority, other probabilistic proofs could be adduced in support of its authority since reason, regenerated by the Spirit, was again a noble and useful faculty.²⁹⁶ Natural knowledge was sometimes applied in the context of internecine debate. According to Kusukawa, 'Melancthon saw in natural philosophy a potent response to issues which he believed to be seriously jeopardising Luther's cause.'²⁹⁷ Prime among these was the argument that natural law, in congruence with divine Scriptural command, underpinned a doctrine of civil obedience that was being flouted by the Anabaptists. Another example from the 1570s concerned the controversy with the Calvinists on the dual nature of Christ.²⁹⁸ There was, then, a theological apologetic application of natural knowledge. But one of the Protestants' favourite polemical uses of nature was to present Catholicism as being akin to 'natural religion.' The Catholics,

²⁹⁴ Alexandra Walsham, *Providence in early modern England* (Oxford: Oxford University Press, 1999), p. 167.

²⁹⁵ *Ibid.*, p. 179. If anything this tendency increased in the seventeenth century when a Millennial dimension increased interest in the natural signs – predicted in the New Testament – of the last times.

²⁹⁶ Book I, chapter 8 of Calvin's *Institutes* concerns 'the credibility of Scripture sufficiently proved in so far as natural reason admits.'

²⁹⁷ Kusukawa, *Transformation of natural philosophy*, p. 4.

²⁹⁸ *Ibid.*, p. 204.

Melanchthon said, derived their system of justification from the dictates of natural human reason which knew only the errant hope of works-righteousness. The belief that religious performance would placate God led just as readily to human sacrifice as to the papists' sacrifice of the Mass.²⁹⁹ The 'great and learned scholastics' who proclaimed obedience of the law to be the source of justification were 'deceived by human wisdom' alongside 'the Pharisees, *philosophers*, and Mohammedans.'³⁰⁰ Other Catholic doctrines were cast as being identical to the pagan philosophers'. For instance, the mitigated doctrine of original sin that accorded man with 'a right understanding and a right will' was dismissed in the *Smalcald Articles* as being that which 'the philosophers teach.'³⁰¹ The truth about original sin was known by 'no philosopher, no papist, no sophist, no human reason.'³⁰² William Perkins, too, argued that Catholicism was equivalent to natural religion and stressed this in his polemical works – for instance claiming that Catholicism was 'under new termes maintaining the idolatrie of the heathen.'³⁰³ The critique of Catholicism as akin to natural idolatry was also applied in the context of Protestant iconoclasm. The heathen were condemned in both the Decalogue and in St Paul's epistle to the Romans for idolatry, not for thinking that the artificial and natural forms to which they prostrated themselves were *themselves* the deity, but for the crime of seeking to *represent* the ineffable and incorporeal God, placating Him by outward acts of devotion to His physical deputy. That is precisely, the Calvinists maintained, the crime of the *dulia* worship of Roman Catholics. This betrayed an ignorance and contempt of the true character and command of God and rendered the Catholics guilty of impiety every bit as reprehensible as those who practiced natural religion in ignorance of the Scripture.³⁰⁴ The fact that Catholicism would wear the label of being in accord with nature proudly, while the Protestant polemicists insulted them with the same appellation, demonstrates the gulf in the theological worth of nature between the confessions.

In another polemical move (somewhat in tension with that delineated above), Protestants also accused Catholicism of being unreasonable, of proposing things that were contrary to nature (though invariably saturating their arguments against Catholicism's unnatural dogma with Scriptural proofs). The prime example of appealing to nature against Catholic doctrine, of course, concerned the doctrine of the real presence in the consecrated host. *The Forty-Two Articles*, for instance, explained that 'the truth of man's nature requireth, that the body of one and the selfsame man cannot be at one time in diverse places...therefore the body of Christ cannot be present at one time in many diverse places.'³⁰⁵ The Catholic appeal to Aristotelian

²⁹⁹ *Apology of the Augsburg Confession* (1531), BoC, pp. 150-51.

³⁰⁰ *Ibid.*, p. 139.

³⁰¹ *The Smalcald Articles* (1537), part III, article I, 'Sin,' BoC, p. 302.

³⁰² *The Formula of Concord* (1577), 'Solid declaration,' BoC, p. 519.

³⁰³ William Perkins, *A Reformed Catholike*, in Perkins, *Workes*, vol. II, p. 583.

³⁰⁴ This is the argument of Calvin throughout the eleventh chapter of the first book of his *Institutes*. CAL, p. 49 ff.

³⁰⁵ *The Forty-Two Articles of Religion* (1553), article XXIX – later omitted in the *Thirty-Nine Articles* of 1571.

parlance to explain transubstantiation only confirmed, to Protestant minds, that the scholastics were given over to the unenlightened conclusions of the reprobate minds of the pagans rather than relying on the sufficient testimony of Scripture. In comparison with the philosophical maze that characterized scholastic discussion of the Sacrament, Protestants' sacramental theology bypassed natural inspection. Either the sacrament was a mere symbolic remembrance (Zwingli) or a purely spiritual transformation that could not be described in terms of natural species (Calvin). Since the Reformed sacramental change was 'done spiritually,' Calvinists held that, as the *French Confession* explained, 'the greatness of this mystery exceeds the measure of our senses and the laws of nature...because it is heavenly, it can only be apprehended by faith.'³⁰⁶ Nature was not involved in the process – the host did not contain, as the *First Confession of Basel* said, 'the natural, true and essential body of Christ.'³⁰⁷ With nothing natural, other than ordinary bread, involved in the sacrament, no natural knowledge was required. Though the Lutheran doctrine of consubstantiation made the actual blood and body of Christ present in the host and their ingestion natural as well as spiritual, the need for natural explanation was avoided by a fideism that, since 'we cannot comprehend [it] with our human sense or reason,' 'we take our intellect captive in obedience to Christ...and accept this mystery in no other way than by faith as it is revealed in the Word.'³⁰⁸

There were a range of positive theological applications of contemplation of the natural world – it could effect a call to humility and repentance, edify by a lively display of God's power, and probabilistically demonstrate doctrine. It is therefore a mistake to think, like Karl Barth, that for orthodox Reformed theologians there was no such thing as a natural theology. Peter Harrison overstates the stripped-down character of natural signification when he writes that by Protestant theology, 'nature would lose its meaning,' for it certainly did not (at least in the sixteenth and seventeenth centuries).³⁰⁹ We cannot ignore the true, extensive and valuable theology in nature for man in both his state of innocence and his state of redemption. The natural world in which the Christian dwelt was not devoid of divine teleology and religious significance. The literalism that characterised the interpretation of Scripture was echoed in the interpretation of nature only insofar as ruling out allegorical and analogical methods of discerning God's will and nature and limiting the extent to which they were signified; it did not undermine the principle of the theological signification of the visible world. The revelatory character of nature remained part of the Protestant worldview; there was considerable continuity in the principle that the world pointed towards the attributes of God as Creator and Sustainer.

³⁰⁶ *The French Confession of Faith* (1559), article XXVI, CCH, p. 157.

³⁰⁷ *The First Confession of Basel* (1534), article VI, 'Concerning our Lord's Supper,' CCH, p. 94. Also, 'we do not believe that the body and blood of the Lord is naturally united with the bread and wine' (*The First Helvetic Confession* (1536), chapter 22, 'Concerning the Lord's Supper,' CCH, p. 108).

³⁰⁸ *The Formula of Concord* (1577), BoC, p. 486.

³⁰⁹ Harrison, *Rise of natural science*, p. 114.

Nevertheless, despite the ways in which natural theology could be a worthwhile Christian enterprise, there is no doubt that in confessional sixteenth-century Protestantism, the extent of its positive religious role was limited. In terms of content, the world only spoke of God *qua* Creator and Judge, but the primary focus of Protestant homiletics concerned God's relation to the Christian as the Redeemer to a forgiven sinner. But it was also limited in application by the priority given to Scripture. The Bible was the direct Word of God to man; natural revelation was mediated through conscribed, natural forms. Why behold the likeness of God in the circumscribed mirror of the creatures when one could contemplate the very face of God in the person of Christ revealed? There was, therefore, a clear subjugation of the Book of Nature to the Book of Scripture. One remarkable example of the impulse to emphasize the verbal revelation and minimise the importance of the natural revelation is Luther's commentary on the nineteenth Psalm. This Psalm, beginning with 'The heavens declare the glory of God; and the firmament sheweth his handywork,' was usually considered the clearest Old Testament precedent for natural theology.³¹⁰ The works of God in nature – particularly the celestial sphere – were a manifestation of His glory. But Luther did not concede even this verse to the natural revelation, but argued it concerned the verbal! The verse meant, he argued, 'the glory of God is preached everywhere in all the lands under all of heaven' – and the preaching, since the verb 'telling' (i.e. 'declare the glory of God') could refer only to speech, served to remind God's people to esteem the oral and external Word. In Luther's estimation, the 'glory of God' meant none other than the Gospel, for it was only through the Gospel that God's glory could be known; the 'handiwork' thereby proclaimed was the work wrought *by* the Gospel: 'justification, salvation, and redemption from sin, from death, and from the kingdom of the devil.' Instead of the psalm celebrating the universal, general and ubiquitous message of God's glory manifest in His visible works, it became in Luther's treatment a spur to the spread of God's verbal message of Gospel.³¹¹

Furthermore, though we have seen that nature was sometimes read to provide probabilistic proofs in support of revealed doctrines, owing to the supremacy of Scripture that made its testimony above reproach, Protestants did not feel the need to ratify, demonstrate or reconcile nature and reason with belief. In contrast, Protestants inclined to a kind of fideism (strongly resisted in orthodox Catholicism) whereby doctrines were held to be unknowable and unprovable by the reasoned contemplation of nature.³¹² In fact, some rejoiced in the way in which Christian doctrine befuddled and humbled reason. Calvin, for instance, was happy to argue that the doctrine of a triune God, 'refuting the subtleties of a profane philosophy,' was

³¹⁰ Ps 19:1 (KJB).

³¹¹ Luther, *Psalms*, p. 140.

³¹² In addition to the example of the Trinity that follows, and the Lord's Supper, discussed above, the Lutheran *Formula of Concord* held that Christ's descent into hell 'cannot be comprehended with our senses and reason, but must be apprehended by faith alone' (BoC, p. 492).

arraigned in *opposition* to the findings of autonomous pagan reason.³¹³ Luther too maintained that no philosophical rational defence could be mounted for the Trinity, whose absurdity and impossibility was an occasion for delight rather than doubt.³¹⁴ In Renaissance Catholicism, such a view of the doctrine's *unreasonable* nature would and did attract the ire of the papal censors. Though it might be beyond the reach of natural reason, Catholics made extensive use of philosophical arguments to prove the doctrine once established. While it is not uncommon in sixteenth-century Catholic works to see appeals to analogies to phenomena observed in the natural world to prove, teach, illustrate or even establish a doctrine, in Reformed confessions of faith, almost no use was made of the pedagogic potential of nature to impart theological knowledge. For instance, though the Catholic Cardinal Robert Bellarmine conceded that 'Diuine matters, can not be perfectly declared by any examples of created things,' he made use of the similitude of lake, river and fountain to explain the doctrine of the Trinity and the 'similitude' of physical health with spiritual felicity to explain eternal life.³¹⁵ This was absolutely typical of Catholic natural-philosophical apologetics. In Reformed confessions and catechisms, I have seen no similar appeal to natural forms to explain divine mysteries. Calvin, for instance, provided not a single natural proof or analogy of the Trinity in his *Institutes* (even rebuking the normally lauded Augustine for his 'speculation that the soul is a mirror of the Trinity'): a striking omission when compared to contemporary Catholic equivalents.³¹⁶ C. J. Burchill notes that the Lutheran Johannes Hasler was roundly condemned by his Protestant peers in the 1570s for even trying to use Aristotle's *Metaphysics* to defend the doctrine of the Trinity philosophically.³¹⁷ The tone of the Lutheran Johann Gerhard is only slightly more conciliatory. In his *Loci communes theologici* he warned that 'our reasonings which are taken from the light of nature and applied to the mystery of the Trinity must not be thought of as occupying the function of corroborating this mystery but only of illustrating it in various ways.'³¹⁸ A doctrine taught by Scripture had, in the Protestant mind, no need whatsoever of corroboration, even if certain natural expressions were on rare occasions found useful to impart knowledge to the unlearned.

The principle of the absolute sufficiency of the Scriptures meant that the study of nature was not needed in biblical exposition. Thomas Cranmer in the authorised Church of England homily on the reading of Scripture, made explicit how the doctrine of Scripture rendered the sciences

³¹³ I.xiii.1, *CAL*, p. 66.

³¹⁴ Preus reports that 'Lutheran theology maintained that the doctrine of the Trinity is a mystery of faith which cannot be supported or even defended philosophically or with the aid of human reason' (Preus, *Theology of post-Reformation Lutheranism*, p. 118).

³¹⁵ Bellarmine, *Ample declaration*, pp. 58, 79.

³¹⁶ I.xv.4, *CAL*, p. 108. In his commentary on the creation of man, Luther also rejected Augustine's notion that the soul was an image of the Trinitarian godhead, on the basis that if that were true, man would therefore be able to effect his own salvation within himself. See Luther, *Luther still speaking*, pp. 60-61.

³¹⁷ C. J. Burchill, 'Aristotle and the Trinity: the case of Johann Hasler in Strasbourg, 1574-1575', *Archiv für Reformationsgeschichte* 79 (1988), pp. 282-309.

³¹⁸ Johann Gerhard, *Loci communes theologici*, cited and translated in Preus, *Theology of post-Reformation Lutheranism*, p. 118.

obsolete for understanding the Bible: 'man's humane and worldly wisdom or science, needeth not to the vnderstanding of Scripture, but the reuelation of the holy Ghost, who inspireth the true sense.'³¹⁹ Concerning the use of learning for understanding the Scriptures, there was, however, a degree of ambivalence. Some recognised that natural philosophy – informed by and strictly bounded by the Bible – could be useful for hermeneutics. The believer's understanding of certain passages would be enhanced by an understanding of certain of the machinations of nature. Calvin, for instance, argues that 'those who are more or less intimately acquainted with those liberal studies [listed as "astronomy, medicine, and all the natural sciences"] are thereby assisted and enabled to obtain a deeper insight into the secret workings of divine wisdom.'³²⁰ Jens Anderson Sinning (d. 1547), a Danish Lutheran professor at Wittenburg then Copenhagen, argued in his *Oratio de studiis philosophicis theologiae studioso necessariis* (given in 1545, published posthumously in 1591) that, in view of the 'innumerable [biblical] passages drawn from the depths of nature; nobody will be capable of understanding or expounding these properly unless he has looked into natural philosophy.'³²¹ Natural philosophy retained, in this albeit restricted sense, its medieval role as a handmaid to theology in that it could be called upon to aid exegesis. Protestant commentators sometimes demonstrate considerable knowledge of the theories of natural philosophy when they expound certain passages – for instance using elemental theories to explain phenomena described in the hexameron such as the aqueous heavens, and both the old and new cosmology to explore how the sun stood still in chapter ten of the Book of Joshua.

Another reason why the application of natural theology was rather more limited in scope in sixteenth-century Protestantism than in Catholicism is the fact that true religion, true worship, was exclusively defined by the Book of God's Word and *not* the Book of God's Works. As Luther insisted in the *Smalcald Articles*, 'God will not deal with us except through his external Word and sacrament.'³²² Calvin said any species of worship that was not 'out of the law [i.e. the Bible]' was sin.³²³ There was, as Walsham discerns, an 'uncompromising rejection of the idea that the material world was capable of containing and transmitting salvific grace' in Reformed theology.³²⁴ Among many Reformed theologians, the very process of imaging was anathema to true worship, even, as in William Perkins' *Warning against the idolatrie of the last times* (1601), when it remained in the mind.³²⁵ God dealt with His people through Word, not image. Physical images were actually a distraction from authentic Scriptural worship, and the world a potential

³¹⁹ Thomas Cranmer, 'On the reading of Scripture', homily I in *Certaine Sermons, or Homelies, appoynted by the kynge Maiestie*, sig. B3v.

³²⁰ I.v.2, CAL, p. 17.

³²¹ Jens Anderson Sinning, *Oration on the the philosophical studies necessary for the student of theology*, trans. Peter Fisher, Facsimilie of 1591 Latin edition printed in Ribe (Copenhagen: The Danish society of language and literature museum Tusculanum press, 1991), 83.

³²² *The Smalcald Articles* (1537), BoC, p. 313.

³²³ I.v.13, CAL, p. 24.

³²⁴ Walsham, *Reformation of the landscape*, p. 82.

³²⁵ Perkins, *Warning against Idolatrie*.

snare. Walsham again summarizes that 'humanity's fatal propensity for making anything perceptible by the eye into an idol turned the natural world itself, metaphorically speaking, into a minefield littered with explosive devices' such that God's creation became 'a deadly threat to the souls of Christian laypeople.'³²⁶ Though the world might originally (like man) have been the image of God, in Christ the image was perfect and in Scripture it was perspicuous. Such antipathy to any visual religious culture alongside the ministry of the Word in worship seriously limited the potential use of the contemplation of the sensible world for devotional use among many Reformed Protestants.

The final restriction on the use of natural theology was the belief that, in the light of the residual effect of man's Fall, it was difficult for the Christian to do properly, especially the unlearned.³²⁷ The Book of Nature required a great deal of diligent study in order to penetrate while Scripture by comparison was easy for the Christian believer to understand. Catholics tended to resist that idea. To them, the interpretation of Scripture needed great care, expertise, and theological training, therefore it could only be entrusted to authorized clergy. Raymond de Sebond, whose *Theologia naturalis* was such a formative and popular text in Renaissance natural theology, actually contrasted the lucidity of nature with the *obscurity* of Scripture!³²⁸ There could not be a position so diametrically opposed to the Protestant doctrine of the perspicuity of Scripture.

When we consider the use of natural theology in Protestant doctrine, as with its possibility, we must attend to the differences between the states of man. There were no positive applications of natural theology for the natural man. The only role that natural theology performed in a pre-fideal context was in justifying the damnation of humanity on account of culpable idolatry. But for the Christian, given true spiritual knowledge and regenerated reason, through the spectacles of Scripture nature could serve to mortify the Christian's pride and help him repent; it could also provoke his praise and buttress his faith. Nature could be called upon to demonstrate and vindicate Scriptural doctrine, and even (for some) could be mined for signs of God's providential will. In these ways, therefore, the Protestants' theological appropriation of the natural world displayed a high degree of continuity with Catholic doctrine that must not be overlooked. But nature was also severely limited in theological usefulness on account of the supreme pre-eminence of Scripture. Arguments from nature were variously viewed as an

³²⁶ Walsham, *Reformation of the landscape*, p. 93.

³²⁷ This, of course, must be held in paradox with the transparent ease with which men could have had knowledge of God and acceptable worship of him from nature. The paradox is resolved, as ever, by distinguishing between the original, fallen, and regenerate conditions of man.

³²⁸ 'The Book of Nature cannot be corrupted nor effaced nor falsely interpreted. Therefore the heretics cannot interpret it falsely: from this Book no one becomes an heretic. With the Bible, things go differently.' (*Item primus liber scilicet nature non potest falsificari nec deleri neque false interpretari: ideo heretici non possunt eum false intelligere nec aliquis potest in eo fieri hereticus. Sed secundus [libri] potest falsificari & false interpretari et male intelligi.*) SLAT, sig. a3r. Translated in SAPX, p. lvii.

irrelevance (Scripture supplied all that was necessary) or an irreverence (hearing the Word rather than seeing the image was the mark of true religion).

iv. Implications for natural philosophy

The Protestant doctrine of natural theology had several implications for the study of natural philosophy. In the first place, many Protestants thought the contemplation of God's creation akin to a holy *obligation*. Part of worshipping God in body, soul and mind was to exercise the intellectual faculties in meditating on the Book of Nature that God had set before the eyes of man in order to see His Scriptural attributes painted large in the visible universe. The duty of reading and comprehending this book (with the spectacles of Scripture) was second only to reading and comprehending the book of God's Word. Calvin explained,

It becomes man seriously to employ his eyes in considering the works of God, since a place has been assigned him in this most glorious theatre that he may be a spectator of them.³²⁹

It would be to the Christians' great shame if the heathen, not having the necessary spiritual insight of a Scriptural natural theology, were more rigorous in investigating God's creation.³³⁰ The study of God's works ought to be the expression of a practical doxology. Luther thought that the predilection for natural knowledge was part of the fabric of man's nature and an imprint of the divine nature: astronomical investigations were 'a spark of eternal life, in that the human being busies himself by nature with this knowledge of nature.'³³¹ Bucer explained 'the duties of a Christian' included 'the professions of good arts and all honourable branches of learning, since without the cultivation of these we would necessarily be destitute of the greatest blessings, and those which are peculiar to mankind.'³³² Hieronymous Zanchi (1516-1590) argued that the contemplation of nature was fitting for man's unique natural equipping and the exercise of the Christian's regenerated intellectual faculties. Man was the only creature made to stand upright and with the ability to direct his gaze around the pantheon of God's Works. For Christians, therefore, the contemplation of the natural world ought to lead to wonder at and worship of God, acting as a spur to piety and a deeper knowledge of God's attributes.³³³ Natural philosophy was, in a sense, the fulfilling of man's redeemed natural ability. Just as Adam's work in innocence was the contemplation and stewardship of the creatures in praise of God, so too was it the duty of the regenerate.

³²⁹ I.vi.1, *CAL*, p. 27.

³³⁰ Calvin makes this point at II.ii.16, *CAL*, p. 168.

³³¹ Luther, *Luther still speaking*, p. 46.

³³² *The Tetrapolitan Confession* (1530), chapter VI, 'Of the duties of a Christian,' *CCH*, p. 61.

³³³ Kusukawa, *Transformation of natural philosophy*, p. 206.

Some Protestants went far indeed in lauding the religious benefits of natural philosophy. The Lutheran Jens Anderson Sinning, for instance, spoke even of the *necessity* of natural philosophy in the education of theologians. The religious utility of natural knowledge as defined by Sinning conformed to the patterns of Protestant orthodoxy. First, it was conducted only in the context of saving, Scriptural faith: natural philosophy did not *inform* religion as if it was epistemologically prior – but subsequent to the articles of faith (which were themselves ‘far beyond the bounds of reason and even nature’) it could be used to explain and illustrate.³³⁴ Second, the theological use of natural philosophy was anticipated in Scripture: biblical authors had established the pattern of extolling God’s Works ‘to declare the divine power, wisdom, prudence, goodness and kindness towards us which are to be observed in His creatures.’³³⁵ Third, the result of natural contemplation was edificatory: to buttress faith already received (‘for the pious, even simple consideration of the universe substantiates faith in God,’) to increase wonder at God’s power (‘it sustains and magnifies their awe of Him’) and to provoke praise (‘such observers are more inspired with wonder and love towards God than men who have achieved no greater awareness of these phenomena than cattle’).³³⁶ Natural philosophy was an holy and necessary obligation according to Sinning for those who would learn theology: but the end of the study of philosophy was *not doctrinal* but practical and pastoral – the better understanding of Scripture and the incitement to wonder and praise for God’s glory displayed.

After the Fall man’s motivations for knowledge of the natural world were sinful, filled with curiosity, pride and ambition to be like God. But Scriptural faith restored natural philosophy from its vanity of motivation so that it could become what God had intended – the work of the garden, the exercise of the mind, the dominion of humanity, and a cause of praise and gratitude to God. It was, Calvin insisted, because one was ‘recognising the divine perfections in the creation of the world,’ that the contemplation of nature had to be conducted with religious diligence, care and zeal; ‘we may not run our eye over them with a hasty, and, as it were, evanescent glance, but dwell long upon them, seriously and faithfully turn them in our minds.’³³⁷ Because the study of nature was the spiritually enlightened study of the creatures that bore God’s image, it had great dignity and deserved meticulous rigour.

Protestant natural theology, moreover, dictated what was expected of the philosophical investigation of God’s works: it must demonstrate the glory of God, His character and attributes, as revealed in holy Scripture; it must inspire repentance, wonder, praise, thanksgiving and piety. Scholars have noticed that the magisterial reformers’ natural theology must have been linked to their attitude towards natural philosophy. We must beware, however, inverting the cause-and-

³³⁴ Sinning, *Oration*, p. 79.

³³⁵ *Ibid.*, p. 84.

³³⁶ *Ibid.*, pp. 84-85.

³³⁷ L.xiv.21, *CAL*, pp. 102, 101.

effect linking the two. For instance, Luther's rejection of Aristotelian philosophy was not the *cause* of the relative neglect of natural theology in sixteenth-century Lutheranism, as Regin Prenter asserts.³³⁸ Instead, Luther's principled objection to the roles that natural *theology* was thought to occupy in Medieval and Renaissance Catholicism informed his rejection of the accuracy and worth of ancient pagan natural *philosophy*. Luther's anthropological and soteriological doctrines mitigated strenuously against crediting Aristotle with genuine and worthwhile insight into the attributes of God or indeed the machinations of His world.

Protestants thought that the true Scriptural natural theology was the foundation of true natural philosophical knowledge. For a right understanding of the creation, a right understanding of the Creator and His expressed truths about the character and purpose of nature was necessary. 'Your idea of nature is not clear,' wrote Calvin, 'unless you acknowledge him to be the origin and fountain of all goodness.'³³⁹ In this vein, Luther argued that the pagan Aristotle had no real knowledge of nature at all; those who claimed to know some of the occult properties of natural things, lacking the Spirit of God, only *imitated* true knowledge of nature.³⁴⁰ Scripture was needed in order to root natural philosophy in truth. There was a parallelism between the necessity of Scripture for a true natural theology and its necessity for a true natural philosophy. Not only was God's Word needed in order to enlighten blind eyes about what the creation said about Him, but also about how the creation was structured and functioned in itself. For instance the doctrines of providence, creation *ex nihilo* of the world in time, and the divine self-image inhering in man were the essential building blocks of a true philosophy of nature. Protestant biblical literalism applied to the Mosaic hexameron made the opening chapters of Genesis a foundational text for Protestant natural philosophy. Its meaning was not allegorical, but historical; not just spiritual in content and intent, but also physical. As Luther put it plainly (in rejecting the interpretation of 'let there be light' to refer allegorically to the concurrent creation of angels) 'Moses is here historically recording facts.'³⁴¹ Since it was an *historia creationis* with the guarantee of divine infallibility, it was of immense usefulness for philosophy.³⁴² Though it might indeed be accommodated to the capacities of his hearers, (Calvin had argued in his commentary that Moses was 'framing his speache and reasons after a common and grosse manner')³⁴³ and

³³⁸ Regin Prenter, 'Philosophical theology,' in Gassmann, Larson and Oldenburg eds., *Dictionary of Lutheranism*, pp. 1890-91.

³³⁹ I.ii.2, *CAL*, p. 8.

³⁴⁰ This point is from Kusakawa, *Transformation of natural philosophy*, p. 45.

³⁴¹ Luther's commentary on Genesis 1:3, in Luther, *Luther still speaking*, 41. In fact a 'literal interpretation' of Genesis did not always avoid controversy. The aqueous heaven was one such controversy between the Reformed camp, who held that it referred to the first clouds, and the Lutherans, who insisted that the celestial waters mentioned actually still existed despite not being perceptible to the senses.

³⁴² On the impact of the literalist hermeneutic on early modern Protestant science, see Harrison, *Rise of natural science*.

³⁴³ Calvin, *Genesis*, p. 38.

thus contain simplified truths, the certainty of its historical and philosophical accuracy was beyond question.³⁴⁴

The belief that the Bible contained physical truth precipitated two different responses. First, since Scripture was sufficient, no philosophical investigation beyond what was recounted in holy writ was necessary or useful for man to know. Second, Scripture contained natural philosophical truth insofar as it went, but Christian philosophers could use this basis as a springboard for further investigation to the end of the glory of God and the utility of man. The former response that recommended a radical philosophical asceticism drew on an earlier Renaissance sceptical tradition and resembles Luther's early position, but it came to be rejected by the Protestant mainstream and was often the target of severe reproach.³⁴⁵ The latter, that the Bible supplied true and useful *foundational* though not comprehensive knowledge of the world, however, permeated widely throughout Protestant natural philosophy in the late sixteenth century. Natural philosophy could be reformed by basing it not on the fallible and at best, probable findings of the ancient pagans who, lacking revelation, were ignorant of the origin and purpose of the universe, but on the certain basis of Scripture. As a result, Protestant philosophers cited a plethora of biblical sources when writing their natural philosophies, including Genesis, the Psalms and the book of Job. Some writers wistfully regretted the reputed 'lost book' of Solomon which was purported to contain details of ancient near-east flora and fauna with the accuracy and certainty of divine insight.³⁴⁶

Given the orthodoxy of the idea that the Bible provided an invaluable, infallible foundation for natural philosophy, the category of 'Mosaic physicists' or 'Christian philosophers' as a particular subset of late Renaissance Protestant philosophers needs re-evaluation.³⁴⁷ Ann Blair claims that there was a group of philosophers who found the basis of true natural philosophy in the

³⁴⁴ A literal understanding of Genesis was not restricted to Protestant exegetes: for instance, the Jesuit Benito Pereira also held that the Mosaic account should be considered historical. Nevertheless there was an obvious overlap between the belief in the sufficiency, perspicuity and pre-eminence of Scripture and its literalist interpretation that made it a Protestant emphasis.

³⁴⁵ Though within confessional Lutheranism the question of the worth of philosophy and its place in the curriculum of Protestant universities was apparently settled by Luther with the advice of Melancthon by the mid-century, another controversy over the issue sprang up in the 1580s and 1590s when the professor of theology at the University of Helmstedt, Daniel Hofmann (1538-1621), argued once again for the elimination of philosophy from the curriculum on the grounds that it sometimes appeared to allege doctrines contrary to revealed truth. The 'Hofmannian controversy' ended with Hofmann's apology and dismissal in 1601, and though few had taken Hofmann's side, it seemed to some contemporaries to pose a threat to the whole philosophical enterprise.

³⁴⁶ That Solomon was an expert on natural philosophy and may have written a natural history was based on 1 Kings 4:33, 'And he spake of trees, from the cedar tree that is in Lebanon even unto the hyssop that springeth out of the wall: he spake also of beasts, and of fowl, and of creeping things, and of fishes' (KJB).

³⁴⁷ I concede that not all of the philosophers so labelled are Protestant. But Blair (following Johann Amos Comenius) only mentions one Catholic example – Francisco Vallès (1524-1592) – among a plethora of Protestant authors (predominantly Calvinist). The fact is that biblical literalism and the rejection of allegorical readings of such passages, whether applied to Genesis in particular or not, was an identifiably Protestant hermeneutic.

testimony of Genesis and other parts of the Bible, 'to supplement or in some cases to replace Aristotle,' which was a 'radical solution' to the problem of coming up with a Christian physics.³⁴⁸ But if there is a particular group of 'Mosaic physicists,' then what is its peculiar characteristic? If to be a Mosaic physicist was to think that the Bible contained truth on the natural philosophical topics on which it touched, then all late sixteenth-century orthodox Protestants fit into that category. If it refers to those who wished to limit the philosophical endeavour to expounding only what the Bible reveals about nature, then the category becomes tiny, unorthodox, and certainly excludes Lambert Daneau, Otto Casmann (1562-1607), Cort Aslaksson (1564-1624) and the other prominent philosophers that currently comprise its chief membership. Instead, Daneau and others described themselves as 'Christian philosophers' not because the content of their natural philosophy was one purged of all but biblical authority (Daneau for his part cites a plethora of pagan sources approvingly), but because the way they *structured* their arguments and corrected the errant scholastic physics they inherited was biblical, even hexameral and explicitly exposed and rectified those points of the old philosophy that Scripture must rebut.

Unless we properly appreciate the confessional Protestant theology of nature, we could fail to delineate properly between the orthodox and heterodox. For instance, Blair presents the Paracelsians and Rosicrucians as of a kind with Mosaic physicists like Daneau. Even the heretical Jean Bodin is presented as 'a pious philosopher in the Mosaic vein.'³⁴⁹ In view of this equivalence, Blair believes that Francis Bacon (1561-1626), in censuring those who tried to found a new philosophy out of Genesis and Job, 'clearly identifies the project of Mosaic philosophy as a contemporary phenomenon and as a real threat to the proper demarcation of philosophy and religion.'³⁵⁰ But it is unlikely that Bacon had the Christian philosophers such as Lambert Daneau in mind when he critiqued the 'fantastic philosophy and heretical religion' of those who mixed philosophy and theology improperly. Instead, it is much more likely that Bacon intended to rebuke the Paracelsians. There are strong reasons in orthodox Calvinist theology to reject the Paracelsian approach on the one hand while embracing the Christian philosophy of a Daneau or a Casmann on the other. The characteristics of a 'Mosaic physics' approach (biblical literalism, Scriptural certainty, hostility to the errant readings of nature by the heathens) were fully within orthodox Protestant theology. Daneau, Blair's chief example of a Mosaic physicist, is unremarkably theologically and philosophically orthodox in the natural philosophy of his *Physica christiana* (1576). He claims to Christianise physics by reforming the opinions of philosophers in the light of Scripture (nothing extraordinary about that) for the spiritual benefit of Christian believers (nothing unusual about that either). Is Daneau really so remarkable, as

³⁴⁸ Blair, 'Mosaic physics', p. 33.

³⁴⁹ Ibid., p. 46.

³⁵⁰ Ibid., p. 42.

Kusukawa implies, for seeking to 'establish the true and correct teaching about Creation according to the Word of God' – for trying 'to establish the authority of the Scriptures and God over human and pagan knowledge'?³⁵¹ It is easy to overstate the novelty of those called 'Christian philosophers.' Their approach did not even substantially threaten the established scholastic system. As Blair recognises, 'they did nothing but confirm scholastic philosophy from the Bible and were more opposed to Aristotle in words than in reality.'³⁵² The truth is that nothing of what Daneau and other Christian philosophers of that type did would have caused the ire of orthodox Protestant natural philosophers – Bacon included.

How, then, can one separate an orthodox Protestant natural philosophy from a heterodox? There are four different theologico-philosophical positions that have sometimes been conflated with resulting historiographical confusion. First, biblical literalism caused the Protestant (and sometimes Catholic) natural philosopher to posit Genesis as an *historia creationis*. Second, the use of the hexameron, alongside Job, some Psalms and a few other passages, to supply a foundational natural theology and metaphysics that corrected pagan theories and put physics on a Scriptural basis. Third, the belief that natural philosophy must be strictly limited to expounding the pages of Scripture. Fourth, the attempt to use biblical passages allegorically to unearth the occult properties of natural things.

The first thing to recognise in approaching late Renaissance natural philosophy is that the first and second positions were *entirely orthodox*. These two Scriptural approaches to the study of nature were simply logical outworkings of the Protestant doctrines of the inerrancy and perspicuity of Scripture in the realm of philosophy. 'Because these facts are revealed by the sacred Scriptures,' said Luther of the biblical lessons concerning the celestial spheres, 'they are certain.' Any theories not derived from Holy Writ did not enjoy the same certainty: 'Although the rest of the ideas have the support of experience, they are not so sure, because experience can be deceiving.'³⁵³ But the third approach (that natural philosophy must not enquire beyond that which Scripture plainly contains), and the fourth (that natural mysteries could be sought in an allegorical reading of holy writ) were departures from the ordinary understanding of how the Bible related to the study of the natural world.

Though all it contained was true, for most Protestants, the hexameron was not thought exhaustive. Natural philosophy was not to be despised because the regenerated faculty of reason was a great gift of God and because the contemplation of the creation was man's intended

³⁵¹ Kusukawa, *Transformation of natural philosophy*, p. 206. Daneau's *Physica Christiana* is given as the example of a strict Calvinist natural philosophy as distinguished from Lutheran – but there is nothing in Kusukawa's characterisation of the Frenchman's book that would not have been readily endorsed by Luther or Melancthon.

³⁵² Blair, 'Mosaic physics', p. 55.

³⁵³ Luther, *Genesis*, p. 44.

paradisiac occupation. The Christian's design to penetrate the things of nature beyond that which was contained in Scripture was not vain curiosity. Moses' *theological* purpose in explaining how nature came about was certainly fully supplied by his written testimony, but 'Moses doth not here curiously intreat of the secrets of nature, as a Philosopher,' wrote Calvin – so the book of philosophy had not been closed, but opened, by the Mosaic record. Natural philosophy that took the Scriptures as the point of departure from which it found out much more, had both divine sanction and purpose:

That diligence or science is not to be disallowed or condemned: as certeine phrentike persons are wont to doe...For Astrologie [i.e. astronomy] is not onely pleasant to be knowen but also verie profitable. It cannot be denied but that the same Art doth set forth the wonderfull wisdom of God.³⁵⁴

Those who sought through anagogical and allegorical readings of Scripture clues to unlock and control the occult properties of natural things erred in the way they understood the relation of God's Word and God's Work. The two Books were both true revelations of God, but their content, though fully congruent, was not identical and their relationship not symmetrical. But just as nature did not contain all theological truths, neither did Scripture dictate all natural ones. Moreover, the Paracelsians' method of allegory and personal inspiration implicitly denied the perspicuity of Scripture. By so closely identifying nature and Scripture and undermining the differences in their content, manner and purpose, the Paracelsians actually elevated the potentiality of human cognition of God and denigrated the transcendent supremacy of the Word. Both their theology of nature and theology of Scripture were unacceptable to orthodox Protestants. Bacon was just one who criticised the Paracelsians for their heretical religion and spurious philosophy. These had, as it were, 'read between the lines' of Scripture in order to posit philosophical methods and theories, offending both philosophical and hermeneutic integrity. There was, then, a gulf between orthodox Protestants, including the 'Mosaic physicists,' and the Paracelsians due to their fundamentally different views of natural revelation.

Given the need for the Holy Spirit and Scripture to supply the foundations of natural knowledge, it must be asked why Protestants were yet willing to cite non-Christian natural philosophers. How could the fallen pagan have any knowledge of the world God created and sustains? In the early years of Luther's reforms at Wittenberg, the reformer was inclined to rid the university of all vestiges of pagan natural philosophy. But a radical purge of pagan sources was never effected; instead they were retained because Protestants believed that *common grace* had enabled those natural men to attain philosophical truth. Common grace was what God poured out upon mankind generally. It included His sustenance of the natural world and His preventing the realization of the worst excesses of man's sinful potentiality. Common grace, however, was strictly separated in Protestant theology from saving grace. While man's blind

³⁵⁴ Calvin, *Genesis*, p. 37.

eyes would remain completely incapable of discerning any salvific truth outside of Scripture, God's common grace could help him overcome his intellectual depravity in those disciplines that did not directly concern religion. There was not a division along these lines in Catholic doctrine. According to Catholic theology, the quickening effect of grace assisted progress in both the human arts and sciences and in the knowledge of God. The Catechism of Trent, for instance, explained that 'God...left not himself without testimony, doing good from heaven, giving rains and fruitful seasons, filling our hearts with food and gladness. Hence it is that the philosophers conceived no mean idea of the Divinity.'³⁵⁵ In this example the Catholic catechists have, to Protestant minds, confused God's *common* grace (*viz.* his provision and providence) with his *special* grace (revealing his divine nature and character to man). Most Protestants thought that natural philosophers could enjoy the benefits of God's common grace to the end of true and useful knowledge of matters natural and human.³⁵⁶ Their achievements were considerable not because of the strength of the human mind, but because God dispensed His assisting grace so that fallen minds were 'adorned and invested with admirable gifts from its Creator' to the end of 'the common benefit of mankind.'³⁵⁷ Bullinger agreed that in some things,

God in his mercy has permitted the powers of the intellect to remain, though differing greatly from what was in man before the fall. God commands us to cultivate our natural talents, and meanwhile adds both gifts and success. And it is obvious that we make no progress in the arts without God's blessing. In any case, Scripture refers all the arts to God.³⁵⁸

The adumbrated intellectual power of postlapsarian man continued in the arts, thanks only to both God's forbearance and his assistance. But that in which 'fallen man is not entirely lacking in understanding' was strictly restricted to 'earthly things.'³⁵⁹ Calvin agreed that the sciences in which common grace availed to true and useful knowledge were strictly secular – he listed them as 'physics, dialectics, mathematics, and other similar sciences.'³⁶⁰ When the unredeemed mind applied itself to *theology*, God's common grace no longer assisted and man remained in utter darkness. Nature studied unto *theological* ends had to be directed by God's *special* grace in the revelation of Scripture.

Another implication of Protestant natural theology was in its being used to legislate on natural philosophical theories. Scripture's supreme authority meant that if anything appeared to contradict its teachings, it was to be discarded. Various philosophical positions were

³⁵⁵ CR, p. 17. This 'idea of the Divinity' is expounded to include all manner of metaphysical and moral attributes perceived by the examination of nature that, the Catechism assures, 'are in full accord with Scripture' (p. 18).

³⁵⁶ Calvin, for instance, lauds the 'exquisite researches and skilful description of nature' by the pagan philosophers in II.ii.15 (CAL, p. 167 ff).

³⁵⁷ II.ii.15, CAL, p. 167.

³⁵⁸ *The Second Helvetic Confession* (1566), chapter IX, 'Of free will, and thus of human powers,' CCH, p. 238.

³⁵⁹ *Ibid.*, p. 238.

³⁶⁰ II.ii.16, CAL, p. 168.

inadmissible because they were incompatible with Scriptural natural theology. Calvin, for instance, held the view that 'all things are sufficiently sustained by the energy divinely infused into them at first' illegitimate as it contradicted the Scriptural doctrine of providence. He also argued that 'the Providence of God, as taught in Scripture, is opposed to fortune and fortuitous causes.'³⁶¹ Pagan theories that eliminated the Final Cause and posited efficient causes as the ultimate, or which denied altogether supernatural agency in the created world, were corrected by the Scriptures' natural theological doctrine of providence. This corrective influence was not just for the protection of theology, but also – Protestants believed – for the benefit of philosophy. For instance, regarding the generation of plants from seeds of their own kind, in its pagan ignorance and natural hatred of God, Luther said that 'Philosophy does not know the cause of these phenomena and ascribes them to nature.' The Christian, however, from revelation knew 'that nature was so created through the Word that the seeds and the kinds of plants are preserved.'³⁶² Similarly, wicked and ignorant human reason could surmise nothing but the eternity of the world: 'we know, however, from Moses, that the world did not exist six thousand years ago.'³⁶³ Because of their wrong theology, therefore, the pagan philosophers could provide no insight into the creation of the world as it was known only by Christian faith: 'neither among the Jews, nor among the Latins, nor among the Greeks,' summarised Luther, 'is there one leading teaching to be found whom I can therein in any way follow.'³⁶⁴ Frequently, Protestant philosophers blamed what they regarded as the sorry state of natural philosophy on the acquiescence of the Catholic Schoolmen with the errant natural theologies of ancient non-Christians. Aristotle's errant opinion about God, derived from his natural mind's survey of the natural world, had infected natural philosophy. According to Francis Bacon, Aristotle substituted Nature in the place of God (a natural theological position regarding Final Causality) that, alongside its deplorable religious impiety, resulted in a moribund natural philosophy.

It is possible to see Melanchthon's reform of natural philosophy as an outworking of Lutheran natural theology. First, there was an urgent need to purge the natural sciences of the effects of the pagans' vain optimism regarding the theological potential of the study of nature.³⁶⁵ Aristotle's lack of revealed insight meant that his physics was based on the principles of the infinity and eternity of the world, the mortality of the soul, and the power of human language in comprehending natural phenomena; therefore containing, as Luther put it, 'no real knowledge of the world of nature.'³⁶⁶ But more sinister still was the Philosopher's assertion that natural

³⁶¹ I.xvi.1-2, *CAL*, p. 114.

³⁶² Luther, *Luther still speaking*, p. 37.

³⁶³ *Ibid.*, p. 24.

³⁶⁴ *Ibid.*, p. 24.

³⁶⁵ See Kusukawa, *Transformation of natural philosophy*, p. 33.

³⁶⁶ Luther's letter to Spalatin, 13 March 1519, in Martin Luther, *Letters*, trans. Gottfried G. Krodel, Luther's works, ed. Jaroslav Pelikan, vol. I (St Louis, Philadelphia: Concordia, 1972), pp. 111-15; cited in Kusukawa, *Transformation of natural philosophy*, p. 40.

reason was the route to divine knowledge.³⁶⁷ Confidence in intrinsic human ability had caused the heresies of medieval Catholicism, from the justificatory efficacy of good works to the sale of indulgences. Rather than being a bridge to salvation, medieval natural philosophy was a spiritual stumbling block. Melanchthon reformed natural philosophy so that it claimed no prescriptive theological authority or soteriological value. But the study of nature in Melanchthon's curriculum retained the theological applications consistent with the Lutheran doctrine of natural revelation. The *Initia doctrinae physicae dictata* (1550) began with the discussion of the attributes of God (including nine *a posteriori* 'proofs' of His existence – the veracity of which was based on Scriptural explanation), since the physical world had to be understood in the context of its being the creation of an omnipotent and eternal Deity. The knowledge of God upon which Melanchthon's natural philosophy touched was knowledge only of God *qua* Creator and Judge – it did not (could not) concern His character revealed in the Gospel. Melanchthon's natural philosophy emphasized the wisdom of God from the intricacy of the human body, the lowliness and depravity of man from a contemplation of the soul, and the providence of God by consideration of the natural law.³⁶⁸ All of the theological applications of Melanchthon's reformed natural philosophy concerned the dispensation of Law: the law of God the Creator and Judge, the natural law of His orderly government of the world, and the curse of fallen man under the law he knew but failed to keep. Though philosophy knew nothing of the Gospel but only the Law, it is not necessary to say that 'his natural philosophy could not have been any form of theology.'³⁶⁹ Melanchthon's natural philosophy kept those theological applications that pertained to the role of Law in Lutheran theology. Kusakawa's analysis of Melanchthon's motivations in reforming natural philosophy could perhaps be broadened. Though natural philosophy undoubtedly became in Melanchthon's hands a formidable defensive weapon to defend Lutheran doctrine against Catholic (and Calvinist) opponents and a spur to teach the natural grounds of civil obedience amid Anabaptist unrest, his reforms in natural philosophy can be put in a broader theological context. The Lutheran doctrine of natural revelation provides theoretical theological reasons for Melanchthon's reform of natural philosophy. Natural philosophy being a philosophy of Law-not-Gospel was motivated not only by the practical need to teach civil obedience but because the Protestant view of natural theology demanded it.

³⁶⁷ Kusakawa, *Transformation of natural philosophy*, p. 44.

³⁶⁸ See *ibid.*, pp. 88-105.

³⁶⁹ *Ibid.*, p. 167.

Conclusion

There is undoubtedly a paradox regarding Protestant natural theology – it is ubiquitous yet illegitimate; irrelevant yet obligatory; irreverent yet holy; extensive and yet limited. Scholars have understandably struggled to solve it. One of the most recent attempts to re-evaluate Protestant (in this case, Lutheran) natural theology has been mounted by Robert C. Koons. Koons challenges the scholarly consensus that natural theology had no place whatsoever in sixteenth- and seventeenth-century Lutheran doctrine.³⁷⁰ Much of his argument is correct; in particular his recognition that ‘the theology of Law is known by human reason; the theology of gospel is revealed only in Christ and is received by faith’.³⁷¹ Koons, however, has not solved the paradox that he recognises. He argues that for Luther, ‘our evangelical knowledge of God is possible only because of our prior, legal knowledge of God’s existence,’ while at the same time asserting that ‘natural knowledge of God does men absolutely no good, serving only to bring them under a universal condemnation.’³⁷² Which is it? Is it an essential intellectual preparation for receiving the Gospel, or is it utterly vain? Koons never draws the essential distinction between what I have called pre- and post-fideal natural theology. If natural theology is defined as the activity of natural reason, seeking knowledge of God from a contemplation of the natural world independently of divine revelation, then Koons is surely mistaken to allege ‘a continuous and uninterrupted endorsement of natural theology by theologians of the Lutheran confession, beginning with Luther himself.’³⁷³ It is my intention to resolve the apparent paradox regarding Protestantism and the place of natural theology. The role of natural theology in Lutheran doctrine is neither what Koons anachronistically asserts (that it is a propaedeutic to faith) nor what many scholars have assumed (that it has no place in the doctrinal system). Natural theology if defined correctly is used either to justify the damnation of the unbelieving or, through the illumination of the Word, to edify the Christian believer.

i. The impossibility of pre-fideal natural theology

There are two mistakes regarding natural theology and sixteenth-century Protestantism, therefore, that need to be carefully avoided. The first is to argue that there was no place in Protestant doctrine for natural theology; and the second is to assert uncritically that there was. In order to understand the Protestant view of the revelatory character of the physical creation, it is essential to delineate between the three states of man. The Protestant confessions were absolutely committed to the principle that nature was God’s revelatory Book. The Book of

³⁷⁰ Koons, *The place of natural theology in Lutheran thought*, pp. 2-3. He has not studied Luther so closely as he might. When, for instance, he asserts the biblical basis for natural theology in the nineteenth Psalm, he shows no familiarity with Luther’s exegesis that contended the Psalm referred to the external word of the preached Gospel.

³⁷¹ *Ibid.*, pp. 5, 10.

³⁷² *Ibid.*, pp. 11, 8.

³⁷³ *Ibid.*, p. 22.

Nature was limited in content, however, because it only revealed God as Creator, Judge, and Father; not as Redeemer. It was also limited in method by the rejection of allegorical and analogical signification as an admissible hermeneutic. Nevertheless, Adam's perfect intellectual faculties enabled him to discern a great deal about God. But with the Fall, natural theology became utterly impossible. Man was blinded by the effects of sin inhering in his natural faculties so that none could discern any truth about God from the creation. This natural theological pessimism contrasted with the Catholic principle that the heathen by diligence and intelligence participate to a degree in theological truth.

ii. *The effect of faith for natural theology*

By faith – the gift of saving grace – man's faculties, however, were regenerated and restored to the spiritual potency they had had in his innocence. The spectacles of Scripture provided sight to man's naturally blind eyes so that he could know the truth about God. Those spectacles, moreover, could be trained upon the Book of Nature so that it could be read aright. The visible world now served as a testimony to the character and attributes of the God revealed in the Bible: natural theology was redeemed by the effects of faith.

iii. *The purpose of natural theology*

The threefold state of man must also provide the context for discerning the purposes of natural theology. For Adam, nature could and did provide a theology that was sufficient for felicitous spiritual life; but that was only an historical state with no practical contemporary application. Postlapsarian, pre-fideal natural theology had no positive role. It could not function – unlike in Catholic theology – as an intellectual, moral, or spiritual propaedeutic to faith, for, on account of man's blindness it led *away* rather than towards the truth, to a false hope in works-righteousness and an evil and culpable idolatry. It served only the negative apologetic function of justifying God's judgement of unbelievers, testifying to the law which man knowingly transgressed so that he was without excuse. This contrasts with the Catholic orthodoxy in which sincere religious pagans could more or less approximate to theological truth and merit. But the post-Scriptural natural theology of the Christian could have a range of applications, engendering lifelong repentance, vindicating doctrine, and edifying believers by a visible demonstration of the omnipotence (and various other attributes) of God. In the context of Scriptural teaching concerning – in particular – original sin and God's providence – nature became a valuable buttress to evangelical faith. Despite these applications, the pre-eminence of Scripture on the grounds of clarity and sufficiency meant that nature, even though a great Book about God, did not come close to Scripture in dignity and worth.

This more rigorous understanding of the doctrine of natural theology in the context of the threefold state of man puts us in a position to see why scholars have disagreed so vehemently about its place – even its existence – in confessional Protestantism. If natural theology consisted of extra- or pre-Scriptural reasoned argumentation that was aimed to lead to true knowledge of God and religion, then it had no place in Protestant doctrine. But if natural theology concerned the contemplation of nature for theological knowledge – and this in the context of true faith and the Scriptures – then it absolutely had a place. We must distinguish, therefore, between the pre-fideal and the post-Scriptural when we consider examples of Protestant natural theological arguments. When the wisdom or power of God is said to be revealed in natural phenomena, it is invariably with Scriptural direction and having assumed the possession of saving faith. The theological deductions of non-Christians based on their natural observations are never met with approbation.

iv. Implications for natural philosophy

The contemplation of the world as a means of knowing and praising God was the work of man in his innocent state, and, by the regeneration of the Holy Spirit and the equipping of the Scriptures, was the work of the Christian also. It was, therefore, something akin to a holy obligation to discern and set forth the attributes of the Creator manifest in the creation. A right natural theology, learned from the Bible, was foundational to a right natural philosophy. The Scriptures' testimony concerning what nature revealed about God, ensured that natural philosophy was established on certain truth. Putting together the Protestant doctrines concerning natural revelation and its relationship to Scriptural revelation suggests more meaningful ways to delineate between Protestant orthodoxy and heresy in the field of natural philosophical enquiry. The principle that Scripture and the Holy Spirit were needed to attain any true knowledge of God from nature would appear to prohibit use of the natural philosophy of ancient pagans which, despite some considerable antipathy in the early Reformation, remained extensively cited. The doctrine of common grace by which God checks the effects of sin and assists the operation of the mind, however, resolves the paradox. Common grace, however, extended in no way to the cognisance of divine matters, and so the natural theological insights of non-Christians were not valuable to the Christian philosopher. The Protestants' natural theology, moreover, informed their natural philosophy by legislating on the admissibility of philosophical theories and providing impetus for a reformation of natural philosophy.

IV. Raymond Sebond's *Theologia naturalis* (1484)

Raymond de Sebond,¹ an obscure Catalan monk, was born in Barcelona towards the end of the fourteenth century. He was a professor, first of medicine and philosophy, and latterly of theology at Toulouse where he died in 1436. Sebond's *Liber naturae sive creaturum* was written in the two years before his death and was widely disseminated in manuscript.² It is difficult to establish what motivated Sebond to produce his book and who he hoped would read it. Jaume de Puig makes a case for its targets being some radical thinkers in the Aragon court, perhaps with an anti-Muslim purpose in the wake of the conversion of the Franciscan Anslem Turmeda (1355-1423).³ The book was edited from its unscholarly Catalan-Latin into a classical Latin by the time it first appeared in print (Lyon, 1484); after its second printing (Deventer, 1485) it was invariably referred to as the *Theologia naturalis*. The Latin text was published at least thirteen times by 1648, four of which editions were published between the beginning of the Reformation and the close of the sixteenth century (Lyon 1526, 1540, 1541; Venice, 1581). Among those we know to have possessed a copy of Sebond's book are the philosophers Nicolas of Cusa, Jacques Lefèvre d'Étaples (c. 1455-1536), Beatus Rhenanus (1485-1547), and Charles de Bouelles (1475-1566).⁴ Montaigne's translation into French in 1569 was one of at least six French editions printed by 1605.⁵ Sebond's book was also adapted into a dialogue called *Viola animae* by Pierre van Diest (1454-1507), first published in Cologne in 1499, going through nine editions in the sixteenth century. This shortened version of Sebond's tome was in turn translated into Spanish by Petrus de Hagembach (d. c.1507) in 1500, and by Francisco Fernandez de Cordoba (d. c. 1518) in 1549; and into French by Jean Martin (d. 1553) in 1551, being reprinted itself in 1555 and 1556. There were even numerous derivative versions of the *Viola*.⁶ I. S. Révah has dedicated an entire booklet to the considerable dissemination and influence of Sebond in the sixteenth-century Iberian

¹ There are various spellings of his name. In the Catalan dialect, according to J. M. De Bujanda, his name was rendered 'Raimundo Sibiunda' (Jesús Martínez de Bujanda, 'L'influence de Sebond en Espagne au XVIe siècle', *Renaissance and Reformation* X (1974), pp. 78-84, at p. 78). I have preferred to use 'Sebond', the name used most often in subsequent scholarship, including by Michel de Montaigne.

² Friedrich Stegmüller found 15 surviving manuscript copies from the fifteenth century. Raymond Sebond, *Theologia naturalis seu liber creaturarum. Mit literargeschichtlicher Einführung und kritischer Edition des Prologs und des Titulus I*, ed. Friedrich Stegmüller (Stuttgart: Frommann, 1966).

³ See Jaume de Puig, *Les sources de la pensée philosophique de Raimond Sebond (Ramon Sibiuda)*, Etudes montaignistes (Paris: H. Champion, 1994).

⁴ See Screech, 'Introduction', xxii, and Bujanda, 'Sebond en Espagne', p. 79.

⁵ Thirteen Latin editions: 1484, 1485, 1496, 1501, 1502, 1507, 1509, 1526, 1540, 1541, 1581, 1635, 1648. Six French editions – trans. Bernard Lecuyer: 1519; trans. Montaigne: 1569, 1581, 1603, 1605; trans. Ian Martin: 1566, 1661. Enumerated in Fruchtbaum, 'Natural theology and the rise of science', p. 59; with more added by Bujanda, 'Sebond en Espagne', pp. 78-79.

⁶ Consult Bujanda, 'Sebond en Espagne', p. 79 for details on the Spanish versions of the text in the mid-sixteenth century.

peninsula.⁷ Given the prolific late-Renaissance circulation of the book, it is appropriate to treat its arguments (despite its composition in the 1430s) as characteristic of beliefs held within sixteenth-century Catholicism.

But we must also issue a caveat if we are treating Sebond as representative of sixteenth-century orthodoxy, since the *Theologia naturalis* was put on the indices of prohibited books in Rome (1559 and 1564) and Madrid (1583), as was the version *Violetta del anima* (Valdes, 1559).⁸ The evidence suggests, however, that the bulk of the work was fully acceptable to the papal censors. Michel Simonin has sought to demonstrate that the *Theologia naturalis* was uncontroversial,⁹ while J. M. de Bujanda explains that its inclusion on the Index of 1559 was itself controversial, causing 'concern among some influential Jesuits in the Roman Curia.'¹⁰ It is worth noting that Montaigne's translation of the work was never condemned. The problem with Sebond's book was with parts of its prologue, specifically singled out in the Tridentine Index of 1564.¹¹ The prologue offended because in it Sebond had argued that God's revelation was final and complete in Scripture, which could be interpreted as an affront to the Catholic Church's claims of institutional divine authority.¹² With the short prologue removed or, as in Montaigne's translation, corrected (his edited version of the prologue was never condemned), the *Theologia naturalis* circulated without controversy.¹³

Sebond's *Theologia naturalis* was the most complete work specifically devoted to natural theology available to Renaissance readers. It contained all the key features of medieval natural theology.

⁷ I. S. Révah, *Une source de la spiritualité péninsulaire au XVIème siècle: la "théologie naturelle" de Raymond Sebond* (Lisbon: Academia das Ciências de Lisboa, 1953).

⁸ See Jesús Martínez de Bujanda, Francis M. Higman and James K. Farge, *Index des livres interdits*, 8 vols. (Sherbrooke, Québec, Canada & Geneva, Switzerland: Centre d'études de la Renaissance: Droz, 1984), vols VIII, pp. 668-69 and VI, p. 521.

⁹ Michel Simonin, 'La préhistoire de 'Apologie de Raimond Sebond'', in Claude Blum ed., *Montaigne, Apologie de Raimond Sebond: de la Theologia à la Théologie: études*, Etudes montaignistes (Paris: H. Champion, 1990), pp. 85-116.

¹⁰ 'L'inclusion de la *Théologie Naturelle* dans l'Index de livres interdits publié par Paul IV en 1559, provoque une certaine inquiétude parmi quelques Jésuites influents dans la Curie Romaine.' Bujanda, 'Sebond en Espagne', p. 79. The work's popularity among the Jesuits, Bujanda speculates, may have been due to its resemblance to the *Spiritual Exercises* of the movement's founder, Ignatius de Loyola.

¹¹ The entry reads 'Raymundus de Sabunde, prologus in theologiam naturalem.' *Index Librorum Prohibitorum, cum Regulis confectis per Patres a Tridentina Synodo delectos, auctoritate Sanctiss. D.N. Pii IIII, Pont. Max. comprobatus* (Venice, 1564), sig. D6r.

¹² The fourth session of the Council of Trent, in April 1546, in the 'Decree concerning the canonical Scriptures', explained that God's word was 'contained in the written books, and the unwritten traditions which, received by the Apostles from the mouth of Christ himself, or from the Apostles themselves, the Holy Ghost dictating, have come down even unto us, transmitted as it were from hand to hand.' Anyone deliberately denying these traditions was declared *anathema*. Waterworth ed. *Canons and decrees of the Council of Trent*, p. 18.

¹³ There have been differing views concerning how much Montaigne used his editorial discretion in translating Sebond into French. Joseph Coppin attested Montaigne's faithfulness to the Catalan, while Philip Hendrick thinks Montaigne watered down Sebond's optimism in man's ability to know God by reason, while heightening the difference between the pre- and post-lapsarian state of man. To that debate I do not propose to make any contribution. See Joseph Coppin, *Montaigne, traducteur de Raymond Sebond* (Lille: Morel, 1925) and Philip Hendrick, *Montaigne et Sebond: l'art de la traduction*, Etudes montaignistes (Paris: H. Champion, 1996).

Indeed the *Theologia naturalis* was characterised by one of Montaigne's father's friends (Adrian Turnèbe, 1512-1565) as a sort of 'quintessence extracted from Saint Thomas Aquinas.'¹⁴ Jaume de Puig has charted the veiled quotations and arguments from Augustine, Anselm, Scotus, Lull, Bonaventure and Bernard among others.¹⁵ The popular title of Sebond's book popularised the phrase 'theologia naturalis' as a catch-all for the branch of theology that could be known by the contemplation of nature.

The *Theologia naturalis* was the fullest expression of an 'optimistic' natural theology available to Renaissance Catholics. Properly considered, nature could teach man 'every truth necessary...concerning both Man and God; and all things which are necessary...for his salvation.'¹⁶ In the first place, man could accurately discern the existence and attributes of God from the study of His works. Scholastic commonplaces, from the ontological argument to the moral, are included. In the hierarchical structure of the universe, a divine order of efficient dependence and normative teleology revealed God as the voluntary Creator and Sustainer of the world. From an independent, logical, reasoned examination of the observed metaphysical and physical properties of the world, various aspects of God's divine nature were necessarily derived. Sebond begins with the usual metaphysical attributes:

From [the world] we have argued infallibly that the maker and creator of the world is life, sense, understanding, will and power... We have discovered the most noble and most perfect properties and conditions of the divine essence, which is without beginning, immutable, incorruptible and eternal, and that all these attributes are also appropriated by the same reason as his intelligence, life, power, and his other qualities.¹⁷

Sebond also extolled the moral character of God from nature and boasted that, by combining all these metaphysical attributes and moral qualities, 'we arrive at perfect knowledge of the divinity.'¹⁸ More remarkably, however, Sebond thought nature could teach the Trinity and Incarnation. Others might have said these 'mysteries' of the Christian religion were known only

¹⁴ *Apologie de Raimond Sebond*, in Michel de Montaigne, *The essays*, ed. and trans. Donald M. Frame (Chicago & London: Encyclopaedia Britannica, 1990), p. 249.

¹⁵ Scharrschmidt thinks Lull was the inspiration for Sebond's method and object (K. Schaarrschmidt, 'Raimundus de Sabunde', in J. J. Herzog, Philip Schaff, Albert Hauck, Samuel Macauley Jackson, Charles Colebrook Sherman and George William Gilmore eds., *The new Schaff-Herzog encyclopedia of religious knowledge*, vol. IX (New York & London: Funk and Wagnalls, 1908), pp. 383-84). For the variety of patristic and medieval sources used by Sebond, see Puig, *Les sources de Raimund Sebond*.

¹⁶ 'Ista scientia docet omnem hominem cognoscere realiter sine difficultate & labore omnem veritatem homini necessariam tam de homine quam de deo et omnia qu[a]e sunt necessaria homini ad salutem & suam perfectionem & vt perueniat ad vitam eternam.' *SLAT*, fol. a2r. Translated in *SSCR*, p. xxiii.

¹⁷ 'L'estre du monde, qui est comme vn corps diuisé & departi en quatre membres, nous a seruie de marche, pour nous en leuer à la cognoissance de l'autre estre, par lequel il a esté de nouueau produit du neant... Par la nous auons infalliblement argumenté, que le facteur & createur du monde est vit, sent, entend, veut & peut, & que toutes ces parties sont mesme chose avec son estre. Nous auons descouuert les tres-nobles & tres parfaites proprieté & conditions de l'essence diuine, comme elle est sans commencement, immuable, incorruptible &ernelle, & comme toutes ces circonstances s'approprient aussi par mesme raison à son intelligence, à sa vie, à sa puissance, & autres siennes qualitez.' *SMON*, pp. 67-68. Throughout, unless otherwise indicated, I have translated from Montaigne's French translation of Sebond.

¹⁸ 'Or accouplant les vnes aux autres... comme estant mesme chose entre elles & mesme chose avec son estre, nous arriuons à la parfaite cognoissance de la diuinité.' *SMON*, p. 68.

by revelation. Not so Sebond. Taking the example of the Trinity, Sebond argues that 'from the creation of the world from nothing we conclude the creation of another divine nature of complete likeness to God.'¹⁹ Thus begins the philosophical process by which he arrives at not only a triune God, but even the relationship of the persons of the godhead in the Trinity itself (the generation of the Son and the procession of the Spirit): 'Thus we have on our own behalf found a God in Trinity, one in essence and triple in person.'²⁰ The study of nature afforded man a full doctrine of God.

Second, natural theology also taught him 'the rule of nature,' that is to say, natural law, or 'what he is naturally bound towards God and his neighbour.'²¹ Knowledge of man himself was absolutely essential for the religious and philosophical life. The contemplation of nature for religious ends began with contemplation of the self; the natural being that was both immanent to the beholder and which bore the clearest witness to the divine creator of the visible creatures. Sebond's book focuses at great length on man's body and natural and supernatural faculties. Sebond's natural theology 'teaches man to know himself, to know why he has been created and by Whom; to know his good, his evil and his duty.'²² Not only was Sebond's reader implored to see in his own body and soul the likeness of God, but also to contemplate his own depravity. Natural theology taught him 'the corruption and defects of Man, his condemnation and whence it came upon him.'²³ Part of Sebond's end was to effect a kind of contrition that would lead to dependence on the grace of God and reformation of the self. In teaching him his depravity it also preached 'how he can be reformed and those things which are necessary to bring this about.'²⁴ From nature, therefore, one could have an extensive and effective theology: from its lowly, earthy beginnings, this science climbed to the 'great and worthwhile fruit' of 'the knowledge of God and of Man.'²⁵

Sebond's essential premise behind his *Theologia naturalis* was that nature comprised the first revelation about God and man. It was the universal revelation to all men both because of its literal ubiquity and, as we shall see, the ease of learning its lessons. It stood alongside the later

¹⁹ 'Par la creation du monde faite de neant nous concluons la creation d'une autre nature diuine & toute pareille à celle de Dieu.' *SMON*, p. 69.

²⁰ 'Voila comment par nostre ordre nous auons trouué vn Dieu en Trinité, vn en essence & triple en personne', *SMON*, p. 95.

²¹ 'Scientia libri creatura... de regula natur[a]e per quam etiam cognoscit quilibet omnia ad quae obligat naturaliter, tam deo quam proximo.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lv.

²² 'Ista scientia docet hominem cognoscere seipsum & propter quid factus sit & a quo factus sit. Quid est bonum suum & quid malum suum et quid debet facere & ad quid est obligatus & cui ipse obligat.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lvi.

²³ '...docet cognoscere omnes corruptiones & defectus hominis & damnationem & vnum venerit homini.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lvi.

²⁴ 'Et docet qualiter reparari potest homo & que sunt necessaria ad suam reparationem.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lvi.

²⁵ 'In fine sequit fructus nobilissimus & infinitus scilicet notitia de deo & de homine.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lvii.

Book of Scripture, but its chronological primacy gave it in some ways a pre-eminence of worth and dignity:

God has given us two books: the Book of the Universal Order of Things (or, of Nature) and the Book of the Bible. The former was given to us first, from the origin of the world: for each creature is like a letter traced by the hand of God.²⁶

Whereas Scripture was written by the hand of man through the agency of the Holy Spirit, Nature needed no intermediary. Whatever was necessary for man to know was made known perfectly and clearly by the Book of Nature:

[God] made this visible world and gave it to us like a proper, familiar and infallible Book, written by his hand, in which the creatures are ranged like letters...so as to teach us the wisdom and science of our salvation.²⁷

Because that Book was given as an accessible and comprehensive revelation of God and religion, Sebond stressed that doing natural theology was remarkably easy. The *Liber Creatorum* claimed to be able to take a natural, unlearned man and make him a scholar of theology. Sebond explained that his science presupposed nothing of the scholastic curriculum,²⁸ while his rigorous effort to make it accessible to the most unschooled of amateur theologians meant that 'it alleges nothing – neither the holy Scriptures nor any of the doctors.'²⁹ The result was a science that 'teaches everyone really to know, *without difficulty or toil*, every truth necessary to Man concerning both Man and God.'³⁰ None of the pedagogical means associated with revealed theology were necessary – no rote learning and no books: natural theology could be practised by layman or cleric and mastered within a month. Nature contained all the same truths as the later revelation (Scripture), accommodated to man's capacity by its being mediated through the senses. Scripture had to be carefully interpreted in the context of a vast reservoir of bookish knowledge and ecclesiastical authority; but Nature was accessible to all. Scripture soared above the workings of man's mind, whereas the tangible book of creatures was 'connatural with us.'³¹

²⁶ In fact, Sebond is even more emphatic: the sense is more that each creature 'was *only* made as a letter written by the finger of God': 'Unde duo sunt libri nobis dati a deo, scilicet liber vniuersitatis creaturarum sine liber nature. Et alius est liber sacre scripture. Primus liber fuit datus homini a principio dum vniuersitas rerum fuit condita quoniam quilibet creatura non est nisi qu[a]edam litera digito dei scripta.' *SLAT*, sig. a3r. Translation above from *SAPX*, p. lvii.

²⁷ 'Propter hoc totum istum mundum visibilem sibi creauit: & dedit tanquam librum proprium & naturalem et infallibilem dei digito scriptum: vbi singule creature quasi litere sunt...ad demonstrandum homini sapientiam & doctrinam sibi necessaria et ad salutem.' *SLAT*, sig. a3v. Translated in *SAPX*, p. lviii.

²⁸ 'Non enim presupponit grammaticam atque logicam neque aliquam deliberalibus scientiis siue artibus.' *SLAT*, sig. a2v. Translated in *SAPX*, p. lvi.

²⁹ 'Et h[a]ec scientia nihil allegat; neque sacram scriptura et neque aliquos doctores.' *SLAT*, sig. a3r. My translation.

³⁰ 'Ista scientia docet omnem hominem cognoscere realiter sine difficultate & labore omnem veritatem homini necessariam tam de homine quam de deo et omnia que sunt necessaria homini ad salutem & suam perfectionem & vt perueniat ad vitam eternam.' *SLAT*, sig. a2r. Translated in *SSCR*, p. xxiii. My emphasis.

³¹ Sebond wrote that the two books fully accorded with each other, 'sed tamen primus [the book of nature] est nobis connaturalis, secundus [Scripture] supernaturalis'. *SLAT*, sig. a2v.

The means of doing natural theology lay within man himself. First, his intellectual faculties were sufficient for the task. God had provided us with 'the means of instructing ourselves in the doctrine which alone is requisite.'³² Natural theology was not something above and outside man's powers of discernment, but a science 'proper to Man insofar as he is man.'³³ Second, natural theology began with reading the self. In the book of creatures, man was 'the principal letter,'³⁴ the image of God, the microcosm of the world and the connection between the natural and supernatural realms. Sebond went so far as to claim that 'there is no need of any other witness but Man.'³⁵ Self-knowledge was the only source of certainty:

Man and his nature must serve as the means of argument and testimony for proving all things concerning man, to prove everything that concerns his salvation, his happiness and misery, his evil and his good: otherwise nothing would ever be certain.³⁶

Third, the contemplation of the rest of the visible creation, both in entirety and in the individual creatures that populated it, would yield fuller theological results:

He who studies and exercises to know them [the creatures], since he knows their natures and their qualities all the better, knows himself and his nobility better, and approaches even further to knowledge of his creator.³⁷

The hierarchical arrangement of beings was, for Sebond, a 'ladder of nature by which man ascends to knowledge of himself and his creator.'³⁸ The scale of being observed in nature in itself witnessed to its divine creator whose essence possessed the perfections of all the creatures in the highest degree. Knowledge of nature and knowledge of God were so closely linked that the neglect of the former, Sebond warned, would be dangerous for the latter: 'let the science of natural things increase all the time in us, so that that of ourselves and of God also increases: and watch lest the diminution of this to ruins will consequently ruin that, and that one imperils the other.'³⁹

³² 'Homo esset capax doctrin[a]e & scienti[a]e quod diuina scientia homini librum creauerit in quo per se sine magistro possit studere doctrinam necessariam.' *SLAT*, sig. a3r. Translated in *SAPX*, p. lvii.

³³ 'Sequit scientia libri creaturarum sive librum naturum & scientia de homine quae est propria homini in quantum homo est' *SLAT*, sig. a2r. Translated in *SAPX*, p. lv.

³⁴ 'Ita componit liber creaturarum quo libro etiam continet homo & est principalior litera ipsius libri.' *SLAT*, sig. a3r.

³⁵ 'Et ideo ista scientia non querit alios testes quam ipsummet hominem.' *SLAT*, sig. a2v. *SAPX*, p. lvi.

³⁶ '...l'homme & sa nature doiuent seruir de moyen, d'argument & de tesmoignage, pour prouuer toute chose de l'homme, pour preuuer tout ce qui concerne son salut, son heur, son mal-heur, son mal & son bien: autrement il n'en sera iamais assez certain.' *SMON*, p. 2.

³⁷ 'Qu'il estude donc & s'exerce à les cognoistre: car d'autant qu'il sçait mieux leurs natures, & leurs qualitez, d'autant se sçait-il mieux soy-mesme, & sa noblesse, & approche d'autant plus de la cognoissance de son createur.' *SMON*, p. 104.

³⁸ 'De l'eschelle de nature par laquelle l'homme monte à la cognoissance de soy & de son Createur.' *SMON*, p. 1.

³⁹ 'Faisons donc, que la science des choses naturelle augmente tousiours en nous, afin que celle de nous-mesmes & de Dieu y augmente aussi: attendu que la diminution de celle là aneantist par consequent celle-cy, & que l'une s'engendre de l'autre.' *SMON*, p. 104.

What did Sebond think *Theologia naturalis* could achieve? The prologue boasts that,

This science teaches everyone really to know, without difficulty or toil, every truth necessary to Man concerning both Man and God; and all things which are necessary to Man for his salvation, for making him perfect and for bringing him through to life eternal. And by this science a man learns, without difficulty and in reality, whatever is contained in Holy Scripture.⁴⁰

From this I believe we can delineate a threefold purpose for his science: its effect would be saving (leading to salvation), sanctifying (perfecting a moral state) and educating (teaching doctrine).

In the first place, Sebond believed that the study of nature was the starting point for an individual's faith:

Whoever has salvation by hope must first have the root of salvation in himself. Therefore he who has this science [natural theology] has the basis and root of all Truth.⁴¹

Sebond argues that 'hope' is founded on the contemplation of nature that begins with the self. In a similar vein to Aquinas, natural reason accorded man the 'root of truth' – or the preambles of faith – which the addition of revelation would perfect. Saying that natural theology was the starting point for the epistemological journey of faith is not exactly the same, however, as saying that the *Theologia naturalis* was intended to convince the committed theoretical atheist. It is true that Montaigne thought Sebond, 'undertakes by human and natural reasons to establish and prove against the atheists all the articles of the Christian religion,'⁴² moreover, the *Viola animae* of 1551 professed in its dedication to Cardinal de Lenincourt to 'bring back atheists, if any there be, to the true light, while maintaining the faithful in the good way.'⁴³ But there is an important difference between bringing the as-yet-unbelieving to the preambles of faith or bringing the doubter back by rational argument, and convincing the committed theoretical atheist. Sebond's agenda must surely have concerned the former persons rather than the latter. If Sebond's aim was to convince theoretical atheists of the Christian religion his methodology would have been different; as it is, Sebond's book anticipates the doctrines at which nature will arrive rather than arguing from first principles rigorously divorced from Scripture and Church tradition. Another reason why the salvation of the pagan or the theoretical atheist was not Sebond's aim was the author's own assertion that the condition of man precluded the ability to attain salvation by purely natural means. For all Sebond's apparent pre-fideal optimism regarding the practice and

⁴⁰ 'Ista scientia docet omnem hominem cognoscere realiter sine difficultate & labore omnem veritatem homini necessariam tam de homine quam de deo et omnia que sunt necessaria homini ad salutem & suam perfectionem & vt perueniat ad vitam eternam. Et per istam scientiam homo cognoscit sine difficultate & realiter quicquid in sacra scriptura continent.' *SLAT*, sig., a2r. Translated in *SSCR*, p. xxiii.

⁴¹ 'Et ideo qui habet in se salutem in spe debet habere primo in se radicem salutis. Et ideo qui habet istam scientiam habet fundamentum & radicem omnis veritatis.' *SLAT*, sig. a2v. My translation.

⁴² *Apologie de Raimond Sebond* (1580), in Montaigne, *Essay*, p. 249.

⁴³ Cited in Screech, 'Introduction', p. xxii.

extent of natural theology, he dramatically qualifies the claims for autonomous natural theology by reserving a crucial role for grace in the economy of coming to true salvific knowledge of God. In fact, Scripture was given 'in default of the first, in which, blinded as he was, [man] could make out nothing.'⁴⁴ Sebond wrote that,

No one can see and read that great Book [of Nature] by himself (even though it is ever open and present to our eyes) unless he is enlightened and cleansed of original sin. And therefore not one of the pagan philosophers of Antiquity could read this science...nor discover the wisdom which is enclosed within it nor that true and solid doctrine which guides us to eternal life.⁴⁵

Since the Fall, said Sebond, natural theology was *necessary* but, without grace (or 'illumination') *insufficient*. This did not limit, in Sebond's mind, the soteriological use of his science. The way in which the *Theologia naturalis* refuted atheism corresponded very much to the time and context of its composition. Lacking the theoretical atheist, Sebond did not have to be rigorous in positing no theist presumptions. Instead, it refuted the figure of the 'practical atheist' – correcting those who thought that reason had nothing to do with faith, whose moral life was deplorable or spiritual life lax, whose views of providence, the world and the divine nature was heterodox, or who attributed too much to secondary causes and risked (it seemed) to squeeze providence and purpose out of the teleological worldview.

The second purpose of natural theology was in sanctifying, or justifying, the soul. For Sebond, natural theology could teach not only speculative knowledge of divinity, but also practical. Its worth was as much in morality as in theology, able to make any who studied it 'happy, humble, kind, obedient, loathing all vice and sin, loving all virtues, yet without puffing up with pride.'⁴⁶ Natural theology was able to teach every duty of the Christian. The very practice of natural theology was an act of worship; an application of the command to love God with all one's heart, soul and *mind*. Sebond argued that the solution to man's difficulty in choosing the good rather than evil (something that ultimately affected his justification and salvation), lay with the study of nature rather than of Scripture. Man needed an ethical science that took him as he was and guided his moral path according to the mode of his being. Natural theology was that science, teaching 'that which appertains to man as man,' giving irresistible evidence that man is 'bound by reason and the law of nature' to a certain moral standard.⁴⁷ The moral inculcation effected by

⁴⁴ 'Secundus autem liber Scripture datus est homini secundo & hoc in defectu primi libri eo quia homo nesciebat in primo legere quia erat c[a]jecus.' *SLAT*, sig. a3r. Translated in *SAPX*, p. lvii.

⁴⁵ 'Quam quidem sapientiam nullus potest videre: neque legere per se in dicto libro semper aperto nisi fuerit a deo illuminatus & a pectorum originali mundatus. Et ideo nullus antiquorum philosophorum paganorum potuit legere hanc scientiam...sed veram sapientia quae ducit ad vitam eternam quamvis fuerat in eo scripta legere non potuerant.' *SLAT*, sigs. a3r-v. Translated in *SAPX*, p. lviii.

⁴⁶ 'Et facit hominem laetum humilem, benignum [sic – *benignum* must be meant], obedientem & habere omnia vitia odio & peccata & diligere virtutes & non inflat neque extollit scientem.' *SLAT*, sig. a2v. Translated in *SSCR*, p. xxiii.

⁴⁷ 'Le traite donc icy de l'art & regle d'affermir ou nier ce qui appartient à l'homme entant qu'il est homme, mesme es choses qui sont au dessus de luy & de son intelligence...mais l'entreprends bien de monstrier ce

practising Sebond's art effected a spirit of humility, piety and enquiry that would prepare the soul for God's gift of grace. The study of nature led to repentance from human pride and wonder at the beneficence and power of the Creator. Both these moral effects – repentance and gratitude – were essential to intrinsic justification, having therefore both a high soteriological and ethical value.

Natural theology could also support and illustrate Christian doctrine. Behind this was the principle that probably motivated Sebond's whole purpose: the absolute congruence, as he saw it, of faith and reason. The relation between these two was the subject of a centuries-old debate, only reinvigorated in the Renaissance. Some had tried to argue that dogmas such as the Trinity, the Incarnation, the Eucharist and the immortality of the soul were either unknown by reason, unproven by reason, or even antithetical to reason. Sebond's original targets would have been the nominalist followers of William of Occam (1288-1348), but in the sixteenth century a whole pantheon of figures including Pietro Pomponazzi, Jacopo Zabarella, and Cesare Cremonini (1550-1631) challenged in various ways the congruence of faith and reason. Protestantism, moreover, argued that the Fall had caused human reason to be diametrically opposed to faith. Sebond sought to show that philosophy and theology were not antithetical, but both were an appropriation of God's dual revelation in Nature and Scripture.⁴⁸ Nature, reason, and Catholic doctrine were in full accord. The reasoned study of nature was that through which man had understanding of 'whatever is contained in Holy Scripture.'⁴⁹ On the basis of the Book of Nature's perspicuity, natural theology was, in fact, the pedagogue for all Christian doctrine:

To make your way towards the Holy Scriptures you will do well to acquire this science as the rudiments of all sciences; in order the better to reach conclusions, learn it before everything else, otherwise you will hardly manage to struggle through to the perfection of the higher sciences: for this is the root, the origin and the tiny foundations of the doctrine proper to Man and his salvation.⁵⁰

In this account, natural theology is shown to be close to the idea of a 'first philosophy' (*prima philosophia*) with which it was often conflated throughout the Renaissance. Though it had applications in natural philosophy, metaphysics and ethics, Sebond's focus is on the importance of the science of natural theology for knowledge of God and religion. Not only the Scriptures, but that other authoritative source of doctrine, the Fathers, were also unlocked by the prior

qu'il est tenu de croire, si euidemment, que celuy mesme qui n'en fera rien, verra toutesfois qu'il estoit obligé par raison & par droict de nature à le faire.' *SMON*, p. 122.

⁴⁸ For more on this, see Alain Guy, 'La *Theologia naturalis* en son temps: structure, portée, origines', in Claude Blum ed., *Montaigne, Apologie de Raimond Sebond: de la Theologia à la Théologie: études*, Etudes montaignistes (Paris: H. Champion, 1990), pp. 133-47.

⁴⁹ 'Et per istam scientiam homo cognoscit sine difficultate & realiter quicquid in sacra scriptura continent.' *SLAT*, sig. a2r.

⁵⁰ 'Quare quilibet si vult intelligere omnes doctores & totam sacram scripturam habeat istam scientiam quia est lumen omnium scientiarum. Ideo si vis esse solidatus fundatus, firmatus, certus addisce primo hanc scientiam. Alteris vagus profugus non habens stabilitatem in seipso quia ista est radix & origo & fundamentum omnium scientiarum quae sunt homini necessari[a]e ad salutem.' *SLAT*, sigs. a2r-v. Translated in *SAPX*, p. lvi.

study of nature: 'this doctrine opens up to all a way of understanding the holy Doctors...For it is the Alphabet of the Doctors: as such it should be learned first.'⁵¹ The visible world was most immanent and suited to corporeal, natural and reasonable man: studying it was the fundamental apprenticeship towards the study of God's Word. Nature ought to be studied by the laity, while only those gifted by God and authorised by his Church should treat of doctrine by way of Scriptural exegesis.

For Sebond, therefore, the study of nature was the most suitable basis on which to establish doctrine. Sebond attempts to establish many doctrines using arguments based on nature. Beyond the doctrine of God, Sebond proves, for example, the incarnation and ascension of the second person of the Trinity (chapters 74 and 77), the immortality of the soul (chapter 217), the necessity of purgatory (chapter 300), the future judgement and resurrection of the dead (for instance, chapter 327), and even the various levels of ecclesiastical hierarchy in the medieval church (chapter 308), including the pre-eminence and eternal power of the papacy (chapter 312). Sebond also argues that natural theology performs two negative educative functions for the faithful. First, it defends orthodoxy by correcting errors of both philosophy and theology:

In this book the ancient errors of the pagans and the unbelieving philosophers are revealed and by its doctrine the Catholic Faith is defended and made known: every sect which opposes it is uncovered and condemned as false and lying.⁵²

Strikingly, the way in which nature supports orthodoxy is contrasted with Scripture which, claims Sebond, can be abused in order to support heresy:

The Book of Nature cannot be corrupted nor effaced nor falsely interpreted. Therefore the heretics cannot interpret it falsely: from this Book no one becomes an heretic. With the Bible, things go differently.⁵³

Such is the perspicuity and extensiveness of this book that Nature is a *better* defender of orthodoxy than Scripture! The second, related, negative function that natural theology can provide is as an apologetic to be used against detractors who cast doctrine into doubt on rational grounds. In the context of the challenge to orthodox Christianity (a challenge that Montaigne also perceived, though in the very different context of the French wars of religion), 'it is necessary that all Christians be fortified, strengthened and certain in the Catholic faith against

⁵¹ 'Ulterius per istam scientiam intelligit facilliter quilibet omnes doctores sanctos... Ita ista scientia est sicut alphabetum omnium doctorum & ideo sicut alphabetum primo debet sciri.' *SLAT*, sig. a2r. Translated in *SAPX*, pp. lv-lvi.

⁵² 'Et cognoscuntur in hoc libro omnes errores anti quorum philosophorum & paganorum ac infidelium & per istam scientiam tota fides catholica infallibiliter cognoscit & probat esse vera. Et omnis secta qu[a]e est contra fidem catholicam cognoscit & probat infalibiliter esse falsa & erronea.' *SLAT*, sig. a2r. Translated in *SAPX*, p. lv.

⁵³ 'Item primus liber scilicet nature non potest falsificari nec deleri neque false interpretari: ideo heretici non possunt eum false intelligere nec aliquis potest in eo fieri hereticus. Sed secundus [libri] potest falsificari & false interpretari et male intelligi.' *SLAT*, sig. a3r. Translated in *SAPX*, p. lvii.

the impugnors of the faith so that they are not deceived.⁵⁴ Natural theology was therefore an apologetic defence of the Catholic faith, in a similar way that Montaigne intended his *Apologie* to be also. Sebond then fulfils this apologetic function in providing natural and rational bases for many Catholic dogmas that went far beyond the bare creedal tenets of Christianity. Sebond's boast for his science was that it, more than arguments drawn from Scripture, delivered from doubt and grounded Christian certainty:

Whatever Holy Scripture says and teaches is known infallibly, with great certainty, in this science; and so the human mind, with all security and certainty, and with all doubts put off, registers and assents to the whole of Holy Scripture so that it cannot doubt these questions in this science.⁵⁵

The infallible certainty and conquering of doubts was neither by scriptural understanding nor by spiritual illumination, but by the practice of natural theology.

It is worth re-examining two interpretations of Sebond in the last generation of scholars. First, Ann Hartle described the book as a work of 'extreme and unorthodox rationalism' that inverted Anselm's dictum 'unless I believe I shall not understand' to 'unless I can prove, I shall not believe.'⁵⁶ I think Hartle overstates Sebond's unorthodoxy here: Sebond emphasized the need for illumination (or grace) to see nature aright and defended the utter congruence of faith and reason (which was restated as dogma during the Fifth Lateran Council). Second, because Sebond's purpose was to defend, on rational grounds, areas of revealed Christian doctrine, Eusebi Colomar has argued that Sebond's book was not a natural theology at all.⁵⁷ In Colomar's mind, natural theology constructs doctrines from nature, completely lacking Scriptural prejudice about what theological truth might turn out to be. Sebond's apologetic book, in this reading, cannot be natural theology. Charles H. Lohr for a different reason implicitly questions whether Sebond's book can be described as natural theology. It is a natural theology, he writes, 'in the sense that it only uses rational arguments and makes no appeal to Scripture, *but* [my emphasis] it extends beyond the doctrine of God to cover the doctrine of the Trinity, creation, man, his fall

⁵⁴ 'Et ideo nunc in fine mundi est necessaria omni christiano vt quilibet sit munitus solidatus & certus in fide catholica contra impugnatores fidei vt nullus decipiat & sit paratus mori per ea.' *SLAT* sig. a2r. My translation.

⁵⁵ 'Et quicquid in sacra scriptura dicit & precipit per istam scientiam cognoscitur infallibiliter cum magna certitudine itaque intellectus humanus cum omni securitate & certitudine: omni dubitatione postposita: toti sacre scripture assentiat & certificat vt non possit dubitare questionem in ista scientia.' *SLAT*, sig. a2r. My translation. This is one part of the prologue that Montaigne, in his translation, softened. He wrote, 'l'entendement humain est desliuré de plusieurs doutes, & consent hardiment à ce qu'elles contiennent concernat la cognoissance de Dieu, ou de soy-mesme.' (*SMON*, sig. a3v): '[this science] delivers the human spirit [mind] from many doubts, making it consent firmly to what Scripture contains concerning knowledge of God and of oneself.' Translated in *SAPX*, p. lv.

⁵⁶ Ann Hartle, *Michel de Montaigne: accidental philosopher* (Cambridge: Cambridge University Press, 2003), p. 141.

⁵⁷ Eusebi Colomar, 'Raimond Sebond, un humaniste avant la lettre', in Claude Blum ed., *Montaigne, Apologie de Raimond Sebond: de la Theologia à la Théologie: études, Etudes montaignistes* (Paris: H. Champion, 1990), pp. 49-66.

and redemption and the ultimate ordering of his actions.⁵⁸ I suggest that instead of positing an anachronism in the Renaissance over the use of the term (the popular title of Sebond's book after all more or less recoins the phrase that groups different areas of theological and philosophical doctrine into one term),⁵⁹ the contents of the *Theologia naturalis* ought to cause historians to redefine and broaden their definition of natural theology and reform their idea of which purposes and ideas it contains. It is clearly much broader than the mere existence and basic metaphysical attributes of the deity.

In his book, Sebond argued that from the study of the natural world, one could know everything one needed to know about God, man himself, and his moral and religious obligations. This knowledge was available easily and clearly by man's use of only his natural faculties, presupposing no prior learning. Natural theology was therefore the first step to knowledge of God and Christian doctrine, epistemologically and pedagogically preceding the revelation of Scripture and the experience of faith. It also taught doctrine that could only be learned from Scripture with great ingenuity and perseverance, corrected heresy and the errors of heathen natural philosophy, engendered a more morally upright life, and provided a redoubtable reasonable apologetic for Christian faith. The *Theologia naturalis* was, therefore, characteristic of what I have called 'optimistic' and 'pre-fideal' natural theology. But what was the reason for the resurgent popularity of Sebond's book among Catholics in the second half of the sixteenth century? Michel de Montaigne gives a reason in his famous *Apologie de Raimond Sebonde*, the lengthy twelfth chapter of the second book of his 1580 edition of *Les essais*. Montaigne's father's visiting friend, the Christian humanist Pierre Bunel (1499-1546), recommended Sebond's book to Montaigne's father as a salve against the effects of the Lutheran heresy that risked degenerating 'into an execrable atheism' by teaching men to despise and reject all doctrine received on the authority of the Catholic Church, only accepting what they personally assented to by the exercise of their reason.⁶⁰ That Montaigne was instructed to translate Sebond's *Theologia naturalis* to stem the dangerous heresies of the Lutherans is itself instructive, giving the lie to the principle that natural theology was non-confessional, even ecumenical in outlook. Though there is not the space to explore Montaigne's 'defence' here, it is worth noting that Montaigne endorsed Sebond's natural theological enterprise as a powerful Catholic apologetic and as a moral and intellectual preparation for faith. Sebond's arguments were 'so firm and felicitous' that 'no one has equalled him' in showing the rational basis for all the articles of Catholic faith.⁶¹ Sebond's arguments 'combat those who are precipitated into the frightful and horrible darkness of

⁵⁸ Lohr, 'Metaphysics', p. 544.

⁵⁹ The phrase is mentioned by Augustine in *De ciuitate Dei* and by William of Ockham in his commentary on Lombard's *Sentences*, the latter equating it with metaphysics. In the Middle Ages the phrase only appears as an Augustinian quotation until it is taken up by Sebond (or by his publishers) in the fifteenth century. On this etymology, see Collins, 'Natural theology and biblical tradition'.

⁶⁰ *Apologie de Raimond Sebond*, II.12 in Montaigne, *Essay*, p. 249.

⁶¹ ARS, p. 249.

irreligion.’⁶² Moreover, Sebond’s natural theology had an important pre-fideal propaedeutical role:

Faith, coming to colour and illumine Sebond’s arguments, makes them firm and solid; they are capable of serving as a start and a first guide to an apprentice to set him on the road to this knowledge; they fashion him to some extent and make him capable of the grace of God, by means of which our belief is afterward completed and perfected.⁶³

Montaigne clearly sanctions Sebond’s natural theology that is prior to faith, preparing the soul both rationally and morally; faith was the supernatural perfecting of natural knowledge. Sebond’s natural theology, therefore, was understood by some contemporaries to have the qualities and purposes that I have described as typical of late sixteenth-century Catholic natural theology.

⁶² *ARS*, p. 253.

⁶³ *ARS*, p. 253.

V. The Book of Wisdom

In order to establish the confessional distinctives of Catholic and Protestant natural theology in the late Renaissance – where many historians have assumed agreement on the fundamentals of Christian theism and even an ecumenism of spirit in a joint assault on the atheist or heathen – it is necessary to demonstrate these distinctive theologies at work in theological and natural philosophical loci. In this vein, it is fruitful in particular to examine the deuterocanonical Book of Wisdom – the text itself alongside translations and commentaries thereon.

One reason to treat the Book of Wisdom as an early modern source is because of the sixteenth-century debate over its canonicity. This debate did not centre primarily on its uncertain authorship: though the Catholic Douai Bible of 1610 believes it ‘very probable’ that it was written by Philo Judeaus (a BC figure not to be confused – the Douai Bible insists – with his later namesake),¹ Catholics were on the whole happy to remain uncertain as to its provenance. The Jesuit exegete Cornelius a Lapide (1567-1637) expressed doubt about what he called its ‘secondary author’, but certainty that the primary author of Wisdom was the Holy Spirit.² Its canonicity was defended by the Catholic Church instead on the basis of its own authority. That the Church defined Scripture, not Scripture the Church, was a common Catholic apologetic and at the Council of Trent the Church vigorously defended its right to determine the canon. For a combination of doctrinal reasons and patristic and medieval tradition, the Council of Trent included seven books from the Septuagint that the Protestants, using the Palestinian Hebrew tradition, rejected, including the Book of Wisdom. The ‘list of sacred books’ that had to be received as ‘sacred and canonical...entire with all their parts,’ venerated ‘with an equal affection of piety, and reverence’ included Wisdom alongside the six other deuterocanonical books (Tobit, Judith, Sirach – also called Ecclesiasticus, Baruch and First and Second Maccabees).³ Accordingly, in the commentary by a Lapide written in the first decades of the seventeenth century,⁴ there was no doubt that Wisdom was canonical, having been settled by Church

¹ *The second tome of the Holie Bible faithfully translated into English out of the avthenticall Latin. Diligently conferred with the Hebrew, Greeke, and other Editions in diues languages...By the English College of Doway.* [Douai Old Testament] (Douai: 1610), p. 343.

² ‘Certum est de fide auctorem primarium libri Sapientiae esse Spiritum sanctum: incertum vero est quis fuerit secundarius.’ Cornelius A Lapide, *In librum sapientiae commentarius: indicibus locorum sacrae scripturae rerum et verborum instructus* (Paris, 1639), p. 3. Throughout the translations from a Lapide’s Latin are mine.

³ Decree concerning the Canonical Scriptures, 8 April 1546. In Waterworth ed. *Canons and decrees of the Council of Trent*, pp. 18-19.

⁴ A Lapide began publishing his series of biblical commentaries (eventually including the whole canon minus Job, Psalms, Tobit and Maccabees) with the *Commentaria in omnes divi Pauli epistolas* (Antwerp, 1614). The commentary on Wisdom, as well as on the Gospels and history books of the Old Testament, however, appeared posthumously. We do not, therefore, know the date of composition though it is reasonable to think he completed it in the early 1630s when working on other ‘wisdom literature’ of Ecclesiasticus and Proverbs, commentaries on which appeared in 1633 and 1635 respectively.

Councils of antiquity and modernity: 'De Fide est librum Sapientiae esse Canonicam Scripturam.'⁵

In the Protestant tradition, however, Wisdom and the other deuterocanonical books were demoted to a non-scriptural status. Martin Luther's German Bible of 1534 was the first to relegate these books to a separate intertestamental section labeled 'Apocrypha' (a convention followed in both the Geneva Bible of 1560 and the King James Bible of 1611). For all the Protestant confessions, the apocryphal books 'nether yet serued to proue any point of Christian religion' and, initially appended to the Old Testament 'for the aduancement and furtherance of the knowledge of the historie, & for the instruction of godlie maners,'⁶ began to be phased out of editions of the Bible in the early seventeenth century. The Book of Wisdom, as included in the Geneva Bible of 1560, then, was devoid of any glosses excepting the occasional cross-reference to canonical Scripture. But the Book of Wisdom included in the Catholic Douai translation of 1609-10 featured much fuller 'arguments' and glosses, treating this portion of the Scripture like any other. The very fact that Protestants rejected the Book of Wisdom as inspired Scripture (along with the rest of the non-Hebraic apocrypha) and Catholics defended it means that the book has an early modern currency of its own.

Indeed, we see Catholics treating the Book of Wisdom with complete parity to the rest of Scripture. Cardinal Robert Bellarmine, for instance, in his *De ascensione mentis in Deum per scalas rerum creatorum opusculum* (1615), begins his work by establishing that 'The Book of Wisdom and the Apostle's Letter to the Romans teach that man can ascend through the works of God, that is, through creatures, to a knowledge and love of the Creator.'⁷ He goes on to include nearly fifty direct references to the deuterocanonical books, twenty from Wisdom alone, accounting for fifteen per cent of all his Old Testament quotations. In a Calvinist book of comparable intent, Lambert Daneau's *Physica Christiana* (1576) – translated into English as *The wonderfull woorkmanship of the world* (1578) – Wisdom is only referenced four times with the deuterocanonical total just ten, constituting five percent of the Old Testament references.⁸ A similar pattern can be observed in other comparisons. Further, while Catholic exegetes produced commentaries on the Book of Wisdom, such as by the Jesuits herein mentioned – Cornelius a Lapide and Jean de Lorin (1559-1634) – I can find no Protestant commentaries in the same period. Jean Calvin's great series of biblical commentaries featured none of the so-called apocryphal books. In the late Renaissance, Wisdom, then, was in many respects a Roman

⁵ A Lapide, *In librum sapientiae commentarius*, p. 1.

⁶ 'The Argument' to the Apocryphal books, in *The Geneva Bible: a facsimile of the 1560 edition* (Peabody, MA: Hendrickson Bibles, 2007), p. 386.

⁷ Bellarmine, *De ascensione mentis*, p. 53.

⁸ In Bellarmine's *De ascensione mentis*, the Apocryphal references are as follows: Tobit (5), 1 Maccabees (1), 2 Maccabees (4), Wisdom (20), Ecclesiasticus / Sirach (16), Baruch (1); Old Testament total (312). In Daneau's *Physica Christiana*; Wisdom (4), Ecclesiasticus / Sirach (6); Old Testament total (184).

Catholic source, appropriated by Catholic commentators and extensively quoted by Catholic theologians.

One notable way in which Wisdom was used was to support a synergistic doctrine of justification in which the natural faculty of reason played a prominent part. The Douai Old Testament makes an equivalence between the wisdom of Scripture (most fully expressed in the so-called 'Sapiential Bookes') and reason. The wisdom literature is introduced thus:

In this part more specially is shewed the ground, and as it were, the very life or soule of the Law, which is Reason, the true Rule or Directorie wherin al good laws are grounded.⁹

Reason is thus the foundation of both divine law and divine wisdom. Reason, being the 'ground' of the Law, causally precedes the revealed wisdom of Scripture. For the Douai editors, not only is reason identified with the eternal wisdom of God, but it is also the efficient cause of righteousness in man:

It both sheweth what ought to be done, or auoided, & directeth mans iudgement to embrace that is good, and to flee from al euil, not only illuminating the vnderstanding to see that is right and iust, but also disposing the internal affection to desire, loue, choose, and preferre the right path of Gods law, before whatsoeuer otherwise semeth pleasant or profitable...effectually perswading to perseuere to the end in holie conuersation.¹⁰

Reason therefore was simultaneously the means to knowledge, both of the natural world and of good and evil; and the cause of choosing the good. This conception of reason meant that there was a causal link between the capacity of a man's faculty of reason and his religious merit. Those with a particularly powerful faculty of reason were able to know God and good by it – through the *modus operandi* in which reason operated (namely the sensory world) – and perform religious duties. In this way, an optimistic view of reason enables an optimistic view of natural theology. Such an optimistic view of reason is not found in sixteenth-century Protestantism, wherein reason was a faculty fatally affected by Adam's Fall and therefore offered no sure ground of natural or divine knowledge, nor moral conduct.

The maxim, *Facienti quod in se est Deus non denegat gratiam* ('to him who does what lies in his power, God does not deny grace'), discussed in a prior chapter as part of the settled Roman Catholic doctrine of justification from the middle ages to the sixteenth century, is congruent with the sentiment of the Book of Wisdom. Indeed, it is in his commentary on the Book of Wisdom that the Occamist Dominican Robert Holcot (d. 1349) expounded the maxim.¹¹ The principle that doing *quod in se est*, understood as the utmost exercise of the natural faculties of reason allied to the free will, necessarily prompts the infusion of God's grace is found, according to Catholic

⁹ Douai Old Testament vol. II, p. 267.

¹⁰ Ibid., p. 267.

¹¹ Oberman, 'Facientibus quod in se est', p. 322.

commentators, in Wisdom. The Protestant Geneva Bible of 1560 translated Wisdom 6:20 as ‘the desire of wisdom leadeth to the kingdome’ while the King James Bible followed in 1611 with ‘the desire of wisdom bringeth to a kingdom,’ trying to keep the focus of the chapter firmly on advice to rulers and not on the question of soteriology. This is in line with the Greek of the Septuagint, which, reading ‘ἐπιθυμία ἀρα σοφίας ἀνάγει ἐπὶ βασιλείαν’ does not describe ‘the kingdom’ spoken of.¹² The Douai Catholic version, however, translates from the Vulgate Latin, in which the kingdom is described as ‘perpetuum.’¹³ Thus in the Douai Bible the verse reads, ‘The desire of wisdom leadeth to the *everlasting* kingdom,’ legitimising its soteriological ‘*quod in se est*’ gloss. Thus it is on the basis of established Catholic doctrine that the glossators write that ‘a resolute desire ioyneth faithful soules to God.’¹⁴ At the outset of the following chapter, the Douai gloss explains how ‘Wisdom procedeth from God, and is procured by prayer,’ drawing support from Wisdom 7:7 (‘I wished, and vnderstanding was geuen me: and I inuocated, and the spirit of wisdom came vpon me.’)¹⁵ In the Catholic mind, then, the wisdom spoken of in the book is the God-given means of meriting salvation. Given by God to those righteous men who earnestly seek it, doing *quod in se est*, apparently independently of or at least antecedent to, special grace and revelation, wisdom grants power over evil and is the guarantor of reward in this life and the next. The Book of Wisdom, then, in canonicity, contents, translation, and gloss, was appropriated to support Catholic soteriology: man, able to desire good and God, is able to pray for and attain wisdom – equated, we recall, with reason – and convert himself by his meritorious piety and good works, to his own salvation.

Chapter thirteen of the Book of Wisdom in particular was almost of as much relevance to early modern Catholics seeking the scriptural teaching on natural theology as the first chapter of Paul’s epistle to the Romans. I quote it now from the Catholic English translation in the Douai Old Testament:

¹² Greek LXX text taken from William J. Deane, *The book of Wisdom: the Greek text, the Latin Vulgate and the Authorised English version* (Oxford: Clarendon, 1881), p. 62.

¹³ The versification of this chapter is not always consistent in the period. In the Clementine Vulgate and nowadays the verse in question is Wisdom 6:21, which in the Vulgate reads, ‘concupiscentia itaque sapientiae deducit ad regnum perpetuum.’ This quotation, and all subsequent, are references to the Clementine edition (*Biblia sacra vulgatae editionis*, (Rome, 1592)) which was declared the official version of the Roman Catholic Church and remained so until the *Nova Vulgata* of 1979.

¹⁴ Douai Old Testament vol. II, p. 352.

¹⁵ *Ibid.*, p. 352.

¹ But all men be vaine, in Whom there is not the knowlege of God: and of these good things, which are sene they could not vnderstand him that is, neither attending to the works haue they agnised who was the workeman; ² but either the fyre, or the wind, or the swift ayre, or a circle of the stares or exceeding much water, or the sunne and the moone, they thought to be goddes rulers of the world. ³ With whose beautie if being delighted, they thought them goddes: let them know how much the Lord of them is more beautiful than they. For the author of beautie made all those things. ⁴ Or if they merueled at the virtue, & operations, let them vnderstand by them, that he which made these, is stronger then they: ⁵ for by the greatnes of the beautie, and of the creature the creator of them may be sene, to be knowen therby. ⁶ But notwithstanding there is yet in these lesse complainte. For they also perhaps erre, seeking God, and desirous to finde him. ⁷ For whereas they conuerse in his works, they enquire: & they are perswaded that the thinges be good which are seene. ⁸ But againe neither ought these to be pardoned. ⁹ For if they could know so much, that they were able to estimate the world: how did they not more easely find the Lord therof? ¹⁰ But they are unhappie, & their hope is among the dead, who haue called the workes of mens hands godds.¹⁶

Much of what the Book of Wisdom says here is in line with St Paul's argument in his Epistle to the Romans (Chapter 1, verses 18-25), that uncontested New Testament source for the doctrine of natural theology. Man in spite of the witness of nature had failed to acknowledge his Creator, transferring his worship to idols of nature or artifice. This passage in Wisdom is therefore something of a two-edged sword for natural theology: on the one hand, it implies the possibility of attaining a true knowledge of God and practice of religion from contemplation on nature; but on the other hand, the argument of the author is undoubtedly a sharp rebuke for idolaters who had invariably failed to progress from nature to true knowledge and true worship. If, however, we consider the translations, glosses and exegesis put on both sides of that two-edged sword by early seventeenth-century Catholics, we will see that they used this passage to support and validate a fundamentally optimistic natural theology.

The 'method' of natural theology outlined in Wisdom and by its Renaissance commentators is wholly orthodox. Familiar natural theological tropes feature in a Lapide's description, such as the commonplace, 'From the effect we know the Cause and from the works we know the Workman.'¹⁷ One could also know 'by analogy' (Wisdom 13:5) from 'the magnitude of beauty, intricacy and power of the creatures...how great, how beautiful, how immense, perfect and omnipotent is the Creator Himself.' De Lorin too explained how one, 'drawing a suitable theory from the effects to the cause' could know of God's beauty and power by following analogously.¹⁸ Creation was made 'by the certain intention of God to imitate and represent his beauty in another way.' From its strength, we were also to know His 'much greater power.'¹⁹ But

¹⁶ Wisdom 13: 1-10a. Ibid., p. 361.

¹⁷ 'Ex effectus cognoscimus causam, ac ex operibus agnoscitur opifex,' A Lapide, *In librum sapientiae commentarius*, p. 246.

¹⁸ 'Apta concludensque ratiocinatio ab effectis ad causam...', 'Quocirca secundum analogiam, & habitudinem, quam res cunctae habent ad Auctorem suum, potest hic satis expedite, & perspicue cognosci.' Jean De Lorin, *Commentarii in Sapientiam* (Lyon, 1607), fol. 467.

¹⁹ 'Ipsa profecto magnitudo speciei, quae hic asseritur in creatura, significat eam factam ex certa DEI intentione, vt suamet in illa pulchritudinem ex primeret aliquo modo, & adumbraret.' 'Idem est de

while Protestants would establish a similar theory of the practice of natural theology on the basis of other scriptural sources, what made Wisdom more suited to a Roman Catholic doctrine was its apparent stress on the actual achievability of such knowledge of God. Wisdom 13 appears to insist to a much greater degree than Romans on the attainability of natural knowledge of God. The extensive knowledge of and wonder at the creatures meant that man *should* have progressed to knowledge of 'he which made these'. Indeed in the Douai translation of Wisdom 13:9, a man knowing the world of creation should 'more easily' progress from that to knowledge of 'the Lord thereof'.²⁰ For de Lorin, the extent of natural theology is not made explicit by the author of Wisdom.²¹ Without doubt, however, nature – both in the creatures that were contemplated and in the faculties of man – was an adequate source for true theology. Both de Lorin and, a generation later, a Lapide, employ two Latin verbs frequently to affirm unambiguously the availability and attainability of true natural theology; namely *posse* (to be able) and *debere* (to owe, with the sense here of 'ought').²² De Lorin writes, 'from knowledge of creatures they *were able to* [potuisse] and *should have* [debuisset] had knowledge of God.'²³ De Lorin thinks it is not only possible but easy; that nature's provision of true theology is not obscure, but clear: 'Therefore according to analogy, and the relation which all things have to the Author himself, one is able to know him *easily* enough and *clearly*.'²⁴ 'From the creatures,' wrote a Lapide, expounding the same verse, 'they *were able to* [potuisse] and *should have* [debuisset] acknowledged the Creator.'²⁵ Later when commenting on verse nine, a Lapide again uses the verbs *posse* and *debere* to describe the knowledge of God available to man from the world, even describing it as *easy* [facile] to ascend therefrom to knowledge of the Creator.²⁶ In contrast to this fundamental optimism regarding the actual attaining of true natural theology, the Protestant position was that man should have had knowledge of God, but that their *ability* to gain it from nature came to an end with the corruption of man's postlapsarian nature.

virtute eidem a DEO insita, unde colligere iubemur multo maiorem esse DEI potentiam, sicut & pulchritudinem.' *ibid.*, fol. 469.

²⁰ Douai Old Testament vol. II, p. 361.

²¹ 'Sed an possent, naturae viribus, non definit quidem Auctor.' De Lorin, *Commentarii in Sapientiam*, fols. 463-64.

²² In Charlton Thomas Lewis and Charles Short, *A Latin dictionary founded on Andrews' edition of Freund's Latin dictionary. Revised, enlarged and in great part rewritten by C. T. Lewis and Charles Short* (Oxford: Clarendon, 1879), *possum, potui, posse* is defined as 'to be able, have power, can', and *debeo, -ui, -itus, -ere* is 'to have or keep from some one... to owe... to be under obligation to render, pay, etc... With *inf.* I ought, must, should, etc. do it.'

²³ '...ex creaturarum cognitione Dei notitiam parari potuisse ac debuisset.' De Lorin, *Commentarii in Sapientiam*, fol. 463. My emphasis.

²⁴ 'Quocirca secundum analogiam, & habitudinem, quam res cunctae habent ad Auctorem suum, potest hic satis expedite, & perspicue cognosci.' *ibid.*, fol. 467. My emphasis.

²⁵ 'Nam eos ex creaturis potuisse et debuisset agnoscere creatorem.' A Lapide, *In librum sapientiae commentarius*, p. 244.

²⁶ 'Ex saeculo, id est ex mundo, hoc est ex mundi creaturis, facile potuerunt & debuerunt ascendere ad opificem, & agnoscere creatorem: unde ad eum debuerunt oculos mentis attollere.' *ibid.*, p. 248.

The Book of Wisdom was used to support the principle that a true natural theology was plainly attainable. But to what end? Here, late Renaissance Catholic sources demonstrated again their belief that the contemplation of nature could lead to true knowledge of the true God, independent of supernatural means. In a telling example of this principle at work, the Douai translators stressed that the religious end of nature was not merely the abstract contemplation of God, but something altogether more significant. By the creation 'the creator of them may be seen,' and by seeing, may 'be known thereby.' Here the Douai Catholic version makes a revealing change to both the Vulgate Latin and the Septuagint Greek, which contains no further inference from the Creator being 'seen' from the creation.²⁷ The Catholic translators are, in line with Thomist theology and their optimism regarding the knowableness of God from nature, putting much emphasis on the Greek word 'αναλόγως' (*analogos*) that in the Septuagint describes how the Creator is seen from the creation. That same verse in the Geneva Bible reads 'by the greatnes of their beautie, and of the creatures, the Creator being compared with them, may be considered', while in the King James Bible it is that 'by the greatness and beauty of the creatures proportionably the maker of them is seen,' neither appending the inference that he may 'be known thereby.' Seeing the Creator in the creation is one thing. *Knowing* him thereby (by which is implied some particular relationship and participation in true religion) is, Protestants would allege, quite another.

Catholic commentators on the book of Wisdom thought that an extensive, accurate knowledge of God was possible; therefore they were willing to some degree to allow that the pagans could know God and gave examples of true theology held by them. For instance, the heathen philosophers knew that God is one. De Lorin excuses the ancient philosophers from the charge of idolatry. Seneca, Plato, Socrates and Cicero are described by de Lorin as knowing that there was one God, professing belief in the multitude of heathen idols only out of fear of retribution.²⁸ A Lapide also believes that by nature one is able to grasp the oneness of God. 'It is certain,' argues a Lapide, 'that by forces of nature one is able to know that God is, and that He is one.'²⁹ Accordingly, a Lapide gives examples of 'Gentile Philosophers and Poets who knew the one and true God,'³⁰ including therein Orpheus, Pythagoras, Plato, Hermes Trismegistus, Sophocles and Xenophon.

²⁷ Wisdom 13:5 in the Vulgate is 'a magnitudine enim speciei et creaturae cognoscibiliter poterit creator horum videri.' In the LXX, the only verb in the verse is 'θεωρεῖται', a passive verb translated as 'is seen' or 'is considered'.

²⁸ De Lorin, *Commentarii in Sapientiam*, fol. 469.

²⁹ 'Ex magnitudine pulchritudinis & molis, virtutisque creaturarum, analogice cognosci potest, quanti sit magnitudo, tam pulchritudinis, quam immensitatis, perfectionis & omnipotentiae ipsius creatoris.' 'certum est vitibus naturae cognosci posse Deum esse, esseque unum.' A Lapide, *In librum sapientiae commentarius*, p. 246.

³⁰ '...hasce de Deo uno & vero recitat Gentilium Philosophorum & Poetarum sententias.' *ibid.*, p. 247.

For neither commentator is knowledge of one God simple theoretical monotheism. Rather, it implied a knowledge and worship of the one *true* God. Some of the ‘mysteries’ of Christian faith are known, albeit dimly, from the contemplation of nature. For a Lapide, their knowledge of God’s name as ‘ens’ (Being) indicated their qualified knowledge of the true God revealed in the Old Testament by the epithet ‘I AM WHO I AM’ represented by the tetragrammaton.³¹ A Lapide was even prepared to admit the possibility of Pythagoras and Hermes Trismegistus knowing the Trinity.³² That the pagan philosophers might even have possessed true doctrine and practised true religion by virtue of their natural theology is implied when a Lapide claims that ‘the philosophers imitated our author of Wisdom,’ giving the example of Plato’s accurate account of the human soul, and that these philosophers imitate God’s ‘justice, holiness and prudence,’ practicing ‘holy worship of the true God.’³³ He also thinks it possible, citing Bellarmine’s *De ascensione mentis in deum per scalas rerum creatorum* (1615) as corroboration, to ascend ‘ethically’ or ‘morally’ from the creatures to the Creator.³⁴ De Lorin had a similar view of the end of natural theology:

For all creation, says Jerome, if not by words, then in deed praises God because from the creatures Christ is consequently understood: in every work and deed the magnificence of God is demonstrated... The whole of creation is a ladder, heaven the summit...through knowledge of which one rises to God.³⁵

This optimistic view of natural theology and natural religion being both true and meritorious raises again the question of the role of natural theology in the economy of salvation. De Lorin makes plain his belief in natural knowledge as a bridge to salvation:

[Man] is able to know [God] naturally, as I have said, unless he wastes his natural faculties, and resists, and rebels against the divine light, as Job says; for to gain natural knowledge, which is always by some step to some object, was a necessary means for salvation.³⁶

³¹ A Lapide was expounding Wisdom 13:1, ‘they could not understand *him that is*,’ reckoned by Douai editors in the ‘Annotations’ at the end of chapter 13 to represent ‘HE WHICH IS’ (Douai Old Testament vol II, p. 362). A Lapide explained that the name of God is ‘ens’ and supported this by reference to several theologians and pagan philosophers including the aforementioned alongside Aristotle, Thales Milesius, Apulius, and Alexander Magnus (A Lapide, *In librum sapientiae commentarius*, p. 244).

³² Of Pythagoras, ‘Vnde aliqui suspicantur cum S Trinitatem cognouisse, saltem per vmbram & obscure’; of Trismegistus, ‘dictum esse Trismegistum, quod de sancta Trinitate diuino quodam spiritu locutus sit.’ A Lapide, *In librum sapientiae commentarius*, p. 244.

³³ ‘Auctorem nostrae Sapientie imitate sunt Philosophi’, ‘...imitatur autem Deum iustitia, sanctitate, prudentia. Est autem iustitia, ut docet Clemens Stromat. lib. 4 concentus partium animae; sanctitatis vero Dei cultus.’ *ibid.* p. 4.

³⁴ ‘Moraliter hic discite a creaturis assurgere ad creatorem, ac in singulis Deum intueri... Lege Bellarmino lib de Ascensu mentis in Deum.’ *ibid.*, p. 247.

³⁵ ‘Omnes enim creatura, inquit Hieronymus, et si non voce, opere tamen laudat DEVM quia ex creaturis consequenter CHRISTUM intelligitur: & in singulis operibus, & effectibus magnificentia DEI demonstratur... Scala est vniuersitas creaturarum: vertex coelem... per quarum cognitionem ascenditur ad DEVM.’ De Lorin, *Commentarii in Sapientiam*, fol. 464.

³⁶ ‘[Homo] potest cognoscere [Deum] tum naturaliter, vt dixi, tum nisi naturali facultate abutatur, & resistat, & fiat rebellis diuino lumini, vt Iob loquitur, etiam naturalem adipisci cognitionem, quae semper in aliquo gradu siue quantum ad aliqua obiecta, fuit ad salutem necessarium medium.’ *ibid.*, fol. 468.

De Lorin immediately qualifies this by stating the concurrent necessity of faith for pleasing God, and leaves the question of the salvation of the pagan natural theologian ambiguous. Both de Lorin and a Lapide, therefore, apparently on the basis of Wisdom, allege that the creation is a ladder to the divine, culminating in knowledge of God (between them God's name, the Trinity and the Incarnation are somehow known at least in part from natural theology). Although neither make salvation of some of the heathen by natural theology explicit, the question is left conveniently open, while both clearly invoke the principle that by natural theology and natural religion one might at least be excused and pardoned to an extent from the charge of impiety and idolatry, as we shall discuss below.

A passage in de Lorin's commentary (that relating to Wisdom 13:5-7) is especially valuable for crystallising the difference between Catholic and Protestant positions on the matter of the heathens' true knowledge of God by natural theology:

Eugubinus collected sufficiently many testimonies of philosophers about this matter against Protagoras, Diagoras of Melos, the Cyrenaic Theodorus, and other atheists; indeed against those denying that [God's existence] could be demonstrated... the opinion of whom Blessed Aquinas calls an error, and also against the heretics Calvin and Heshusius (who condemn the doctrine of the Roman Catechism), because it is possible to know that God is, and is One, by the light of nature.³⁷

De Lorin rejects what Jean Calvin and Heinrich Heshusius (1556-1597) – a prominent Lutheran polemicist – had argued concerning natural theology; namely that by his natural light man was unable to know even the most basic tenets of a true theology. He casts this view as in direct opposition to the Catholic Church's teaching. First, such a view ran counter to the foundational theology and philosophy of Thomas Aquinas, on whom much scholastic theology still depended. Second, Eugubinus – the Latin name for Agostino Steuco (1497-1548) – had, in his 1540 book, *De perenni philosophia libri X*, demonstrated to de Lorin's satisfaction both a Ficino-esque 'prisca theologia' held by ancient pagan sages such as Hermes Trismegistus, and an extensive innate human knowledge of God that served to condemn ancient atheism by the evidence of nature. De Lorin, therefore, in this commentary on the Book of Wisdom, sees the divide between optimistic and pessimistic natural theology fall along the exact confessional lines I have been seeking to establish.

Not only did Catholics find much in Wisdom to commend a positive view of natural theology that seemed to go beyond that of Romans, but they also found the tools to blunt the second edge of that two-edged sword that comprised the witness of Wisdom chapter 13 and Romans 1 to the *failure* of men to use natural theology to ascend to true religion. Two things needed to be dealt

³⁷ 'Philosophorum hac de re testimonia satis multa collegit Eugubinus contra Protagoram, Diagoram Melium, Cirenaicum Theodorum, & Atheos alios: immo & contra negantes id posse demonstrari...: quorum B. Thomas opinionem errorem vocat, & ex Haereticis Caluinus, ac Hesusius, qui doctrinam Romani Catechismi damnat, quod lumine naturali cognosci possit DEVM esse, & vnum esse.' *ibid.*, fol. 468.

with in order to sustain a positive view of the extent and ends of natural theology. First, the naturalness of sin must be countered, and second, a gradation of reason and natural theology had to be seen to correspond to a gradation in religious merit and demerit.

One major problem for an optimistic natural theology is the idea that sin is natural to man. If man is sinful by nature, as Protestants alleged, then any natural theological agenda must surely be in vain. The idea of sin being *natural* to postlapsarian man was repugnant to early modern Catholics; both their soteriology and Aristotelian philosophy established that man was directed by his nature (that is, through his natural reason subjecting his will) to pursue his true end (good, and salvation) – something could not pursue its own ill (sin, and its due punishment) *by nature*. The reluctance to equate sin with the nature of the human condition is found, for instance, in the Douai editors' translation of Wisdom 12. Where the Book of Wisdom says that God's punishment came upon the Jews when he saw that 'the nation of them is wicked, and their malice natural, & that their cogitation could not be changed for euer,' the editors hasten to qualify the statement: 'By custom malice became *as it were* natural, after that nature was corrupted.'³⁸ The sin of malice could not be described as genuinely natural, for no actual sin could reside by nature in the human soul (it is to be remembered that original sin was not actual sin but the depravation of supernatural gifts); it therefore had to be metaphorical – 'as it were' natural. And the ingrained and permanent nature of this sin of malice could not be the effect of the Fall making all humanity fixed in evil cogitation; instead *custom* – something temporally and geographically contained, in this case, among the Jews – had to be the proximate cause of the corruption of their nature.

An even more striking example of Catholic reluctance to consider sin natural concerns the opening to chapter 13. A comparison of the Protestant and Catholic translations of the first verse reveals their contrary positions:

Geneva Bible (Protestant) 1560:

Svrelly all men are vaine by nature, and are ignorant of God, and colde not knowe him that is, by the good things that are sene, nether consider by the workes the worke master.

Douai Bible (Catholic) 1610:

Bvt al men be vaine, in Whom there is not the knowlege of God: and of these good things, which are sene they could not vnderstand him that is, neither attending to the works haue they agnised who was the workeman.

³⁸ Wisdom 12:10 and its gloss from Douai Old Testament vol. II, p. 359. My emphasis.

Both translations were based on the same sources; the Septuagint Greek and the Vulgate Latin.³⁹ The Protestant translators have here provided an account of man's utter incapacity for natural theology. They have reinstated from the Septuagint what the Vulgate (and the Catholic translators following it) had omitted – that men are vain 'φύσει', *by nature*. While the Catholic translation makes their lack of knowledge of God a cause of their vanity, in the Protestant translation their natural vanity is the cause of their utter inability to cognise God from His works. In the Protestant rendering all men are positively ignorant of God; in the Catholic all men who negatively lack knowledge of God are vain. In the Protestant, man *could* not know God by his visible works; in the Catholic man *did* not attend to the works in order to know the workman. The translators of the Geneva and Douai Bibles have used the ambiguity of the Greek and Latin sources according to their theological dispositions: with no grammatical difference between exclusive and inclusive relative clauses, the Catholic preferred that all men in whom there is no knowledge of God are vain; while the Geneva translators preferred all men are vain by nature and (all men are, therefore) ignorant of God. The Catholic translation reserves *much* more potential for a true natural theology by preventing the description of sin as 'natural', in its subtle differences to the preceding English versions of the Book of Wisdom.

When our two Jesuit exegetes expounded this verse, they admitted that the Septuagint includes the word 'φύσει' ('by nature').⁴⁰ Instead of allowing that man's natural faculties were irreparably damaged by the Fall such that man could not rely on his natural cogitations on God, both a Lapide and de Lorin immediately explain that the verse refers to the errant will of some wicked men. De Lorin insists that the deliberate rejection of God precipitates the vanity of their nature, rather than the other way round: 'by nature' means

they by themselves, and by their own free will, have been carried away to various other errors, because they are destitute of the knowledge of God; indeed, their nature is made vain...since it is ignorant of God, of whom knowledge is their end.⁴¹

A Lapide unfolds 'by nature' to be a predilection 'by themselves, of their own accord', made possible by the postlapsarian concupiscence that affects the will.⁴²

³⁹ Greek LXX of Wisdom 13:1a reads 'Μάταιοι μὲν γὰρ πάντες ἄνθρωποι φύσει, οἷς παρὴν Θεοῦ ἀγνωσία'. The Vulgate of Wisdom 13:1 reads 'Vani autem sunt omnes homines in quibus non subest scientia Dei; et de his quæ videntur bona, non potuerunt intelligere eum qui est, neque operibus attendentes agnoverunt quis esset artifex.'

⁴⁰ A Lapide, *In librum sapientiae commentarius*, 243, and De Lorin, *Commentarii in Sapientiam*, fol. 463.

⁴¹ Graece additur...*natura*: ipsi per se, ac sponte abripiuntur in varios alios errores, quando Dei sunt scientia destituti: vel natura eorum vana efficitur...cum ignorat Deum, cuius cognitio finis illius est.' De Lorin, *Commentarii in Sapientiam*, fol. 463.

⁴² 'Natura... id est naturali indole, propensione, corruptione; item per se, sponte sua.' A Lapide, *In librum sapientiae commentarius*, p. 243.

While Wisdom's censure of idolators who had failed to progress from knowledge of the natural world to worship of the true God could not be denied, the passage in Wisdom 13 was used to vindicate the principle of a relativity of religious demerit that accorded well with Catholic doctrine. The Protestant view of justification as the forensic imputation of Christ's righteousness by a gifted faith admitted a strict dichotomy between religious merit and condemnation. But the Catholic doctrine of justification being attained by an intrinsic righteousness derived from the sincerity of a man's contrition, the extent of his voluntary cooperation with supernatural grace, and the superaddition of his (natural and supernatural) good works, invited a scale of religious merit and a gradated journey to justification. Even, then, within the religion of idolators there were to be degrees of blame and corresponding degrees of due punishment (here, doctrines of the levels of hell and of limbo were useful). This is exactly what Renaissance Catholics were able to allege from Wisdom 13.

The thirteenth chapter of the Book of Wisdom serves a Catholic view of natural theology in its implication of a *relativity* of blame and *excusability* in idolatry that is not found in the natural theological passage in Romans. Wisdom 13:6 says that there is 'lesse complainte' in those who have deemed the higher machinations of nature (the sun and moon, celestial spheres, 'swift ayre') because of their intent to find God thereby. Stopping at *God's* creation of the beautiful things of nature is more excusable than the second category of idolators who place their hope in 'the workes of mens hands.' There is a tentative difference between the Catholic and Protestant English translation related to this idea of excusability. The men who considered the natural world in verse one deemed 'the circle of stars' and so on to be 'goddess rulers of the world' in verse two – that is, a genitive – rulers of the world belong to God, according to the Douai translation. But the Protestant translation of this verse is subtly different. There the circle of stars, etc., were deemed by the vain men 'to be gouvernours of the worlde, and gods' (Geneva Bible, 1560), or 'to be *the* gods which govern the world' (King James Bible, 1611).⁴³ In this second reading, in fact more faithful to the sense of the Septuagint Greek,⁴⁴ the charge for which the men are culpable is outright idolatry: the believing that the machinations of nature were gods. But in the Catholic rendering, the error is perhaps more that men simply accorded too much to secondary causes at the expense of the first cause. It was not that they thought the sun to be a god, but that thinking the sun to be God's ruler of the world they had squeezed out the direct providential care of God over His creation. Their wonder at the secondary causes was not in itself misplaced, but their wonder and praise of God should have been much greater as a result.

To return to the question of a relativity of blame regarding idolators, for Catholic exegetes such as a Lapede, three species of idolatry were identified in Wisdom chapters 12 and 13; namely,

⁴³ The Vulgate of Wisdom 13:2 reads, 'sed aut ignem aut spiritum ...rectores orbis terrarum deos putaverunt.'

⁴⁴ Greek LXX Wisdom 13:2c reads 'ἡ φωστήρας οὐρανοῦ πρυτάνεις κόσμου θεοῦς ἐνόμισαν.'

worship of animals (12:24), the elements or heavenly bodies (13:2), and artifices fashioned by the hands of men (13:10).⁴⁵ According to Catholic doctrine, idolatry was quite simply the worship of a creature. Such a conception of idolatry was more limited than the Protestant and it is worth briefly delineating that different position here. Calvin typified the Protestant position that held that the worship of creatures and artifices was merely the manifestation of an idolatry whose true origin and life was in the human mind, that ‘stuffed...with presumptuous rashness...substitutes vanity and an empty phantom in the place of God.’⁴⁶ In Calvin’s reckoning, the essence of idolatry was conceiving God to be other than how He was revealed in Scripture (‘they do not conceive of him in the character in which he is manifested, but imagine him to be whatever their own rashness has devised’),⁴⁷ and worshipping Him contrary to His instructions therein. In this reckoning, therefore, Catholics could be said to be guilty of idolatry (for God forbade the use of images in worship) while the pagan was *necessarily* guilty of idolatry as any god he conceived could not resemble the God solely revealed in Scripture. The significance of this for the current discussion is that the Book of Wisdom could be said to condemn idolatry – in the more limited Catholic sense – while maintaining the possibility for, indeed practice of, the true worship of God through natural theology; because it makes the distinction only between worship of the works on one hand, and the Workmaster on the other. A Lapide says that Wisdom 13 was written ‘to show the vanity of the idolatry of philosophers and other men, who worship the creatures, as opposed to the true faith of the worshippers of God who strive to know, worship and love Him.’⁴⁸ When idolatry is limited to creature-worship, there is a much greater possibility for natural theology to lead to worship of the true God and this, indeed, is the flavour of the natural theological works and biblical exegesis of Catholic theologians such as those mentioned in the current discussion.

Since in the Catholic reckoning, idolatry was worship of creatures, the creature that was worshipped in place of the true God reflected upon the moral and spiritual degeneracy of the idolater. Those, therefore, who worshipped the sun – a heavenly body of composed of ethereal quintessence, vast in size, sublime in beauty, mighty in power – were guilty of idolatry to a much lower degree than those who, at the other end of the spectrum, worshipped idols made by the hands of man. The more removed from God’s substance and attributes the worse the crime of idolatry. This is exactly the sense conveyed in Catholic exegesis on the account of natural theology and its relation to idolatry in Wisdom 13. De Lorin, for instance, says that the author of Wisdom ‘teaches how much blame was deserved for those who transferred the worship owed to

⁴⁵ A Lapide, *In librum sapientiae commentarius*, p. 242.

⁴⁶ I, xi, 8. in Jean Calvin, *Institutes of the Christian religion*, trans. Henry Beveridge (Peabody, MA: Hendrickson, 2008), p. 55.

⁴⁷ I, iv, 1. *Ibid.*, p. 12.

⁴⁸ ‘Hoc est thema totius capitis...nimitum ostendere, tum vanitatem idolatratum, Philosophorum ceterorumque hominum, qui creaturis fruuntur; tum oppositam veritatem fidelium Dei cultorum, qui Deum agnoscere, colere et amare satagunt.’ A Lapide, *In librum sapientiae commentarius*, p. 243.

God to some more noble things [than the idolaters who worshipped beasts in the previous chapter],’ but the worst of all were those ‘who call the work of men’s hands a god.’⁴⁹

The relativity of blame and excusability regarding idolatry receives an extended exposition in a Lapide’s commentary. A Lapide tells the story of how men ‘in seeking God...came across the beautiful creatures, and neither finding nor perceiving another god, they held these to be gods.’ This excuses their sin of idolatry ‘at least in part’ because ‘their error was by chance,’⁵⁰ while there was no such excuse for those who worshipped things made by human hands.

The passage in Wisdom 13 is, as we have said, a two-edged sword for natural theology, constituting both an attack on the failure of it while also implying its attainability. One way to reduce its negative connotations is to limit the scope of its invective. In his commentary, de Lorin does exactly that. Those who in the first verse are described as vainly ignorant of God are not all men in all time, but rather, ‘the word seems to indicate the imperfection of the time of the Canaanites or Egyptians.’⁵¹ This limit allows him to invoke a more optimistic natural theology from the chapter than if he had seen in Wisdom a rule that all exercises in natural theology were doomed to failure on both a speculative and practical theological plane.

The Book of Wisdom, Catholics could allege, stressed the actual intellectual attainability of natural knowledge of God, therefore making the *failure* of natural theology a case purely of the will and not of reason. The Douai ‘Annotations’ at the end of chapter thirteen show this to be the case:

Philosophers discussing the nature of manie creatures, saw that euerie creature preceded of some other thing, & so there must nedes be one beginning of al, absolute of itselfe, neither proceding nor depending of an other, nor a limited substance... saying without addition, HE WHICH IS, we shew the beginning of al, in no sorte limited: and this is God. Whom some Philosophers, by such discourse found, & knew in general, & sometimes confessed, but did not honour him as God, and therefore were inexcusable, as S. Paule concludeth against them.⁵²

Philosophers were able, from a discussion of creation, to infer a knowledge of the nature of God that approached even God’s personal name (‘HE WHICH IS’, that is, ‘God’s most proper

⁴⁹ ‘Docet quantam mereantur reprehensionem, qui cultum Deo debitum transtulerunt in res etiam alias nobiliores... Sed minime ferendos urget, qui opus artificis Deum dicant.’ De Lorin, *Commentarii in Sapientiam*, fol. 462.

⁵⁰ ‘Forte hi aliqua ratione a grauitate sceleris idololatriae, si non in totum, saltem in parte excusari possunt, quod fortuitus eorum fuerit error: cum enim quaererent Deum, fortuito incurrerunt in speciosas creaturas, cumque alium Deum non reperirent nec aspicerent, illas pro diis habuerunt.’ A Lapide, *In librum sapientiae commentarius*, p. 248.

⁵¹ ‘In quibus non subest scientia...quibus aderat Dei ignorantia. Videtur verbo imperfecti temporis indicare Chananaeos, vel Aegyptios.’ De Lorin, *Commentarii in Sapientiam*, fol. 463. A Lapide also thought the invective in the chapter was occasioned by the punishment due to Egyptian and Canaanite idolaters. A Lapide, *In librum sapientiae commentarius*, p. 242.

⁵² Annotations to Wisdom 13, Douai Old Testament vol. II, p. 362.

name'⁵³). This God the philosophers properly and actually discovered and even confessed; but their failure was moral – they would not ‘honour him as God’ and for this they were inexcusable. De Lorin explains that ‘they were not able to understand’ (Wis. 13:1) means only that ‘they were not able, *because they were not willing*, for they blinded themselves by their sin.’⁵⁴ It was not want of natural ability to know God that condemned them, but want of effort and good works. A Lapide echoes this principle in his commentary. The philosophers come in for special censure for their deliberate idolatry. ‘The greater the knowledge of God,’ wrote Lapide, ‘the greater the sin, and the greater the damnation to which they are accursed.’⁵⁵ It was not want of natural witness to God, nor of the power of man’s natural faculties that explained their irreligion – in fact, the philosophers had true knowledge of God. Their vanity and foolishness was not regarding knowledge of God, for ‘through natural science [they] knew God, but did not worship and glorify him with fitting piety and purity.’⁵⁶ Their knowledge of God, said a Lapide, was ‘speculative’, and while from it they perceived the moral necessity of exercising ‘practical’ knowledge of God in the practice of true religion, they had preferred darkness and had rejected the knowledge of God that they possessed.⁵⁷ A Protestant would claim that knowledge of God was suppressed in both the speculative and practical species such that no ‘true knowledge’ of God was had at either level.

For de Lorin, it was only because natural theology was truly attainable that St Paul’s argument in Romans held true: people who do not honour God have no excuse from his judgement because they ‘do not submit to the proven opinion on such a weighty matter, a wise argument fortified by probable inferences.’⁵⁸ Accordingly, while de Lorin is expounding Wisdom he provides his gloss on Romans 1:20:

What is known about God (pertaining to the truth about him known naturally) is manifest in them (manifested through the evidence of natural reason, if they wanted to seek it out) – for his invisible nature – (this is the way in which God manifests himself, for certainly we are not able to know him as he is by intuition or from causes) by the creation of the world (ever since the creation of the world) is clearly seen through what has been made (as it were, made visible by intellectual reasoning).⁵⁹

⁵³ Gloss to Wisdom 13:1, *ibid.*, p. 361.

⁵⁴ ‘Non potuerunt, *quia noluerunt*, excaecavit enim eos malitia eorum.’ De Lorin, *Commentarii in Sapientiam*, fol. 463. My emphasis.

⁵⁵ ‘Quare quo maiorem habent Dei cognitionem, eo maiorem malitiam, ideoque maiorem damnationem sibi accersunt.’ A Lapide, *In librum sapientiae commentarius*, p. 243.

⁵⁶ ‘Vaniores et stultiores fuere Philosophi, qui cum Deum per scientiam naturalem cognouissent, eum tamen non ut Deum ea pietate et puritate, qua par erat, coluerunt et glorificaverunt.’ *ibid.*, p. 243.

⁵⁷ ‘*Scientiam Dei* intellige non tantum speculativam, sed et practicam coniuncta cum Dei cultu, timore, obedientia, et amore.’ *ibid.*, p. 243.

⁵⁸ ‘...inexcusabiles iudicari etiam illos, qui non acquiescunt opinioni ad rem adeo grauem spectanti, quando prudens ratio valde probabilibus munita coniecturis eam proponit.’ De Lorin, *Commentarii in Sapientiam*, fol. 468.

⁵⁹ ‘Quod notum est DEI (pertinens ad verum eius cognitionem naturalem) manifestum esse in illis (manifestatum per euidentibus rationes naturales, si eas rimari vellent) inuisibilia enim ipsius (hic est modus, quo DEVS manifestauit, quae scilicet per se vel intuitiue, ac per causam cognosci non possunt) a creatura

In other words, if willing, any man could cognize from the creation and with his natural reason, a knowledge of God. A failure to do so implicated neither the obscurity of the natural revelation nor the degeneracy of human reason, but solely the activity of the will. 'If they wanted to seek it out' is the only contingency in de Lorin's characteristically Catholic account of natural theology. Man 'is able to know [God] naturally,' insists de Lorin, 'unless he wastes his natural faculties, and resists, and rebels against the divine light.'⁶⁰ While Protestant theology stressed intellectual degeneracy and a will enslaved to evil and ignorance of God, de Lorin demonstrates his belief both in man's rational ability for natural theology, and the freedom of his will to effect it.

De Lorin thus casts supernatural and natural means as equivalents – both were sufficient for saving knowledge of God, and a neglect of either means left the impenitent culpable. Having established that nature provided sufficient witness for knowledge of God such that those who did not know God were responsible for their own ignorance, de Lorin says that 'in the same manner, when someone has a notion of God by supernatural means and faith, he who is ignorant [is so] by his own fault.'⁶¹ De Lorin thus exhibits an epistemology of divine knowledge that stresses the similarity in extent and effect of the *via per creaturas* and *via per revelationem*, and it is this equivalence that for de Lorin must underpin the equity of God's judgment on heathen and lapsed Christian alike. The Book of Wisdom, then, backed up the principle that moral and intellectual effort by man with his natural faculties and the witness of the natural world, availed religious merit; at the least mitigating the crime of idolatry, and at best commending the soul to God's grace unto salvation.

The failure of a man to effect true religion from natural theology was therefore fundamentally moral, and not due to universal postlapsarian intellectual bankruptcy. But we have also seen that reason was the faculty that determined the scope of natural theology that an individual could practice. How then could the two positions be reconciled? Here, Catholics again found in the Book of Wisdom a useful apologetic: Wisdom came to those who piously sought her. The principle encapsulated by *facienti quod in se est Deus non denegat gratiam* proves invaluable once more. Though wisdom, which is needed to practice natural theology, lies in the gift of God, it is attainable by the morally upright. Wisdom 'is cleere...and is easely sene of them that loue her, and is found of them that seeke her' (6:12). Indeed, wisdom actively 'goeth about seeking them that be worthie of her' (6:16). But wisdom 'wil not enter a malicious soule, nor dwel in a bodie subiect to sinnes' (1:4).⁶² As James Barr in his *Biblical Faith and Natural Theology* (1993) noticed in

Mundi (iam inde a Mundi creation) per ea quae facta sunt intellecta conspiciuntur (fiunt veluti visibilia per discursum intellectus.)' *ibid.*, fol. 468.

⁶⁰ '[homo]...potest cognoscere tum naturaliter, vt dixi, tum nisi naturali facultate abutatur, & resistat, & fiat rebellis diuino lumini.' *ibid.*, fol. 468.

⁶¹ 'Immo & ad eundem illum modum nosse dicitur aliquando DEVM notitia quoque supernaturali, ac fidei is, qui sua culpa ignorat.' *ibid.*, fol. 468.

⁶² These references are all taken from the Douai Old Testament.

his analysis of the argument of Wisdom, 'it is a matter decided by morality in the last resort. Wisdom is accessible, but sinners will not realize this access, while those who seek it sincerely will have no difficulty in finding it.'⁶³ Barr also noted that 'there is no suggestion that access to wisdom is limited by the strict lines of special revelation: in principle anyone can gain wisdom, provided they have morality and purity of heart.'⁶⁴

Protestants would be loathe to admit any access to true wisdom – especially concerning divine matters – outside of the Scriptures. But the Book of Wisdom grants wisdom to the deserving without reference to the word of God. The effect of all this for understanding early modern Catholic natural theology is that it is *moral worth* (which because of free will to choose good as well as evil, is within the capacity of all) that determines access to the wisdom that leads the soul through the contemplation of the creation (not necessarily through verbal revelation) to knowledge of God. The Book of Wisdom therefore is much more optimistic regarding natural theology than other non-apocryphal scriptural sources. As Barr summarises,

If the canon includes the Wisdom of Solomon, it is likely that natural theology will seem to be a more 'natural' and indeed a 'biblical' option, sustained by a strong continuity running through the Bible. If, on the other hand, Wisdom is taken to be 'apocryphal', the continuity of natural theology will be obscured and the rejection of it made more likely. And this fits in very well with what has actually happened.⁶⁵

Again, the possibility of determining the chicken-and-egg question of the exclusion of Wisdom from the Protestant canon and the rejection of a true, extensive, and effective natural theology is beyond my scope and purpose. But it is certainly no coincidence that the admission of Wisdom and a fundamentally optimistic natural theology went hand in hand in early modern Catholicism.

⁶³ Barr, *Biblical faith and natural theology*, p. 72.

⁶⁴ *Ibid.*, p. 73.

⁶⁵ *Ibid.*, p. 77.

VI. Philippe de Mornay's *Traité de la vérité de la religion chrétienne* (1581)

An objection to my thesis that Protestant natural theologies could not be primarily about converting people to Christianity through arguments drawn from nature, might be alleged by citing the Reformed Huguenot, Philippe de Mornay's book *Traité de la vérité de la religion chrétienne contre les athées, épicuriens, payens, juifs, mahométans et autres infidèles* (Antwerp, 1581, translated into English in 1587 and 1592). This indeed might seem to be a work of natural theology with the genuine attempt to convince atheists and people of other faiths to convert – the precise purpose of natural theology that historians have assumed and I have denied. De Mornay apparently endorses an optimistic possibility for natural theology: the natural world 'offereth it selfe continually unto us, replenisheth our wittes with the knowledge of God.'¹ In the *Traité*, we have arguments drawn from ancient pagan philosophers, the promise to 'alledge nature it selfe, the sectes that haue sought out nature' and an explicit appeal to 'the vniversalnesse of this consent' which means 'the voice of nature is the voice of truth.'² All this in a work which, its title suggests, will attempt to convert atheists, Jews and so on to the Christian faith.

But this is not the case. In the first place, insofar as it has an evangelistic purpose, the evidence presented for Christianity regards the *verbal revelation* of Scripture. This, and not any appeal to an autonomous theological reading of nature, is, for de Mornay, the vehicle of Christian belief:

Truly I dare say, & by Gods grace I dare undertake to prooue, that whosoeuer will lay before him wholly in one table...the promises & prophecies concerning Christ, the comming of our Lord Iesus Christ and the proceeding of his Gospel, he shal not be able to deny, euen by the very rules of Philosophie, but that he was sent of God, yea and that was God himselfe.³

It is the verbal revelation of the Old and New Testaments, when regarded properly, that lead to faith in Christ. Natural philosophy will be incapable of disproving the truth of the Gospel (indeed de Mornay suggests that it verifies it) but nor is it charged with proving it with any kind of independence from Holy Writ. In other words, the role of *natural* theology in the argument is *post-Scriptural*, or *post-fideal*. De Mornay assumes, in line with Calvinist orthodoxy, the inability of the fallen mind to perceive religious truth independently of the Spirit-illuminated word of God.

¹ Philippe de Mornay, *A vvorke concerning the trevwnesse of Christian religion, written in French: against atheists, Epicures, Paynims, Iewes, Mahumetists, and other infidels*, trans. Philip Sidney and Arthur Golding (London, 1592), sig. B1v.

² Ibid., sig. B7r.

³ Ibid., sig. B3v.

The truth of God was, since the Fall, utterly beyond or even against man's natural reason. True religion was known only by God's *special*, and not His general, revelation – the Patriarchs therefore were taught 'such things as no man could know' by God's word.⁴ The reason of natural men in no way conduced to true knowledge and worship of God – for the way of salvation, the way in which God made Himself known, was unknown to, and antithetical to, human wisdom: by God's Word through the prophets and apostles, men were told to believe 'even of things contrary to the law of the world, and to the witte of man: namely, that Iesus Christ crucified is God.'⁵ De Mornay therefore exhibits the Calvinist tendency to restrict the theoretical content of natural revelation to the first half of the *duplex cognitio Dei*. Though de Mornay begins with a (biblically framed) natural theology concerning the existence, oneness, eternity, purity and beneficence of God the Creator and Father of mankind, when he turns to those aspects of doctrine that touch on redemption, the focus moves completely from proofs and citations from nature and natural philosophers to an exposition of the promises of Scripture alone.

De Mornay never admits the possibility of *theoretical* atheism: 'the Atheist,' he wrote, 'offends not through reasoning, but for want of reasoning, nor by abusing of reason, but by drowning of reason or rather by bemiring it in the filthy & beastly pleasures of the world.'⁶ In other words atheism was, as we have said, practical and not speculative: it was not an intellectual commitment that de Mornay could respond to with counter-reasons drawn from nature, but a moral failing that suppressed the individual's sense of religious truth and duty. This can be seen in the peremptory way with which de Mornay heads off speculative atheism by simply citing the movement of the world as needing a First Mover. That is the extent to which this large book engages on the basis of an observation in the world with theoretical atheism. In this regard it is typical of what Leif Dixon has found to be the character of late sixteenth-century 'atheomastical' treatises in its non-engagement with arguments against the existence of God.⁷ Indeed, in the first chapter, 'That there is a God,' de Mornay explains that first, universal consent makes an attempt to prove the existence of God unnecessary (the equivalent of Calvin's *sensus divinitatis*) and second, that 'there is no reasoning against those which deny the Principles' – as such people are 'wranglers and unwrothie of all conference,' contending 'against their owne mother wit.'⁸ These so-called atheists had given themselves over to carnal desires and wished to rid themselves of the guilt of transgressing God: 'to the intent they might practise all manner of wickedness with the lesse remorse have striued to perswade themselues...that they haue no soule at all, & that

⁴ Ibid., sig. B2r.

⁵ Ibid., sig. B2v.

⁶ Ibid., sig. B3v.

⁷ See Dixon, 'Perkins and "Atheisme"'.

⁸ Mornay, *Trevvnesse of Christian religion*, sig. C1r.

there is no iudge to make inquirie of their sinnes.’⁹ An intellectual natural theological case for theism is pointless because there are no speculative atheists, and because the profession of atheism is a moral, not an intellectual, decision – it is therefore God’s operation by the Holy Spirit and through the conscience, that will bring the misbeliever back from their godlessness.

There is also no engagement with rival theologies. De Mornay’s aim, therefore, does not really concern those who would label themselves atheists, Muslims, or pagans – but to correct the theological error and strengthen the faith of *Christians* by showing that God’s Book of Words is consistent with His Book of Works. De Mornay makes explicit his reason for writing the book, listing ‘how manie blasphemies he heareth...how great either coldnesse in the things which they ought to follow most wholly, or doubting in things which they ought to beleve most stedfastly,’ so that it was ‘more needfull now a daies...among those which beare the name of Christians, than euer it was among the very Heathen & Infidels.’¹⁰ The purpose of writing, therefore, concerned wavering Christians rather than those of another religion or none. The book’s translator, Arthur Golding, explained that he undertook the 1587 translation,

as an increase of comfort and gladnesse *to such as are already rooted & grounded in the truth,*
as a stablishment to such as anyway either by their owne infirmitie or through the
wiliness of wicked persons are made to wauer & hang in suspence, & as a meane to
reuoke such as of themselues or by sinister perswasions are gone away into error.¹¹

The *Trewnesse of Christian Religion* was, therefore, an in-house affair: the need was for the challenging and edification of those within the Christian fold who, de Mornay and others worried, were entertaining certain philosophical beliefs that were antithetical to the Christianity they professed, or had a lackadaisical approach to religious observance that needed disciplining. So why mention the heathen at all? Clearly the figure of the atheist or the Jew served a rhetorical purpose in providing a straw man against which the Christian veracity could be set. There was also a clear aim to cite pagan and Jewish authors, as well as the observations of nature, in support of revealed Christian truths to demonstrate the flimsiness of their religions compared with the solidity of the doctrines of Christian revelation. Just because fallen reason did not know God did not detract from the unity of truth: both revelation and, with Scriptural insight, true natural wisdom concurred in the vindication of true religion.

But what service exactly could the cogitations of natural men such as the pagan philosophers provide for the Christian? The main purpose of such citations was to teach the necessity of relying on God’s revelation in Scripture. De Mornay believed that all men had ‘common insights’ such as ‘the perswasion of the Godhead, the conscience of euil, the desire of immortalite, the longing for felicitie.’ While for most, ‘those common and general insets haue

⁹ Ibid., sig. C5r.

¹⁰ Ibid., sig. B3v.

¹¹ Arthur Golding’s *Epistle Dedicatorie*, in *ibid.*, sig. B1r. My emphasis.

remained barren', in some there have been 'some small sparkes of truth and wisdome' which had given the possessors the title of 'Philosophers.'¹² These sparks of truth, however, could not and did not become true knowledge of God and the Gospel. De Mornay strictly insists that while his aim is to 'kindle a fire of their sparkes,' it is 'not to lead vs to saluation...for in that behalf we haue neede of God himself to be our Pilote.' Instead it was 'to shewe vs as it were from a Tower which way it standeth in the darke wherein we now be, to the end we may call to God for helpe, and euer after make thitherward.'¹³ In other words, the cogitations of the pagan natural theologians demonstrated man's natural inability to attain saving knowledge of God. Pagan natural theology could teach only the *darkness* of humanity regarding the deity while Scripture alone granted spiritual sight. This accords well indeed with the principle delineated above, whereby men might be able to perceive only the curse of Law and the spiritual barrenness of reason from the contemplation of nature. But for the Christian, the role of natural reason regarding theological truths was not to establish them or give them a support which was epistemologically necessary, but to teach the necessity of God's revelation for true knowledge of matters divine: 'mans reason is able to leade vs to that point namely, that we ought to beleue even beyond reason, I meane the things whereunto al the capacitie of man to attaine.'¹⁴ Even this role of reason was only in the context of spiritual regeneration. Reason, once reborn in the Holy Spirit, could apprehend revealed truths that before conversion it could not:

When things are reuealed vnto vs, which reason could neuer haue entered into nor once imagined, no not euen when it was at the soundest, the same reason (which neuer could haue found them out) maketh vs to allow of them: the reason I say...maketh them credible vnto vs.¹⁵

In the above de Mornay again implies that certain doctrines could never have been naturally discerned even in man's innocence when reason was 'at the soundest.' But the point to notice especially is that the role of reason here is not an intellectual propaedeutic that precedes the reception of special revelation. Natural reason could in no way anticipate or prepare for the articles of true faith. But reason *subjected to God's Word and renewed by His Spirit* was now that aspect of the mind that acceded to and applied God's truth: 'it is a making of reason seruant to faith by reason.'¹⁶ Natural reason was not, therefore, the beginning of faith. It was not even admitted as a post-Scriptural test of doctrinal truth:

¹² Ibid., sig. B7r.

¹³ Ibid., sig. B7v.

¹⁴ Ibid., sig. B5v.

¹⁵ Ibid., sig. B5v.

¹⁶ Ibid., sig. B6v.

Low how Reason teacheth vs that which she herself neither knewe nor beleued, namely by leading vs to the teacher, whom we ought to heare & beleue, and to the booke wherein he vouchsafeth to open himself vnto vs, in giuing vs infallible markes & tokens, whereby to discerne what commeth of God, and what commeth not of him.¹⁷

The 'infallible marks' by which to discern spiritual truth from falsehood came, not from the test of reason, but by the exposition of the Bible. Catholic theologians with an optimistic view of the potentiality of man's mental faculties in matters divine might allege that reason and the witness of nature – so long, perhaps, as it did not contradict revelation – was an equal partner with the Bible in determining doctrine. This is not the case in de Mornay's work of natural theology, in which Scripture is both the beginning and end of true theology and nature and reason play only a supplementary, post-fideal and post-Scriptural role for those who doubted or erred.

Though de Mornay cites many of the arguments of ancient heathen, he explains that non-Christian, pre-fideal, or un-Scriptural natural theology had no autonomous value and no claim to participate in truth in itself. All that the heathen could know by nature was that there was a God – something to which their own soul as much as the external world testified. Some managed to attest to some of the metaphysical attributes of a Creator. But beyond this all natural theology was mired in desperate error and wickedness. De Mornay makes it clear that 'albeit that the least things which are in Nature and in our selues, doe sufficiently shewe us that there is but one God: yet notwithstanding all Nature is not able to teach us what God is, neither is man in nature able to comprehend any thing of him.'¹⁸ Although God was to a small degree expressed in the creation, no work could properly reveal the Workman. Furthermore, man lacked the mental capacity to accurately reason from the created world to the invisible Creator. For this reason, de Mornay explained in a manner similar to Calvin, that natural theology unenlightened by Spirit and Scripture led only to idolatry. The methodology of natural theology was utterly insufficient to penetrate spiritual truth – even the most promising deductions of the heathen natural theologians were alien to the truth of God 'by infinite distance.'¹⁹ Natural reason could not accommodate the true properties of God: God's containing in Himself all perfections in simple unity (which Scotus had taught was naturally deduced) for instance, was 'contrary to mans understanding.'²⁰ Lacking the ability to do natural theology unto religious truth, the attempt was pointless: 'darest thou be so bold as to describe God by his workes what he is, and to dispute of his substance?' asked de Mornay, 'And if thou canst not conceive him by his workes, how wilt thou then conceiue him, seeing that canst not behold him otherwise?' The answer, of course, is by God's verbal revelation, which provides the truth *objectively*, and the Holy Spirit, who enlightens the understanding *subjectively*.

¹⁷ Ibid., sig. B5v.

¹⁸ Ibid., sig. E4v.

¹⁹ Ibid., sig. E5v.

²⁰ Ibid., sig. E5v.

For the Christian, there was now a synergy, where before there had been antipathy, between God's truth and human reason: 'the trueth being reueled, enlighteneth reason, & that reason rowseth vp her selfe to rest vpon trueth.'²¹ In this way, areas of Christian doctrine in which one might doubt or err could be buttressed by an appeal to the Book of God's Works. We have, in other words, a post-fideal natural theology defined at every step with reference to God's Word. Concerning the natural theological treatment of the doctrine of the Trinity in the fifth chapter, for instance, the touchstone of truth is the Bible. The chapter begins with this agendum: 'Let us presume a little further,' writes de Mornay, 'not by rash inquisitiveness of man, but by the mercifull guiding of God, who hath vouchsafed to utter himself unto us in his Scriptures.' It is only then that he explains that reason 'will helpe us to maintaine and prooue the things which she of her selfe could neuer haue found out.'²² Some of those proofs resemble the analogical reasonings about traces of the Trinity in the natural world and in man's soul that feature in patristic and Catholic writings – but in place of Catholic optimism (or at least ambiguity) de Mornay makes absolutely clear that these traces 'are such as we could not well perceiue them, until the doctrine thereof was reuealed us.'²³ Perhaps de Mornay went further, therefore, than most Calvinists would have done in reckoning vestiges of the Trinity to be discernible in nature. It is amusing to note that Curtius, the spokesperson for Calvinism in the widely-disseminated manuscript the *Colloquium heptaplomeres* (c. 1593) of the heterodox Judaising Catholic Jean Bodin (1530-1596), criticises de Mornay for precisely the attempt to discern the Trinity independently of the context of faith:

The aim of Salomon and Toralba is to pursue the nature of God and the mysteries of the Trinity by reasons and proofs. Faith is needed... Wherefore I cannot approve the writings of Eusebius, Galatinus, Augustine and Eugubinus from which Mornay tries to draw out evangelical proofs.²⁴

Only through the spectacles of Scripture focussing the witness of the natural world could the Christian see confirmatory signs of what God had revealed of Himself in Scripture. Neither natural philosophy nor any exercise of human reason is given as an *arbiter* of religious truth at any point in de Mornay's book, but only as a demonstration or illustration of a Scripturally-defined doctrine after the fact. De Mornay's example, despite on cursory examination challenging the thesis I have sought to make, is in fact an example of most of the hallmarks of a distinctively Protestant natural theology: the denial of speculative atheism, the utter vanity of

²¹ Ibid., sig. B6r.

²² Ibid., sig. E8v.

²³ Ibid., sig. F5v. My emphasis. The modicum of knowledge about the Trinity that the ancients had was, de Mornay argued in chapter six, derived from verbal revelation to the patriarchs and the Jews, but was bastardised so that these beliefs concerning God were ultimately darkened.

²⁴ Jean Bodin and Marion Leathers Daniels Kuntz, *Colloquium of the seven about secrets of the sublime* (Princeton & London: Princeton University Press, 1975), p. 354. Bodin's authorship of the *Colloquium* has been admirably established in Noel Malcolm, 'Jean Bodin and the authorship of the *Colloquium Heptaplomeres*', *Journal of the Warburg and Courtauld Institutes* 69 (2006), pp. 95-150.

non-Christian natural theology, the proselytising only through Christ revealed in Scripture, the need of Scripture to read the theological message of nature aright, and the value of doing so for challenging and edifying the Christian believer.

VII. Lambert Daneau's *Physica christiana* (1576)

The theologian and philosopher Lambert Daneau also exhibits the characteristics of late sixteenth-century Calvinist orthodoxy that I have delineated in this account. Lambert Daneau was a Professor of Theology at Geneva and held a chair of theology at the university of Leiden. In his lifetime, he was regarded as one of the foremost Calvinist theologians in Europe, his work disseminating widely in its original French and Latin and in translation throughout the late sixteenth century. His published work reflected a wide variety of theological and philosophical topics. He wrote not only about confessional, expository, and polemical theology, but also ethics, politics, geography, and witchcraft.¹ His book on natural philosophy, *Physica christiana* (1576) was enormously successful, running to several editions over the next thirty years, and being translated into English as *The Wonderfull Woorkmanship of the World* within two.² This work is frequently referenced by both contemporaries and historians. Daneau's *Physica Christiana* is an excellent example of the incorporation of a Calvinist doctrine of natural theology into a textbook of natural philosophy. Together with the Frenchman's theological tracts, the main attributes of a Calvinist approach to the theological study of nature can be observed throughout his corpus.

'Natural Philosophie is, as it were a parte of Divintie, and an handmaiden vnto the same,' wrote Daneau, 'for it is a notable meane to know God by.'³ The end of natural philosophy was 'that our greate and good God, who is the auctour, Father, and creatour of them all, maie bee knowne, praised, and extolled.'⁴ The knowledge and glory of God were the chief ends of the study of creation. The centrality of these natural theological aims in Daneau's philosophical book was clearly understood and applauded by contemporaries. Thomas Twyne, the English translator of Daneau's tract, celebrates its being, 'a woorke doubtlesse of great auail, to the knowledge of God in his creatures,' of 'wonderfull efficacie, to set foorth the honour and glorie of God the Creator,' of 'rare effect to declare the prayse of God the woorkman' and finally, 'to establishe assured fayth, and true religion.'⁵

¹ Daneau's principal works were *Ethices Christianae Libri Tres*, 1577; *Politices Christianae libri septem*, 1596; *Geographiae Poeticae id est Universae Terrae descriptionis Lugduni*, 1580; *Elenchi haereticorum*, 1573; *De idololatria*, 1565; *Christianae Isogoge*, 1583-1588; and *Les Sorciers, Dialogue très utile et très necessaire pour ce temps*, 1564.

² Lambert Daneau, *Physice Christiana, siue, Christiana de rerum creatarum origine et usu, disputatio* (Geneva, 1576); the English version is Daneau, *Wonderfull woorkmanship*. A second edition in the original Latin appeared in 1579, with further editions in 1580, 1588, 1602 and 1606. The sequel *Physices Christianae pars altera* (1580) was also in its fourth edition by 1606.

³ Daneau, *Wonderfull woorkmanship*, sig. C4v.

⁴ Ibid., sig. D2r.

⁵ Thomas Twyne, *Epistle dedicatorie*, in *ibid.*, sig. A2v.

The reason for God's creating the universe in the first place was, Daneau said, to reveal His glory. The thirty-first chapter sets out that 'the chief end of the creation of the world, is the glory and knowledge of God the creator.'⁶ The world was made by God 'to communicate...his felicitie' to 'companions and partakers of his felicitie.'⁷ But for Daneau, the potential theological content of the Book of Nature was limited to concern only God's office as Creator. When the activity of natural philosophy is discussed at the opening of Daneau's first chapter in the *Physica christiana*, it is defined as 'apperteinyng to the praise of God the Creatour.'⁸ Daneau always only has the knowledge of God in His office as 'auctour, Father, and creatour' in view when he has the theological lessons of nature in view. In the thirty-second chapter Daneau explains that the world 'teacheth vs that God is our Creatour, but it is not able to enfourme vs that he is also our redeemer.'⁹ There were, he explained, three 'images of God' – the world, man, and Christ: but the three imaged God in different ways; the world represented only God's attributes, man some of His properties, while Christ was the full manifestation of the character and love of God.¹⁰ The breadth of the natural knowledge of God was circumscribed, but still – Daneau insisted – extensive and useful. When Daneau gives his justifications for natural philosophy being 'meete for a Christian' in the second chapter, the first is 'that thereby wee knowe God, not onely to bee the Creator of all thinges, but also to bee euerlasting, omnipotent, and mercifull, &c.' God *qua* Creator could be known through the contemplation of the natural world; the universe therefore manifested those attributes of deity that pertained to His relationship with creation. 'In these visible thinges,' wrote Daneau, 'the power, wisdome, and eternitie of God is to bee seene liuely.'¹¹ God's omnipotence, Daneau explained, was manifest in there being a creation, His wisdom in its intricacy of design, and His goodness in its continual sustenance.¹² Daneau also hints at the possibility of natural knowledge of (natural and moral) law: 'God, and his Commaundementes and preceptes' were the true first causes that philosophers should be able to comprehend from the contemplation of nature.¹³

The limiting of the content of the natural knowledge of God to only His offices of Creator and Sustainer was in accordance with his Reformed system of theology. In his *Isogoge* (1583), Daneau in fact developed Calvin's *duplex cognitio Dei* a little further than the Swiss.¹⁴ None in this life, he argued, could know God 'in himself' (*ex sese*). All had to know God through His works; of which there were two species – Creation, and Redemption. Knowledge of God could be had from the contemplation of the world or from the Bible – but the difference between these species of

⁶ Ibid., sig. S1r.

⁷ Ibid., sig. M4r. My emphasis.

⁸ Ibid., sig. B1r.

⁹ Ibid., sig. S3v.

¹⁰ See *ibid.*, sig. T1v.

¹¹ Ibid., sig. C4v.

¹² Ibid., ch. 31.

¹³ Ibid., sig. D3r. My emphasis.

¹⁴ Lambert Daneau, *Christianae isagoges ad Christianorum theologorum locos communes* (Geneva, 1583).

knowledge was not quantitative, as it was in the Catholic estimation (recall that Trent declared that knowledge through the Scriptures was *more clear, more easy, more excellent* than that attained through nature), but qualitative. There was an huge epistemological gulf between the Christian and the heathen: the former possessed knowledge of God by His work of redemption through Scripture; the latter sought knowledge of God by His work of creation through reason. The object, method, and end of the two was completely different, and this is clearly presented in Daneau's *Physica*. While the 'Heathen people & Philosophers...followed this knowledge of Naturall thinges' it was in no way a preparation for faith – they 'neyther perceiued...the reason of mans saluation...neither were thei themselues saued, bicause they lacked faith.'¹⁵

Blind autonomous reason could not know God through His work of Creation – but the Christian, informed by Scripture – had the opportunity, ability, and obligation to seek knowledge of God through His Work of Creation and therein see lively presented that aspect of God's nature. The *Physica christiana* was Daneau's philosophical textbook for those Christians who would meet that obligation. The *Physica* contained no discussion of Christ, soteriology, justification, and redemption because in it Daneau's focus was on knowledge of God through His work of creation, not on knowledge of God through His work of redemption. Similarly, the triune nature of God could only be known by special revelation: there is no discussion of Trinitarian theology throughout Daneau's 'Christian philosophy' – a most notable omission when compared to contemporary Catholic tracts. Daneau believed that God had given men three books of revelation – the book of creatures, the book of Scripture, and the book of life.¹⁶ While the revelatory character of nature is therefore endorsed, there is nothing like an equivalence between the Book of Nature and the Book of Scripture – the latter is, Daneau explains, 'far more sure, true, and plentiful',¹⁷ and, as he explains elsewhere, the only source for prescriptive theology.¹⁸ That strict dichotomous nature of the divide between the natural and the Scriptural revelation that I have argued characterised Calvinist approaches to natural theology and natural philosophy is perfectly exhibited in Daneau's book.

Daneau's natural theology was therefore 'post-Scriptural.' In Daneau's theology and philosophy we can see a direct inverse of what historians have usually believed comprised natural theology. That is, instead of the autonomous study of nature leading independently to the truths found latterly in revelation, Daneau looks from the revelation of Scripture *back* at the world through

¹⁵ Daneau, *Wonderfull woorkmanship*, sigs. S3v-S4r.

¹⁶ The book of life concerned God's sovereign will in election, and His providence meted out in the temporal sphere. Daneau thought that the book of experience was impossible for man to read to spiritual benefit.

¹⁷ Daneau, *Wonderfull woorkmanship*, sig. T4r.

¹⁸ Olivier Fatio explains that in Daneau's reckoning in his *Isogoge*, 'Scripture is the only one of the three ways...by which we are able to know God' ('L'Ecriture est la seule des trois voies - livre de la nature, livre de l'Ecriture et livre de vie - qui nous permette de connaître Dieu'). Olivier Fatio, *Methode et theologie: Lambert Daneau et les debuts de la scolastique reformee*, Travaux d'humanisme et Renaissance 147 (Geneva: Droz, 1976), p. 153. My translation.

the enlightened eyes of faith. Twyne argued that Daneau's post-Scriptural approach made his natural theology far superior to the others that had gone before: this work, 'doubtlesse of great auail, to the knowledge of God in his creatures' was 'so farre surpassing all other woorkes of like argument,' because it was 'founded vppon the assured ground of Gods woord and holy Scriptures,' rather than 'vpon the fickle foundation of mans reason & iudgement.'¹⁹ In that retrospective survey of nature Daneau finds corroboration in the Book of God's Works of those things declared in the Book of God's Word. In Daneau's treatment, therefore, Scripture defines the attributes of God and determines how they might be seen reflected in the mirror of the visible world.

While natural theology was post-Scriptural and post-fideal, so too was Daneau's metaphysics. Calvin had rejected altogether the worth of metaphysics for understanding the being of God, but Daneau thought that a metaphysics (concerning the attributes of God and the first principles of being) could be drawn from Scripture and then supported by a selective range of philosophical insights. His metaphysics was therefore limited. Olivier Fatio explains that in the *Isogoge*, Daneau 'always tries to begin with Scripture to combine its data with metaphysical elements,' so that 'while rejecting Aristotelian metaphysics, he admits the presence of the true and absolute metaphysics in Scripture.'²⁰ Biblical metaphysics was fully sufficient for an understanding of both God and the world.

Daneau's natural theology was, moreover, strictly *post-fideal*. Daneau saw no need to prove the existence of God by natural reasoning. Following Calvin, he simply denied the existence of speculative atheists, and declared that the existence of God was so plain to all that any rational demonstration was superfluous.²¹ In his *Isogoge*, Daneau supplied eight reasons for the existence of God, and four for the God of Christianity being the One True God that drew upon the classical and medieval heritage – but the end of these was not to prove the rational basis for coming to Christian belief, but the reasonableness of faith. It was a post-fideal buttress to a faith received entirely independently and supernaturally: for that reason, Daneau thought it entirely legitimate for his arguments concerning the existence and identity of God to be drawn from the very pages of Scripture as much as from logic and experience. These post-Scriptural, post-fideal 'proofs,' moreover, were contained in his primer for theology students – and owed rather more

¹⁹ Thomas Twyne, *Epistle dedicatoire*, in Daneau, *Wonderfull woorkmanship*, sig. A2v.

²⁰ 'Il s'efforce toujours de partir de l'Ecriture pour conjuguer ses données avec certains éléments métaphysiques... [Il] admet dans l'Ecriture la présence de la ver et absoluta Metaphysica.' Fatio, *Methode et theologie*, p. 164. My translation.

²¹ In his *Isogoge* (1583), Daneau thinks the scholastic disputation, 'An sit Deus?' to be pointless. Olivier Fatio reports, 'Daneau on this point seems unconvinced of the merits of this enterprise. Why ask whether God exists when it is obvious? ...All those who deny the existence of God are not true atheists; their conscience often testifies to their awareness of a deity' ('Daneau, sur ce point, semble moins persuadé du bien-fondé de son entreprise. Pourquoi se demander si Dieu existe alors que la chose est évidente? ...Tous les négateurs de Dieu ne sont pas de vrais athées; leur conscience souvent témoigne d'une divinité'). Ibid., p. 158. My translation.

to the scholastic curriculum that he inherited and wished to reform than any overriding theological commitment for their particular necessity. Daneau's complete silence concerning natural proofs for the existence and identity of God in his highly theologically-sensitive book of natural philosophy shows that he saw these ends – assumed by many to be the bread-and-butter of natural theology – to be no real part of what it meant to do natural philosophy in a theologically responsible manner.

The *spiritual* benefit of Daneau's work (the philosophical usefulness is discussed below) was not, therefore, any propaedeutic potential of nature in soteriology or pedagogical value in dogmatics. Rather, it was simply material that would provoke praise of God for His benefits in creation. The 'true knowledge' of natural philosophy was defined as 'apperteinyng to the praise of God the Creatour.'²² In chapter six, the first end of natural philosophy is that 'all maye bee referred to the onely glory, and knowledge of our great and good God.'²³ In the second chapter, Daneau explained how natural philosophy led to praise:

Wondering at in our myndes, and beholding with our eyes these woorkes of God, so greate, so many, so wonderfull...wee are with greate zeale and affection stirred vp to set forth the wonderfull praises of God and to giue him thanks.²⁴

It was setting forth God's glory as its conscious end that distinguished Christian from heathen natural philosophy. Christian natural philosophers 'dooe referre the summe of their disputation to this ende, that our greate and good God, who is the auctour, Father, and creatour of them all, maie bee knowne, praised, and extolled: and finally woorshipped the more ardently, and more feared.' Heathen natural philosophers, on the other hand, 'dooe not arise higher' than the 'lowe and meane degrees' of secondary causes, *not* ascending therefrom 'as it were by a Ladder, vnto GOD the Creatour of them.' The wrongheaded philosophy and sacrilegious theology of the heathen went hand-in-hand, so that their focus merely on secondary causes made them 'fleshely men, and Atheistes, not knowyng, or regardyng God,' deliberately robbing God of his rights of thanks, praise and obedience by positing the 'uncertein force...thei terme *Nature*' in the place of the final cause.²⁵ Though Daneau strongly criticises the pagans for their impiety and censures their philosophical inaccuracy, he arguably does not develop the same thoroughgoing denunciation of the idolatry of their natural theology as we might expect from a Reformed theologian. Daneau does mention that 'what knowledge of God may bee had, by the beeholdinge of this worlde' did not avail unto faith for the pagan philosophers but rendered them 'vnexcusable' because their blindness was on account of their sin, but he does not argue or analyse this in any great depth.²⁶ The explanation for Daneau's relative inattention regarding the

²² Daneau, *Wonderfull woorkmanship*, sig. B1r.

²³ *Ibid.*, sig. E2v.

²⁴ *Ibid.*, sig. B2v-3r.

²⁵ *Ibid.*, sigs. D2r-3r.

²⁶ *Ibid.*, sig. S3v, S4r.

damnation of the heathen is straightforward: the *Physica* that Daneau is writing is *christiana* – he is not dealing with the question of natural theology in itself divorced from a Christian context, nor is he doing some kind of exercise in comparative religion – instead, he is taking the Christian faith of his reader for granted and expounding the natural theological content and natural philosophical end that is legitimately and prescriptively within the remit of the Christian. What Daneau is considering here as natural philosophy is *not* the observation and reason of pagan thinkers without supernatural revelation (that is indeed the target of Daneau’s criticism) but is the pious activity of redeemed Christians contemplating the world through the spectacles of Scripture. Only the positive ends of natural theology are therefore explained in any depth; we should not expect to find an analysis of the justified damnation of the idolatrous heathen here.

A Calvinist natural theology clearly pervades Daneau’s natural philosophy. Since natural philosophy was about knowing and glorifying God, and since the doctrine that really defined the Protestant Reformation was the inerrancy, authority, perspicuity, and sufficiency of Scripture, it is no surprise that this Calvinist polymath should apply God’s Book of Words to expound the Book of God’s Works. Using Scripture to inform natural philosophy had obvious advantages over relying merely on pagan authors, reason, and experience. Since Scripture consisted of certain truth, the Christian natural philosopher ought to found his physics as far as possible in the Bible. This is what Daneau does in the *Physica christiana*. He considers many traditional Aristotelian scholastic *questiones*, and arbitrates on the different views by appealing *first* to Scripture (often the book of Genesis), and then to the corroboration of true philosophical insights – whether ancient or modern, whether by Christians or heathen. For this reason, Daneau has been described as a ‘Mosaic physicist.’ This term is problematic, and seems to label Daneau with a position that he did not hold. It is true that the Christian revelation must inform philosophy as the latter had theological sensitivities: for this reason (Scripture-defined) natural theology informed natural philosophy, rather than the other way round. But Daneau certainly does not intend to reduce the scope of natural philosophical endeavour to that which is expressly contained in Scripture – which is the sort of extreme application of biblical literalism that the term ‘Mosaic physics’ normally invokes. Instead, Daneau divides natural philosophy into ‘general’ and ‘particular.’

General natural philosophy concerns the ‘big picture’: the basic and essential attributes of the universe – its being created, finite, mutable, a substance and so on, and the building blocks of physical explanation – the elements, causality, order and the like.²⁷ Particular natural philosophy concerns the nature of the individual creatures and the machinations of secondary causes in natural phenomena. It is *general* natural philosophy, says Daneau, that the Scripture informs –

²⁷ Daneau defines general natural philosophy as that which concerns the ‘moste principall partes of the worlde, with their originall, nature, and causes’, and teaches the ‘generall maner and order of preseruyng and increasyng of all thynges.’ *ibid.*, sig. B2r.

‘for the more part,’ indeed it was ‘comprehended in the first chapter of *Genesis*.’ In part this is because questions such as the creation of the world were a matter of faith, being beyond both human history and capacity.²⁸ But aside from mere *creatio ex nihilo*, Scripture informed general natural philosophy because it had a significance regarding theology – or the knowledge and glory of God. For instance, God and matter cannot be co-eternal; so Scripture describes the creation of the world and the eternity of God; or God and Nature cannot both be the First and Final Cause – so Scripture calls God the author of everything and demonstrates His agency behind, say, celestial motion. Appeal to Scriptural doctrine therefore finally settled some of the standard *questiones* of Aristotelian physics. Chapter after chapter legislated on the questions of general natural philosophy. The world was substance, not shadows (ch. 10); there was one world, not many (ch. 11); the universe was finite, not infinite (ch. 12); the world was probably – on the balance of Scripture – a sphere (ch. 13); there was no world soul (ch. 14); the world was created, not eternal (ch. 15) and so on. Daneau insisted, however, that the general natural philosophy taught by Scripture was not attested in fideistic spite of, but (usually) confirmed by, reason, with a range of logical deductions from traditional metaphysics asserted invariably after the biblical proofs were supplied.

A biblical natural theology therefore must inform a Christian natural philosophy for theological reasons – but it must also do so for philosophical benefit too. Since Scripture is certainly true, its pronouncements on the essential character of the universe are an indispensable basis of certainty for natural philosophers. Lacking the verbal revelation, pagan general natural philosophy was theologically impious and philosophically unsound. Philosophers’ ‘diuersitie of opinions’ and ‘blindnes’ on the origin and early history of the world was such that ‘concernyng this matter a man better ghesse than vnderstand by their doctrine what hee hath to follow.’ This was because the pagans were ‘drowned in darknes, forasmuch as they were destitute of Gods woord, that is to say, the true light of knowledge.’²⁹ Daneau gives further examples of the heathen’s errant natural philosophy – for instance their confusing of causality and order in nature.³⁰ The root cause of this was the intellectual depravity of fallen reason. ‘Mans reason,’ explains Daneau, ‘is many times: and his senses are most times deceiued.’³¹ Christians, however, had the inestimable advantage of the Author of creation’s insight into the world’s makeup. ‘Generall naturall Phylosophie’, writes Daneau, is ‘chiefly to bee learned out of holy Scripture’ because God was Author of both the Word and the world: ‘what woorkmans woorkmanship, thinke you, is thys world?’ asks Daneau,

²⁸ Since it was ‘Through Faith wee vnderstande, that the worlde was made by the woorde of God’ (Heb 11:3), ‘the true and certaine knowledg concerninge these matters, is declared vnto vs by the holy scripture.’ *ibid.*, sig. C3r.

²⁹ Daneau’s epistle dedicatory to Frederick IV, Elector Palatine, in *ibid.*, sig. A3r.

³⁰ See *ibid.*, sigs. D3r (causality) and D4r (order of creation).

³¹ *Ibid.*, sig. E1v.

Is it any others than Gods onely? So that wee ought to beleue none rather than him, who in hys woorde teacheth vs the maner and order of framinge his worke, that is to saye, the worlde.³²

Going as far as possible to found natural philosophy on the Bible gave it its greatest possible surety. Daneau's fifth chapter, on 'What, and howe greate the certentie is, of the knowledge of Naturall Philosophie' explains that 'those things which in this art and knowledge wee learne out of Gods woorde, are most sure & most true, as grounded upon a most certaine foundation.' Daneau contrasts this with natural philosophical precepts that 'are not so sure and firme, bycause they bee onely established by mans sence, and reason: which two things are no undoubted, and assured groundes.'³³ This explains the Daneau's purpose in the *Physica christiana* to reform the pagan natural philosophy that dominated the universities' curriculum in the light of the certain truth of Scripture. Daneau lamented that an errant and impious 'Heathen Philosophie' had 'not onely...instructed and infected,' Christian philosophy, but the schools had become so 'stuffed, bewitched and deceiued therwith' that they 'would graunt and admit nothyng whiche they supposed to bee repugnant to the principles thereof.' Aristotle and Plato had usurped the place of Scripture as the one seat of unquestioned authority and, lacking the revealed truth, had led many into both theological and philosophical error with the principles of their general natural philosophy. Daneau accordingly aimed to 'refourme the opinions of the Philosophers by the woord of God.'³⁴

'Particular' natural philosophy (that which 'setteth doune the peculiere natures, operations, properties, and effectes of euery kinde, which are seuerally distinguished in these created and visible thynges'), however, had no such theological sensitivities.³⁵ Daneau's Calvinist belief in the limited content and purpose of natural theology (revealing the attributes of God the Creator and lauding His glory) restricted the implications of strictly Scripture-defined parameters on natural knowledge to the 'general' natural philosophy just discussed. Daneau, in a manner that I have argued was typical of Protestants' approach, did not think that the individual creatures (man, in the image of God, obviously excepted) had any analogical, specific symbolic spiritual meaning or revelatory purpose; nor, in fact, did natural phenomena have a portentous significance. Therefore the rational study of particular natural philosophy did not properly pertain to natural theology, except as a small part of the macrocosm that did. Accordingly, Daneau declared that particular, extra-scriptural natural philosophy was fully acceptable and even commendable. This is shown by the way in which Daneau was able to cite positively many pagan philosophers throughout his works. Daneau did admit that Scripture, for instance in the book of Job, did contain some elements of particular natural philosophy – and that it would be

³² Ibid., sig. C2v.

³³ Ibid., sig. E1v.

³⁴ Ibid., sig. A3v.

³⁵ Ibid., sig. B2r.

foolish to ignore that wealth of information. Accordingly, in his *Physices christiana pars altera* (1580) he extracted and reproduced what particular natural philosophy he could from holy writ.³⁶ But this was not exhaustive: while ‘certaine partes...and sparkes’ of particular natural philosophy were ‘founde shynyng heere and there dispersed in holie Scripture’, ‘the whole historie & general discourse of these thinges is not conteined in the Scripture.’³⁷

Daneau’s claim of the validity of extra-Scriptural particular natural philosophy was premised on his belief in the adumbrated but continued ability of human reason, with the assistance of common grace, in matters temporal. Since it was a gift from God, Daneau argued, reason was not to be despised. When the interlocutor asks if natural philosophy taught ‘without warrant of Gods woorde, is...vain and altogether uncertaine’, the answer given is ‘No, not so... Bicause GOD hath not giuen those two partes of iudgement vnto men in vaine: to wit, reason of the minde, and sense of the body.’ Daneau specifically arraigns himself on the opposite side to those who had argued that, on the basis of the inadequacy of man’s sense and reason, natural philosophy is to be entirely abandoned. Instead, Daneau argued that the judgement of reason and sense are ‘not lyinge, and deceiued in all thinges’ and that thereby the arts and sciences based upon them ‘ought not to bee condemned as altogether vaine and false.’ Daneau believed, like Calvin before him, that natural philosophy was an arena in which God’s common grace operated: it was his gift to men given indiscriminately and independently of special revelation and saving grace: Daneau therefore spoke of ‘the knowledge of so manye notable things and artes...which GOD, besides the Scripture of his woorde, hath giuen vnto men.’³⁸ But what might look like curious optimism regarding what we have said the Calvinists’ view of the effects of the Fall on the human intellect was, is tempered by Daneau’s assertion first, that reason was utterly blind in spiritual matters, and second, that reason *could* and often *did* go astray so that its achievements were due only to God’s forbearance and aid. Neither sense, reason, nor experience were any grounds of certainty, but their residual powers by the sufferance and grace of God did mean that some (particular) *philosophical* truth could be gained through their use. That truth was flawed, uncertain, and limited – Daneau apparently believed that the philosophers’ blindness extended to ethics,³⁹ but yet the results of pagan wisdom could, when tested against and incorporated into the general natural philosophy and natural theology provided by Scripture, be legitimately useful for the Christian investigating the world. Daneau’s philosophy was therefore *founded* on the general principles learned from Scripture, but he certainly did not intend thereby

³⁶ Lambert Daneau, *Physices Christianae pars altera, siue De rerum creaturarum natura* (Geneva, 1580). Blair, ‘Mosaic physics’ described it as an ‘hexameral commentary on the natural phenomena described in the Bible’ (p. 45).

³⁷ Daneau, *Wonderfull woorkmanship*, sig. B2v.

³⁸ *Ibid.*, sig. E2r.

³⁹ The philosophers drew their moral precepts in the corrupt light of nature, whereas Christian theologians drew from the pure source of the word of God. For the conscience to direct rightly what was good and evil, it needed to be regenerated by grace through faith and educated by God’s Word. See Fatio, *Methode et theologie*, p. 178.

to circumscribe natural philosophy. In labelling Lambert Daneau a 'Mosaic physicist' for his belief in the literal scientific truth of the Genesis account, we must not accuse him of limiting the scientific endeavour within its pages.

In Daneau's theology and philosophy, therefore, we find an example of the Protestant approach to natural theology and how it affected natural philosophy. The study of nature had as its most true and sublime goal the knowledge of God – but this was knowledge of God only as Creator; and it was possible only on the basis of the Scriptural revelation. Natural theology was an activity that was not applied to convince the heathen or the atheist, but the Scripture-defined activity of knowing and praising God by contemplation of the sphere of His great work of creation. It had no preparatory role for faith – either moral or intellectual, nor any prescriptive role in doctrine. It was an activity defined as the believer looking through the Book of God's Word at the Book of His Works. A Scriptural natural theology defined natural philosophy for Daneau, but only insofar as it provided a certain basis for general natural philosophy – the kind of natural philosophy that was theologically sensitive. This meant that Daneau explicitly endorsed an extra-Scriptural particular natural philosophy, in which reason retained some ability (though not certainty) and God's common grace could operate.

VIII. Conclusion

From a survey of a raft of theological sources, this thesis has explored in some depth the doctrine of natural theology, best defined as the answer to the question, ‘what can be known about God and religion from the contemplation of nature?’ In so doing it has challenged the assumption that natural theology was only concerned with proving the existence of God, that it was defined in dichotomous opposition to (Scriptural) revelation and, in particular, that it was an area devoid of confessional distinctions. Broadly speaking, Tridentine Catholic natural theology, while more conservative than the excesses of some medieval traditions, can be described as *optimistic* and *pre-fideal*. Optimistic, in that Catholics believed that a great deal could be known about God and religion from the contemplation of His creation, and that nature had both a high degree of authority in determining matters of faith and providing the basis of spiritual life. Pre-fideal, because natural theology was possible for the non-Christian according to the doctrine of prevenient grace, being a kind of intellectual and moral apprenticeship for the reception of grace and the higher theological mysteries. Indeed, pre-fideal natural theology accrued considerable merit in the eyes of God who was inclined to view the sincere natural religion of the heathen with favour – perhaps even provoking His infusion of saving grace. On the other hand, the Protestant confessions were more inclined to a natural theology that was *pessimistic* and *post-fideal*. Pessimistic, because the revelatory capacity of nature was restricted in terms of content (to God as Creator and Judge, and not as Redeemer; or to Law, not Gospel) and end, being always subservient to a theology derived and expressed *sola Scriptura*. Post-fideal, because the curse of the Fall had destroyed man’s intellectual and moral ability to seek and know God in any measure. The natural theology of the non-Christian was not only no preparative to grace and no source of merit before God, but necessarily false and idolatrous, providing justification of God’s damnation of the reprobate. Only the regeneration effected by the gift of saving grace – faith – could restore spiritual sight so that, always through the lens of Scripture, the world could be read once more, and to significant edificatory effect, as a Book about God’s great creational attributes.

These differences dovetail with the confessions’ contrasting doctrines concerning, in particular, the effects of the Fall, revelation, and the nature of justification. The Catholic Fall was a spiritual deprivation that left man’s natural faculties intact – with a reason that could still cognise God from the creation, and a will that was free to direct the soul toward God and the good. The Protestant Fall was a total deprivation of spiritual and natural goods that left man with a blind reason and a will enslaved to sin. These differing lapsarian anthropologies directly inform the ability of man to do natural theology. The Catholic doctrine of revelation was one which admitted the veracity of a variety of authorities in addition to Holy Writ, such as the traditions

of the Fathers and the decrees of the Church. With a theology of revelation that was already plural, nature and reason could have an importance that far surpassed their role in the Protestant *schema* that admitted none beside Scripture as the rule of faith. The Catholic doctrine of justification was gradualist, involving the intrinsic righteousness of the soul purged of sin by penitence and improved by good works. Into the soteriological 'journey' of justification, natural theology as a means to accrue knowledge of, and merit before, God could fit seamlessly. The Protestant doctrine of an imputed status of righteousness, on the other hand, allowed for no synergistic contribution on behalf of natural man: natural theology, therefore, had no place in the soteriological system.

In Raymond Sebond's *Theologia naturalis*, we have seen an expression of the fullest Catholic natural theological optimism that remained current throughout the confessional age. In the late sixteenth- and early-seventeenth century treatment of the Book of Wisdom we have detected the pre-fideal character of natural theology in the context of biblical exegesis. With Philippe De Mornay's *Traité de la vérité de la religion chrétienne*, we have learned to beware assumptions about the ends of natural theology even when a title suggests conformity to modern notions; and in Lambert Daneau's *Physica Christiana* we have seen an application of a post-Scriptural natural theology at work in an example of Calvinist scholastic natural philosophy.

The picture presented here of natural theology in the confessional age goes some way to filling something of a chronological gap in historians' treatment of natural theology. I do not claim, however, that the different confessional standpoints of the late Renaissance describe the character of natural theology in the following centuries. It is not my purpose to replace one static definition of natural theological doctrine with another. A promising further area of research would be to chart the changing face of natural theology over the course of the seventeenth and eighteenth centuries – centuries that, I suggest, fundamentally confuse and conflate the confessional distinctives that I have drawn herein. Profound change is occasioned by theological, philosophical, and contextual developments. Theologically, Arminian theology, spreading through Protestantism from the early seventeenth century onwards, provided Protestants with a way to accommodate a pre-fideal optimism regarding the possibility and role of natural theology into their doctrinal system. Meanwhile Jansenism (later declared heresy) installed a catastrophic Augustinian Fall at the centre of many a Catholic's theological system. These currents blurred, diluted and confused the distinctions between the confessions regarding man's natural postlapsarian theological and spiritual capacity. Mid-seventeenth-century Deism brought to the fore of natural philosophical debate a new view in which God's attributes as revealed in the world became a *challenge* rather than a spur to Christian belief. Meanwhile natural philosophy was subject to radical and rapid change as a mechanical conception of nature came to the fore and as empirical techniques increased the scope of scientific certainty. These, as

well as more fringe trends such as a resurgent neo-Platonism, fundamentally changed the way in which God was thought to relate to the natural world. Partly in consequence of philosophical developments, theoretical atheism began to be seriously and studiously espoused while the virulent antagonism of post-Reformation polemics began, in some intellectual circles, to subside. There was perhaps, then, by the late eighteenth century, the occasion for natural theology to assume the role of convincing atheists of the existence of God by rational proofs drawn from nature, without reference to revelation, in a non-confessional manner.

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