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Lecture 5: Natural theology and the quest for meaning
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In earlier lectures, we noted how the “natural theology” could be conceived in a number of manners. We also noted particularly one approach to natural theology, which is rooted in the Christian tradition and the distinctive way of “seeing” nature that this makes possible. This is to be contrasted, for example, with the Enlightenment’s approach to natural theology, which saw it primarily as a means of demonstrating the existence of God – a rather deist notion of God, it may be added – from rational reflection on the natural world.

One of the most difficult questions confronting some traditional styles of natural theology, including those developed in response to the agendas of the Enlightenment, concerns the relationship of the God whose existence might be inferred from nature, and the rather more specific God of the Christian faith. It is an important question. The forms of natural theology that emerged in the seventeenth and eighteenth century have become so influential that we might not unreasonably style them as “classical natural theology”.

Yet as we noted earlier, these “classical” approaches have at best an indirect connection with the Christian tradition. Stanley Hauerwas made this point with some force in his 2001 Gifford Lectures: “Natural theology divorced from a full [Christian] doctrine of God cannot help but distort the character of God and, accordingly, of the world in which we find ourselves.” So is the somewhat generic divinity of classical natural theology identical to the God who is revealed in the history of Israel, and in the life, death and resurrection of Jesus Christ? And if not, precisely what relationship does exist between these concepts of divinity?

This is no idle question, which can be easily dismissed. Within the context of a polytheistic worldview, for example, it is perfectly possible to suggest that the “true God” was not involved in the work of creation, which was entrusted to some subordinate divine agency, such as a demiurge. Within this context, a natural theology would thus have an innate tendency to disclose this lesser deity, if it discloses anything at all, rather than the “true” or “ultimate” God. Not all concepts of God are commensurate with a natural theology.

It is clear that the Christian vision of God cannot be equated with some “generic” notion of divinity, in that it is characterised by a set of specific features that both distinguish this notion of God from its rivals and alternatives and define its attitude towards natural theology. For example, within a monotheistic religious system, the idea of God might be articulated in terms that are not conducive to a viable natural theology. What if the one true God to self-disclose in a fundamentally exclusive manner – as, for example, within Islam. a monotheistic religious belief system which, like Christianity, has a strong doctrine of divine revelation. Nevertheless, Islam understands both what is disclosed and the manner of its disclosure in a very different fashion to that associated with Christianity. In general, Islam recognizes no true knowledge of God outside the Qu’ran, thus raising serious difficulties for any notion of natural theology. Since about 1500, most Muslim theologians have followed the general approach of Al-Ghazali, who regarded both natural philosophy and theology as posing a significant

threat to Islamic orthodoxy. On this view, nature is held to be incapable of disclosing anything reliable about God, and might mislead the faithful into making idolatrous or blasphemous judgements.

It might, of course, be responded that natural theology, when undertaken within a monotheistic framework, can only lead to the “God and Father of our Lord Jesus Christ” (1 Peter 1: 3). If there is only one God, and nature points to this one God, then the issue of the identity of the divinity intimated by nature would seem to be settled. “The love that moves the sun and the other stars” is identical with the God who became incarnate in Jesus of Nazareth. There is no other God to whom nature can point, lead or direct.

This apparently promising line of argument, however, encounters serious difficulties. The most serious of these is that a distorted conception of God arises from the process of inferring the divine nature and attributes from the natural world, either on account of the assumptions brought to bear by the human interpreter of nature, or on account of distortions or refractions arising from the medium from which God’s character is inferred. The problem can be seen emerging in the celebrated “Boyle Lectures” of the early eighteenth century: many attempts to establish the character of God from the rational analysis of nature ended up yielding a decidedly heterodox vision of God.

Yet the approach to natural that I wish to commend is grounded in a Trinitarian vision of God – the vision of God which excites and informs the Christian faith. The somewhat generic notions of “natural religion” or “religion of nature”, which became particularly significant in the eighteenth century, articulate a conception of a remote and detached creator God. This view of God, often dubbed “the divine watchmaker”, offers a radically truncated version of the Christian economy of salvation, generally limited to the past action of creation. Yet orthodox Christianity, endorsing the judgement of Irenaeus of Lyons, insists that salvation history does not begin and end with creation, but follows the more complex trajectory of creation,

fall, incarnation, redemption and consummation. This view of salvation history, and the one God whose actions lie behind it, must be seen as an integral aspect of a distinctively and authentically Christian approach to reality that is called “Trinitarianism”.

The approach to natural theology that I set out in these lectures is not based on an allegedly “neutral” reading of nature, which is held to disclose a God who may be known independently of divine revelation. Rather, it interprets natural theology as the process of engagement with nature that has its origins from within the Christian tradition, and which is guided and nourished by a Trinitarian vision of God. This allows nature to be “seen” as God’s creation, which resonates with how empirical reality is observed. The Christian tradition holds that nature possesses a derivative capacity to disclose something of God’s wisdom, without undermining or displacing divine revelation itself. It both legitimates and encourages such an engagement in the first place, and in the second offers an intellectual framework through which what is observed may be understood and appreciated.

Engaging with the natural world from a Trinitarian perspective encourages an expectation that nature can, in certain ways and to a certain extent, echo its origins and goal. From a Trinitarian perspective, it is not simply nature itself that is fine-tuned; the believer’s perception of nature can also be said to be fine-tuned, in that the Christian tradition mandates a certain attentiveness to nature and a heightened anticipation of disclosure, which permits its noise to be heard as a tune, to use Michael Polanyi’s helpful analogy, which we noted earlier.

The grand themes of the Christian faith provide an interpretative framework by which nature may be seen, allowing it to be viewed and read in profound and significant ways. Christian theology is the elixir, the philosopher’s stone, which turns the mundane into the epiphanic, the world of nature into the realm of God’s creation. Like a lens bringing a vast landscape into sharp

focus, or a map helping us grasp the features of the terrain around us, Christian doctrine offers a new way of understanding, imagining, and behaving. It invites us to see the natural order, and ourselves within it, in a special way – a way that might be hinted at, but cannot be confirmed by, the natural order itself. Nature is “seen” as God’s creation; the “book of nature” is read as God’s story – and ours. It is as if a veil has been lifted, or a bright sun has illuminated a mental landscape. And above all, it allows us to avoid the fatal fundamental error that is so often the foundation or consequence of a natural theology – namely, that divine revelation is essentially reduced to the supreme awareness of an order already present in creation.

So what are the distinctive features of a Trinitarian approach to natural theology? Limits on space mean that I must restrict myself to exploring two of its many aspects. We shall consider, briefly, the notion of the economy of salvation, and the idea that humanity is the bearer of the image of a Trinitarian God.

We begin by considering the economy of salvation. The notion of the “economy of salvation” is traditionally attributed to Irenaeus of Lyons. Reacting against Gnostic interpretations of salvation history in the late second century, Irenaeus laid out a panoramic vision of the “economy of salvation”, insisting that the entire breadth of history, from creation to consummation, was the work of one and the same triune God. Thus Irenaeus adopts a Trinitarian approach to creation, describing the Son and Spirit as the “two hands of God” in this process. The enterprise of natural theology takes place within the flux of the economy of salvation, not at its points of origination or consummation. This leads to the theologically significant conclusion – which clearly requires scientific comment – that a fallen humanity reflects on a fallen nature.

Hints of the importance of this consideration can be seen within the New Testament. For example, it is well known that Paul makes an appeal to creation as the basis of a knowledge of God. Yet while Paul clearly holds that

God can be known through the creation (Romans 1), at other points he qualifies this by referring to the “groaning” of the creation (Romans 8). The created order is to be seen as in transition, from what it once was to what it finally will become. There is a profoundly eschatological dimension to an authentically Christian natural theology, in that the natural order should be observed in the light of its goal, not merely of its origination. Paul’s statements can thus not only be interpreted in terms of the fall of creation from its original state, but also as an extension of the Old Testament prophetic theme of the hope of the future renewal and restoration of creation.

The importance of contextualizing the enterprise of natural theology within a Trinitarian economy of salvation is perhaps best appreciated by comparing this with the somewhat attenuated alternatives proposed by certain forms of Deism. On that reading of things, God created the world, and endowed nature with the appropriate capacity to develop and function without the need for any continuing divine superintendence or interference. There are many difficulties with this view. For example, it encouraged the emergence of a functional atheism, in that God was, to all intents and purposes, absent from the world. From the standpoint of natural theology, however, this approach encourages the idea that a direct equivalence, or at least a near-equivalence, may be posited between the empirical reality designated “nature” and the primordial creation that God declared to be “good” (Genesis 1: 12).

The plausibility of this idea would be fatally eroded through scientific advance. In the eighteenth century, it became increasingly clear that, whatever the explanation might be, the surface of the earth had changed significantly over time. Geology proposed a history of the earth which could only be reconciled with some difficulty with traditional readings of the Christian Bible. It was little wonder that John Ruskin found his childhood evangelical beliefs being shattered by the geologists’ hammers: “If only the Geologists would let me alone, I could do very well, but those dreadful

Hammers! I hear the clink of them at the end of every cadence of the Bible verses.”

More significantly, however, the rise of Darwinism destroyed the plausibility of any traditional “argument from design” which presupposed that empirical nature – what is presently observed – can be equated with God’s primordial creation. William Paley’s *Natural Theology* proved vulnerable at this point, precisely because Paley assumed that the natural world had remained more or less constant since its creation.

The theological notion of the “economy of salvation” does not entail the physical alteration of the natural world over time, although it can easily be stated in forms that are entirely consistent with an evolutionary perspective, whether cosmological, geological or biological. The relevance of the notion for natural theology is that it acknowledges that both the human observer and the natural observed are located *in hoc interim saeculo* (Augustine of Hippo) – in other words, at a point that is theologically distant and removed from the creation that was declared to be “good”. That creation now groans, and those groanings are observed by those whose judgements are clouded and obscured by sin. From this perspective, it is a theological inevitability that a naïve observer will interpret the natural world in such a way that may lead to idolatry, heterodoxy, or some form of paganism. Nature must be “seen” in the right way for it to act as a witness to, or conduit for, the Trinitarian God of the Christian tradition. Like any text, nature can be translated and interpreted in a multiplicity of manners; the question of how it is *rightly* to be interpreted cannot be overlooked or marginalized, as older approaches to natural theology tended to do.

Our insistence that a natural theology is shaped by an ontology within which the notion of the “economy of salvation” is firmly embedded allows us to address the specific concerns raised by Stanley Hauerwas and Eberhard Jüngel. Where, they ask (though in their different ways), is the cross of Christ to be found in a natural theology? Both correctly discern that a traditional

natural theology – such as that criticised by Karl Barth – has severe difficulties with the inclusion of any reference to the cross. Yet a Trinitarian natural theology brings to the observation and interpretation of nature an understanding of God that is deeply shaped by reflection on the cross. A Trinitarian engagement with nature is already marked with the sign of the cross, and is thus especially attentive to the problem of suffering in nature.

Undertaking natural theology within the Trinitarian framework of the economy of salvation thus allows the Christian interpreter of nature to accommodate the moral and aesthetic ambivalence of nature by contextualising its observation. The force of this point is considerable. Unless constrained by an excessive cognitive bias, the observer of nature will observe what can only be interpreted as beauty and ugliness, joy and pain, good and evil. A naïve natural theology can only reflect this ambiguity. How can the existence of a good God be inferred from such ambivalence? When all is said and done, there are really only two options at our disposal: turn a blind eye to those aspects of nature that cause us moral or aesthetic discomfort; or develop a theological framework that allows us to account for evil, while affirming the primordial goodness of nature.

The first such approach, in addition to being intellectually disreputable, causes considerable psychological discomfort, giving rise to a potentially destructive “cognitive dissonance” between theory and observation. We are thus left with only one viable way of handling the issue – developing a framework which allows this moral ambiguity to be observed, honoured, and interpreted.

A Trinitarian “economy of salvation” offers such a framework. Christian theology holds that its vision of reality offered a compelling imaginative resource, fully capable of confronting the spectrum of complexities of human existence and experience without intellectual evasion or misrepresentation. It affirms that God created all things good, and that they will finally be restored to goodness. Yet at the present, it insists that good

and evil coexist in the world, as wheat and weeds grow together in the same field (Matthew 13: 24-30). Without collapsing one into the other, it allows us to locate good and evil within the context of the theological trajectory of creation, fall, incarnation, redemption and consummation.

To explore the potential of such an approach, let us consider a passage from the final volume of John Ruskin's *Modern Painters* (1860), in which he reflects on a landscape in the Scottish Highlands. Ruskin insists that God does not wish us to see only the "bright side" of nature. God has given us "two sides" of nature, and intends us to see them both. Those who see nature only in positive terms are failing to see it as it actually is. To make this point, Ruskin points to an unnamed "zealous" Scottish clergyman who was determined to see the landscape as a witness to the "goodness of God". And so he described it in terms of "nothing but sunshine, and fresh breezes, and bleating lambs, and clean tartans, and all kinds of pleasantness."

Yet Ruskin dismisses this as inept. The zealous clergyman has chosen to see what he wishes to see, not see what is actually there. For Ruskin, "to see clearly" lies at the heart of poetry, prophecy, and religion. How can one live with such a blatant failure to see clearly? How can nature be sunlit without there being shadows? Ruskin offers an alternative viewing of a Highland landscape, stressing its moral and aesthetic ambivalence:

It is a little valley of soft turf, enclosed in its narrow oval by jutting rocks and broad flakes of nodding fern. From one side of it to the other winds, serpentine, a clear brown stream, drooping into quicker ripple as it reaches the end of the oval field, and then, first islanding a purple and white rock with an amber pool, it dashes away into a narrow fall of foam under a thicket of mountain-ash and alder. The autumn sun, low but clear, shines on the scarlet ash-berries and on the golden birch-leaves, which, fallen here and there, when the breeze has not caught them, rest quiet in the crannies of the purple rock.

Up to this point, Ruskin echoes the somewhat onesided sentiments of the Scottish parson. Yet the shadows, he now insists, must be seen. Ruskin's mood alters, as he describes the less attractive and pleasing aspects of the scene:

Beside the rock, in the hollow under the thicket, the carcase of a ewe, drowned in the last flood, lies nearly bare to the bone, its white ribs protruding through the skin, raven-torn; and the rags of its wool still flickering from the branches that first stayed it as the stream swept it down. . . . At the turn of the brook, I see a man fishing, with a boy and a dog – a picturesque and pretty group enough certainly, if they had not been there all day starving. I know them, and I know the dog's ribs also, which are nearly as bare as the dead ewe's; and the child's wasted shoulders, cutting his old tartan jacket through, so sharp are they.

Ruskin's point cannot be challenged, and there is nothing to be gained by gilding his lily through further comment. There is a shadowy side to nature, which cannot be denied or softened by even the most zealous Romantic imagination. Yet this is the "nature" that a natural theology must address – a harsh empirical reality, not the idealized fiction of an armchair theologian. Nature must be observed and interpreted from a Trinitarian perspective, which allows us to see the natural world as decayed and ambivalent – as a morally and aesthetically variegated entity whose goodness and beauty are often opaque and hidden, yet are nevertheless irradiated with the hope of transformation. Such an approach does not filter out theological inconveniences, but seeks to contextualize them within an overall vision of the history of the natural order. A Trinitarian ontology allows us to see nature with both eyes, giving a rich and truthful account of what is seen, while at the same time making sense of its variegation and complexity.

Let us now turn to consider the notion of the image of God in humanity. Both Christianity and Judaism share the insight that humanity is the bearer of the "image of God" (Genesis 1: 27), and show a propensity to avoid crude interpretations of the idea as a "divinized humanity", such as those which

gained influence in secular Hellenistic circles in the early Christian era. Jewish interpretation of humanity's creation in the image of God tended to avoid any suggestion that this established a direct correlation with God, perhaps reflecting a fear of some form of anthropomorphism ensuing. Some exegetes argued that God created humanity in the image of the angels, interpreting the context of Genesis 1: 27 to imply that God's words were addressed to an angelic audience. Others argued that the text was to be interpreted as implying that humanity was created according to some image that was specific to it, thus distinguishing humanity from the remainder of creation.

Christian theologians, however, saw no difficulty in interpreting this passage as proposing a direct link between the creator and the height of the creation. In part, this reflects the New Testament's theological endorsement and Christological elaboration of the notion, evident in (though not limited to) the Pauline assertion that Jesus Christ is "the image of the invisible God" (Colossians 1: 15). In the light of this Christological reconfiguration of the idea, Christian theologians naturally interpreted the notion of the *imago Dei* in soteriological and incarnational terms, ultimately expressed within a Trinitarian context.

Partly reflecting the influence of the great Alexandrian Jewish theologian Philo, the notion came increasingly to be interpreted as designating human rationality, especially its capacity to discern the divine or transcendent within the world. Philo interprets the biblical idea of the creation of humanity "after the image of God" to mean that humanity itself is not an immediate image of God; rather, it is created after the immediate image, which is the *Logos*. This idea was taken up especially within the Christian theological tradition, especially that which emerged in the city of Alexandria, which increasingly emphasized the correlation between the "rational (*logikos*)" nature of the created order, the capacity of the human mind to discern this, and the incarnation of the *logos* in Jesus Christ. The same "rational" order that was

embedded within creation, and the human mind as expressive of the *imago Dei*, was embodied in Christ.

Athanasius of Alexandria is one of the best representatives of this approach. In his *de incarnatione*, Athanasius sets out his *logikos* understanding of humanity:

God did not create humanity to be like the irrational animals of the earth, but created them according to his own image, and shared with them the power of his own Word, and thus possessing as it were a kind of reflection of the Word, and being made rational, they might be able to remain forever in blessedness, living the true life which belongs to the saints in paradise.

Athanasius's concept of the *imago Dei* is thus strongly shaped by his overarching theology of the *logos* as the agent of creation. While all of nature has been brought into existence by the Logos, and thus may be said to bear its imprint, humanity alone within the creation possesses the capacity to reason according to that *logos*. Athanasius thus argues that God "made humanity through His own Word our Saviour Jesus Christ, after his own image, and constituted humanity so that it was able to see and know realities by means of this assimilation to Himself."

Although Athanasius is clearly working within an implicitly Trinitarian understanding of the *imago Dei*, the full and explicit articulation of this approach is best seen in the writings of Augustine of Hippo. Since humanity is created in the image of God, and God is Trinitarian, Augustine argues that humanity bears *vestigial Trinitatis* – "footprints of the Trinity". "There is", he comments, "a kind of image of the Trinity in the mind itself." Since humanity has been created by a Trinitarian God, this is reflected in the impression left upon humanity – above all, on its rational character. "The image of its creator is to be found in the rational or intellectual soul of humanity." A Trinitarian God is thus known in a Trinitarian manner.

The implications of such an approach for natural theology will be evident. Athanasius summarizes the central point as follows: humanity was created by God in such a way that, “by looking into the heights of heaven, and perceiving the harmony of creation, they might know its ruler, the Word of the Father, who, by his own providence over all things, makes the Father known to all.” Although Athanasius holds that human nature has been corrupted by sin, his understanding of the dialectic of nature and grace is such that humanity retains a God-given capacity to discern its creator within the created order.

This point is of importance in dealing with one of the most discussed features of the universe – its intelligibility. Scientific advance has disclosed the fundamental explicability of much of the natural world. While some might see this as eliminating any notion of mystery, others have rightly pointed out that it raises a far deeper question: why can we explain things at all? As Albert Einstein pointed out in 1936, “the eternal mystery of the world is its comprehensibility.” As Einstein wryly remarked, “the fact that [the world] is comprehensible is a miracle.”

For Einstein, explicability itself clearly requires explanation. The most incomprehensible thing about the universe is that it is comprehensible. The *intelligibility* of the natural world, demonstrated by the natural sciences, raises the fundamental question as to why there is such a fundamental resonance between human minds and the structures of the universe. From a Trinitarian perspective, this “congruence between our minds and the universe, between the rationality experienced within and the rationality observed without” is to be explained by the rationality of God as creator of both the fundamental ordering of nature and the human observer of nature.

Yet Einstein’s interest in explanations in general, and the explicability of the universe in particular, raises a question of fundamental importance for natural theology. In what sense, if any, may a natural theology be said to explain anything?

The human longing to make sense of what we observe in nature and history partly underlies both science and religion. But what sort of explanations can be offered? In particular, in what sense does a natural theology explain anything? To answer this question, we must consider what the term “explain” means, and what outcomes arise from alleged “explanations” of things.

The notion of “explanation” reflects the simple fact that “knowledge” and “understanding” are not identical. To know that something exists or has happened is not identical with understanding why this is the case. Any account of explanation which is unable to sustain the distinction between “knowing that *A* exists” and “understanding why *A* exists” condemns itself as inadequate. Such explanations are often causal: *A* happened because of *B*. Yet, as we shall see later, it is important to emphasise that an appeal to causes is only one type of explanation. The fundamental point is that there is a distinction to be made between knowing that a phenomenon takes place, and understanding why this is so.

Yet the explanations that are offered may themselves require explanation. The process of explanation is often regressive, leading to the question of whether there is an ultimate explanation of all things, or whether there exists an infinite chain of explanations. The quest for a “theory of everything” or a “grand unified theory” can be seen as an attempt to offer a comprehensive explanation of explanations. Yet explanations do not themselves require to be explained in order to have explanatory power. Isaac Newton proposed gravity as a general explanation of the motion of terrestrial objects – such as the famous apple dropping from a tree – and of the orbits of the planets in the solar system. Gravity was unquestionably an explanation of these observations. Yet Newton was quite unable to offer an explanation for gravity itself. Indeed, Newton was deeply troubled by the notion of “action at a distance”, which he regarded as intrinsically implausible at the time. It is not necessary for a valid explanation of an observation to be explained itself in order to retain its explanatory function.

In recent years, three particularly significant discussions of explanation have emerged: Paul Humphreys' model of causal explanation; Peter Lipton's account of the nature of explanatory loveliness, which sets a causal approach to explanation within the framework of "inference to the best explanation"; and the account of explanatory unification offered by Michael Friedman and Paul Kitcher. Each of these has potential for illuminating the capacity of natural theology to explain what we observe about the world, and we shall consider their merits in what follows.

In the past, most approaches to natural theology have appealed to causal explanations. To explain something is to give information about its causes. Although the metaphysics of causation remains contested, no general solution to the issues raised by David Hume having gained general acceptance, this is not generally seen as a fundamental obstacle to the success of this approach. Furthermore, it is widely agreed that there are some explanations that are clearly non-causal, and that not all causes are explanatory. While we possess no adequate account of the nature of causation, most philosophers seem perfectly willing to live with this challenge, and work within its limits. As Lipton's work demonstrates, it is easily incorporated into the general approach of "inference to the best explanation".

Traditional forms of natural theology held that the existence of God provided a causal explanation of what might be observed in the natural world. The approach to natural theology which I develop in this work does not deny causal agency, direct or indirect, to God. It is perfectly possible to affirm God as a causal agency within the context of a Trinitarian natural theology. The point I have underscored is that it is more appropriate for such a natural theology to focus on the explanatory virtues of a unificationist approach. In part, this is because Trinitarianism proposes a unitary ontology of the natural world, grounded in the doctrine of creation.

Some might object that Deism represents a more modest and hence more rationally defensible ontology than that proposed by Trinitarianism. We see here the classic difficulty, which Chris Swoyer has dubbed “the great ontological trade-off” between a “rich, abundant ontology with great explanatory power” on the one hand, and a “more modest ontology with greater epistemological security” on the other. Yet a Trinitarian ontology is an integral aspect of the Christian vision of reality, and will be defended by theologians, not so much on account of its philosophical underpinnings, but in terms of its evangelical integrity and authenticity. Its “rich, abundant ontology” is a gift, and a Trinitarian natural theology its natural expression.

Yet the ontological vision of reality articulated by a Trinitarian faith is ideally suited to another approach to explanation, which is usually designated “unification.” This designates the manner in which theoretical advance takes place by bringing together a group of apparently disparate and disconnected theories, each of which can be accommodated and explained in terms of either a more advanced theory, or on account of a hitherto unnoticed relationship between existing theories. On this approach, we can be said to understand a phenomenon when we see how it fits together with other phenomena in a unified whole. This resonates strongly with the traditional Christian idea that to understand the world is to see the fundamental reality which underlies its multiple, and sometimes apparently disconnected, phenomena.

The unification of scientific theory is a topic of major interest, and has been the subject of intense debate in recent literature. Successful unification may exhibit connections or relationships between phenomena previously thought to be unrelated, thus offering the possibility of significant advances in scientific understanding. Excellent examples of the unification of explanation are to be found in Descartes’ unification of algebra and geometry, Isaac Newton’s unification of terrestrial and celestial theories of motion, James Clerk Maxwell’s unification of electricity and magnetism, the integration of Darwinian and Mendelian insights in neo-Darwinism, and

Einstein's demonstration of the unity of physics. Not all attempts to achieve unification have been successful; to date, for example, the unification of quantum and relativity theory still remains a distant goal.

The heterogeneity of the natural sciences gives rise to a variety of kinds of unification. For example, the creation of a common classificatory scheme or descriptive vocabulary – as in Linnaeus' comprehensive and principled systems of biological classification – where no satisfactory scheme previously existed is clearly an example of unification. Newton's demonstration that the orbits of the planets and the behavior of terrestrial objects falling freely close to the surface of the earth are due to the same gravitational force, and thus conform to the same laws of motion, represents a different form of unification. In this case, phenomena which had previously been seen as unrelated are shown to be the result of a common set of mechanisms or causal relationships.

A third type of unification arises when it can be shown that the same mathematical framework or formalism, such as the Lagrange-Hamilton formalism, can be applied to a group of phenomena, once more suggesting that they possess some shared features. There is also a significant philosophical debate over whether these successful unifications actually demonstrate anything of fundamental importance for such philosophically and theologically significant themes as the ontological unity of nature, or the metaphysics of reductive explanation. One may certainly draw the inference that a unified theory implies some ontological unity of nature, and avoid seeing a "successful phenomenological theory as evidence for an ontological interpretation of theoretical parameters". Yet despite this debate about the ultimate significance of unification, there is little doubt that the history of science regularly discloses the same pattern: the forging of connections between theories that were initially assumed to have no fundamental connection. The basic point here is that they can be recognized to part of a bigger picture, which explains them, while they in turn reinforce the plausibility of the bigger picture.

This points to the fundamental source of explanatory power ultimately lying in an *ontology* – an understanding of the way things are, of the fundamental order of things. It is by discovering the “big picture” that its individual elements are able to be both known and understood. Pierre Duhem (1861-1916) argued that to explain something “is to strip the reality of the appearances covering it like a veil, in order to see the bare reality itself.”

This approach to natural theology does not entertain the idea that the observation of nature can *prove* the existence of God through necessary inference; rather, the vision of nature that is mandated and affirmed by the Christian vision of things is held and found to offer a highly satisfactory degree of consonance with what is actually observed. Christian theology offers, from its own distinctive point of view, a map of reality which, though not exhaustive, is found to correspond to the observed features of nature. It makes possible a way of seeing things that is capable of accommodating the totality of human experience, and rendering it intelligible through its conceptual schemes. A Christian natural theology is able to explain much of what is observed in nature; that capacity in turn becomes an additional reason for asserting that the Christian tradition, whose fundamental ideas gave rise to this form of natural theology in the first place, is justified in its beliefs.

In this lecture, we have raised yet more questions about natural theology, and its capacity to engage with – and, dare we say it, “explain” – the world. Yet it is clearly necessary to bring all these ideas that we have explored together – a task that we shall attempt in the final lecture on Thursday.

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