

THE GROUND AND GRAMMMAR OF THEOLOGY

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I MAN THE PRIEST OF CREATION

The ultimate aim of Christian theology is the knowledge of God, but this only arises within the universe he has created. Scientific inquiries aim to understand the universe, but this is of deep interest to theology since this is God's universe. I make no apology therefore for trying to think out the interrelations between theological and natural science. Interest in this has never been more intense in view of recent startling advances in a unitary and comprehensive understanding of space-time.

'When I look at the sky which you have made... what is man?' (Ps. 8:3-4). The vastness of our own galaxy of one hundred million stars is dwarfed by the fact that it is only one among a hundred million similar systems. What is man that God should care for him? Sir Bernard Lovell asks: why is the universe expanding at precisely the critical rate to prevent its collapse and at precisely the rate that makes human life possible?

This seems to say: (1) somehow the universe and man are bracketed together, (2) we cannot give an adequate account of the universe without including the conscious mind as an essential factor. As we probe into the intrinsic order of the universe, we are in touch with a depth of intelligibility that reaches indefinitely beyond what our finite minds can comprehend (Schrödinger, Lovell and Einstein). To all this, theological science presents a complementary account for this universe in which God has planted us. The pursuit of natural science is one of the ways in which man, the child of God, fulfils his distinctive function in the universe. Francis Bacon: human science is a form of man's obedience to God. Man as scientist can be spoken of as the priest of creation, whose office is to interpret the books of nature written by the finger of God, to unravel the universe in its marvelous patterns and symmetries, bringing all into an orderly articulation so that it fulfils its end as the vast theatre of the glory of God.

Through this universe God has revealed himself to man in historical dialogue establishing communities of reciprocity in which his Word is intelligibly communicated to us through the Holy Scriptures. The natural scientist and the theologian are both at work within the same space-time structures of the universe and man is part of nature. The work of natural and theological science therefore overlap. They are not opponents but partners before God. In a lecture in 1978 I showed how three of the most basic ideas of modern natural science may be traced back to Christian sources in Alexandria as Greek theologians from the fourth to the sixth century thought out the relation between the Incarnation and the Creation (see Chapter 3). To take a different example, James Clerk Maxwell's celebrated field theory came not so much from his classes in physics as from Sir William Hamilton's lectures in metaphysics and was an idea with theological as well as philosophical roots. But the great day for creative integration between natural and theological science lies ahead of us.

I would like to indicate how I regard the change in scientific activity that makes such coordination possible. The fundamental principle with deep and far-reaching implications is that we know things in accordance with their natures and must let that determine the content and form of knowledge. This is appropriate to the complexity and richness of nature so that, in biology for example, we do not impose a mechanistic understanding with its rigid instrumentalism. Science is the development of our ordinary and natural experience of the world with a deeper penetration into the natural coherences and patterns already embedded there.

All this applies to our relations with God. There is no secret way of knowing, but only the one basic way which develops different modes of rationality in natural science and in theological science. It

would be unscientific to transfer the distinctive rationality from one field to another. Just as it would be irrational to try to know a person by chemical analysis, so it would be irrational to look for God through a telescope, to treat him as a natural process, or to use him as a stopgap in some scientific hypothesis. In each field of inquiry we must be faithful to the reality we seek to know.

In recent years the increasing fidelity of science to the nature of things has resulted in a number of changes that are significant for the unification of knowledge, overcoming the split between the natural and human sciences and between those and theological science.

1. Science has been shedding its abstractive character in which it tended to tear the surface pattern of things away from their objective ground in reality as though we could have no knowledge of things in their internal relations but only in their appearances. The abstractive method led to the deep splits in our culture. But now science is concerned to understand the surface pattern of things in the light of natural coherences and operates with the indissoluble unity of form and being, or the theoretical and empirical elements in human knowledge.
2. The era of merely analytical science is coming to an end and in the new science, an integration of form that transcends the limits of analytical methods, leads to the replacement of atomistic thinking with relational thinking. Cf. high-energy physics and particle theory. Here we have a mode of onto-relational thinking with which Christian theology has long been familiar and out of which came the concept of the person. Merely analytical science had difficulty in thinking together being and event, such as the particle and the field in light theory or position and momentum in quantum theory. But this is the stage high energy physics has now reached – a stage reached in theology by Karl Barth forty years ago when he brought together the ancient emphasis on the being of God in his acts and the modern emphasis on the acts of God in his being.
3. One of the most startling features in recent science is the success with which Katsir and Prigogine wrestled with the problem of how to relate the so-called random elements in nature to the laws of thermodynamics. It seems that the old couplets of chance and necessity, uncertainty and determinism, must now be replaced with a new way of thinking in terms of spontaneity and open-structured order. Theologically we are concerned with understanding the spontaneity and freedom of the created universe as grounded in the unlimited spontaneity and freedom of God the Creator.
4. Science has been moving away from a flat understanding of nature on one level to one characterized by a hierarchy of levels or dimension. The universe is not flat but a stratified structure, an ascending hierarchy of relations of thought that are open upward in a deeper and deeper dimension of depth, but that cannot be flattened downwards by being reduced to the same level. The old-fashioned science which tried to reduce everything to hard, causal connections in a rigidly mechanistic universe gives way to sciences concerned with living connections within the framework of an open-structures dynamic universe in which the human being can breathe freely. Polanyi.

Under the providence of God, these changes in the very foundations of knowledge are overcoming the damaging split between the sciences and the humanities and between both of these and theology.

2 EMERGING FROM THE CULTURAL SPLIT

This lecture will look at contemporary theology from the perspective of dogmatics and science within the scientific transition from a *dualist* to a *unitary* outlook. By *dogmatics* I mean the pure science of theology, acknowledging the living God as he is disclosed to us. By *science* I mean natural science in

its pure rather than applied forms – the knowledge we reach of things in any field under the compulsion of their independent reality. Many of our contemporaries are afraid to relate theology and science. This leads people to cut off faith in Christ from the historical Jesus.

But something different is found among men of science who more and more number themselves among believers. Basic habits of knowing are changing. Different dimension of reality, once foreclosed, are now more accessible indicating a multi-level universe that requires more open structures of thought. Here the scientist has to do with an intelligibility which transcends the limits of his natural-scientific methods. Scientists today frequently find themselves at the frontiers of their science compelled to ask questions directed towards an intelligible ground beyond the determinations of science, but without which science would not make sense. The more scientific inquiry presses toward the boundary of intelligibility in the universe, the more we are thrust up against the question of the creation and the Creator.

The fears of some theologians are tied up with false notions of science, the obsolete conception of the universe as a mechanistic system characterized by a hard determinism. In Rudolf Bultmann's view even history figures as a closed continuum with individual events determined by cause and effect, ruling out anything like incarnation, miracle or resurrection. The effect of this is to offer an existentialist interpretation of the Christian message. Behind all this lies a disastrous dualism, but it contrasts with the position actually adopted by scientists themselves. The era of determinism has come to an end. Scientists have moved on whereas theology tends to remain stuck in obscurantist modes of thought and so-called liberal theology slips into empty humanist subjectivism eked out by some kind of mystical transcendentalism. It is least able to establish intelligible connections with natural science. But fundamental changes have been taking place in theology, sharing in the transition from a dualist to a unitary outlook. Meantime I want to concentrate on the problem of dualism and its effects on our theology.

The form of dualism we are concerned with took shape in the thought of Kant and Descartes or of Newton and Galileo, but it goes back to the irreducible dualisms in the philosophy and cosmology of Plato and Aristotle. These concern dualisms between the empirical and the theoretical, the physical and the spiritual, the temporal and the eternal, the mortal and the divine. These dualisms congealed through the Aristotelian notion of *chorismos* or separation into the comprehensive dualism of the Ptolemaic cosmology – the supralunar and infralunar realms – still affecting all life and thought up to Copernicus and Galileo. Despite the developments in Greek Christian theology, the dualist outlook of later Neoplatonic Hellenism came to prevail and was given its most enduring expression in the Augustinian culture of Western Christendom. With the help of a resurrected Aristotelianism, a great synthesis emerged in which theology and science were intimately connected. The price paid for this synthesis was that the causal and logical bridge between God and the world was possible only through the Aristotelian ideas of God, man, nature, motion and causality. Far from overcoming the Augustinian dualism in the heart of medieval Christendom, this narrowed and hardened it and tied theology into obsolete notions of science.

But when the Aristotelian synthesis succumbed to the critical attacks of Reformation theology and Galilean science, the old radical dualism reappeared through Renaissance Neoplatonism and Reformation Augustinianism and Galileo's distinction between primary and secondary qualities. Even while the Ptolemaic cosmology gave way before the Copernican revolution, the new era continued to be characterized by an inveterate dualism. This was given philosophical expression by Descartes and Locke and scientific expression by Isaac Newton. Newton's great system of the world was characterized by a massive dualism between absolute mathematical time and space and relative apparent time and space. This gave rise to the deistic disjunction between God and the universe which has so deeply plagued modern theology, leading to the conception of the mechanistic universe. Because with Newton time and space became part of the subject matter of science, other human sciences such as history became caught up in the Newtonian dualism, evident in Lessing's big ugly ditch and Herrman's distinction between two kinds of history, *Historie* and *Geschichte*.

The form of dualism most damaging to theology derives from the thought of Immanuel Kant. Newton took over Galileo's distinction between the geometric aspects of reality, which are quantifiable, and appearances or phenomena, which are not, but must be correlated with what is. To cope with this Newton deployed his distinction between absolute mathematical time and space and relative apparent time and space. By clamping down the former on the latter he was able to bring mathematical order into phenomena and so to expound immutable laws of nature in terms of causal and mechanical connections. He identified absolute time and space with the mind of God, seeing the immutable God as an inertial frame containing the universe. The order of the universe was thus objectively grounded and the human observer is in touch with rational structures that are truly independent of his observations. But they are clamped together with the phenomenal universe through the containing power of God.

With Descartes, the Galilean dualism took another form with the notion of innate ideas in the human mind and intuitively comprehended axioms on the one hand, and a materialist mechanistic view of nature and space on the other. While the emphasis here fell upon rationalism and deductivism, it was otherwise with Locke, who returned to the old Aristotelian idea that there is nothing in the mind except what comes through the senses thus developing a dualism between mental substances and material substances. The only ideas the mind can have are derived from sense experience or reflection upon it. As Hume saw, this plays havoc with the connection between cause and effect so important for Newtonian science, for it emptied causality of any objective character.

Hume's analysis forced upon Kant the necessity of finding some way of bringing the empirical and theoretical ingredients in knowledge together to save the foundations of Newtonian science. This he did through his theory of 'the synthetic *a priori*' in which he combined sense experience, not with innate ideas but with built-in structures of consciousness through which the human knower imposed conceptual order on all he perceived. That made it impossible to penetrate behind his cognitive activity to what things are in themselves. What Kant did then was to transfer absolute time and space from the mind of God (as in Newton) to the mind of the human knower. They remain absolute, unaffected by experience, but instead of reading laws of nature out of nature, they were read in. Time and space were 'forms of sensibility' and causality and substance were 'categories of understanding', thus rejecting the possibility of any knowledge of 'things in themselves'. This introduced an element of necessity into the very act of knowing, thus making determinism into a hard metaphysical dogma.

This involved a damaging dualism between unknowable 'things in themselves' and what is scientifically knowable, a bifurcation between noumenal essences and phenomenal objects, a deep split between man as a being in the world of phenomena where he has no freedom and man as the subject of the supersensual or noumenal where his freedom belongs. Kant thus severed the connection between science and faith, depriving faith of any objective reference. In that context, Schleiermacher and Ritschl struggled to find some place for faith. Only a moral or symbolic or mythical meaning can be given the gospel. It is the anachronistic survival of this conception of the world as a closed deterministic realm of causal connections that keeps the damaging dualism alive and results in so much pseudo-theologies.

I turn now from the historical roots of dualism to its effects on theology.

1. The effect of dualism upon biblical interpretation

According to the positivist restriction of knowledge to observational phenomena, we derive scientific theories by deducing them from our observations for there is no direct cognitive access. The effect of this on biblical interpretation is twofold.

- (a) The theological component in biblical knowledge is limited to what is logically derived from observations or appearances. We cannot therefore know anything about Jesus Christ as he is in himself, but only as he appeared to his contemporaries. The task of the biblical scholar is

thus to clarify the impression Jesus made through some kind of historical-critical method, stripped of any theological interpretation. Only after the biblical scholar has set some criteria for acceptable observational data, shorn clean of theoretical component, may the theologian then do to work to deduce valid theological ideas or doctrines. Cf. the nominalist science of Ernst Mach.

- (b) Deducing knowledge from observation is restricted to the epistemological model of vision. This casts its dualism into the visible realm which we access by intuition, and the invisible realm to which we have access only by logical inference or hypothetico-deductive activity. This limitation of intuitive apprehension to visual or aesthetic experience cuts out the possibility of intuitive acts in auditive experience and undermines the all-important place of *word* in the Scriptures. This undermines the necessity for thoroughly theological interpretation of the Scriptures. This dualism cuts off the word of the Scriptures from the objective Word of God, for by definition in the deistic disjunction between God and the world, there can be no interaction between God and our world of space and time. Biblical material is thus transposed into a very different genre of symbol and myth.

This whole approach to biblical interpretation reposes upon the epistemological dualism between the empirical and the theoretical devastatingly destroyed by Einstein. He established in general relativity the indissoluble unity of form and being, the theoretical and the empirical to show that our basic scientific concepts are reached not by logical deduction or inference from observations, but through immediate intuitive apprehension of an intellectual kind. This extra-logical apprehension of intelligible structures is not to be confounded, however, with their formal justification or methodological establishment.

The intelligibility inherent in the universe is amenable to mathematical representation, but the intelligibility we are concerned with in biblical interpretation is the kind that takes its rational form of *logos* or 'word'. In theology we have to do with 'hearing statements' corresponding to the 'recognition statements' in mathematics or physics. These are statements that we are compelled to make as our minds fall under the power of intrinsic rationality of the field we are investigating, not statements we think up for ourselves, but imposed upon us by objective structural realities. Thus, *mutatis mutandis*, what holds good of our apprehension of objective intelligibility in nature, holds good also of our apprehension of objective intelligibility in the biblical revelation which we call the Word of God.

Thus with the exposure and collapse of false epistemological dualism with which so much modern biblical interpretation is bound up, the ground is clear for us to engage in fresh theological interpretation of the biblical material.

2. *The effect of dualism upon theological statement*

Here we think of dualism as the abstraction of the phenomenal surface of our experience – the world of appearances – from the geometrical frame on which it is grounded. The phenomenal surface inevitably starts to disintegrate. This is evident today in the developing disintegration of form in and across a whole range of human experience, but we shall take an example from the scientific investigation of some particular reality in which we propound a scientific theory. These are statements we develop out of our empirical relation to the reality concerned, but if they are to be meaningful, they must refer to that reality in terms of what it is independently of our statements about it. That objective or ontological reference is primary and without it the statements would be meaningless for they would fail in their intention. All scientific thought and all rational thought is pivoted primarily upon ontological references.

Suppose however that the ontological reference is suspended, what are you to make of those statements? What meaning can you give them? There are two alternatives. *Either* you interpret them by reference to the subject who made them – expressions of his states of consciousness or attitude of

mind or how things appear in his experience – *or* you interpret them in terms of the interrelations of the statements with one another through grammatical and logical analysis. Thus you are *either* confined to a form of existentialism, focusing on your own self-understanding, *or* you are confined to some kind of language philosophy restricting itself to the analysis of linguistic and logical connections. Being therefore cannot be known in its inner relations. Thus both existentialism and the various forms of language philosophy remain trapped in the Kantian dualism. They are twin errors which arise from such a radical break in the ontological reference of our statements to reality that the Einsteinian understanding of science as grasping reality in its depth – apprehending the intelligibility inherent in the universe independently of our perceiving it - is ruled out.

The same twin errors arise in the handling of theological statements within the dualist framework. If the objective reference of statements such as ‘God is love’ or ‘The Word was made flesh’ is cut off, then what do we have? Either they are interpreted in a subjective and anthropocentric way so that they are only a mythological way of expressing our feeling of dependence on God or they are treated as logical propositions to be analyzed or interpreted in their syntactical interrelations. This may lead in a fundamentalist direction in which people are concerned with the relation of statement to statement in a formalistic elision of the truth of being with the truth of statements. Or it may lead in a nominalist direction in which, as the doctrines disintegrate in being detached from the empirical and objective ground in the acts of God, they are shown to be meaningless. If with Bultmann we reject any conception of the ‘intelligibility of reality’ they are no more than autobiographical statements and theology degenerates into anthropology.

Let me sharpen this with reference to Christology. The dualist paradigms of thought detach Jesus Christ from God and detach his message from his person. When the Christian gospel was first proclaimed in the ancient world, dualist thought was deeply entrenched. There was the dualism of Greek philosophy and science, but also sorts of dualism in religion. On the one hand there was the very radical dualism of the Gnostic sects between a suprasensual, transcendental realm of divine realities and the murky and transient earthy, material realm. The gap was spanned through mythological hierarchies of semidivine beings. On the other hand, there was the dualism of Arianism according to which the disparate realms of the uncreated/divine and the creaturely/human touched each other tangentially at a sort of mathematical point they identified with Jesus. Ultimately he belonged to this world of created being.

It was in the impact of those dualisms upon Christian theology that we have the rise of demythologization and what one may call philosophical mythologizing. The radical dualism of the Gnostics made them regard the biblical account of the acts of God as myths and to give them high flown mythologization. In the Arian view on the other hand, the world of God bears upon this world not to overlap but to impinge upon it in a timeless and spaceless changing point. This required them to demythologize the Christian faith since Jesus belongs only to this world of created and changeable realities, and understand him as only the symbol and not the reality of God. Jesus is a detached and changeable image of God and cannot be invested with finality and determinate character. He is only an intermediary and not the unique Mediator between God and man.

Classical Christian theology held that this world of ours in space and time is actually intersected and overlapped, so to speak, by the divine world in the *parousia*, the advent and presence, of Jesus Christ, God of God yet man of man, belonging to both the eternal world of divine reality and to the historical world of contingent realities. The linchpin of this theology is the *homoousion*. The Nicene theology thus gave basic shape to the doctrine of the Trinity. If Jesus Christ is in his own being what he is as God’s revealing word and saving act toward us, or if, conversely, what God is toward us in the revealing word and saving act of Christ he is inherently in his own eternal Being, then through Christ and in one Spirit we are given access to God as he is in himself. If the revealing and saving Word of the incarnate Son is internal to the Being of God, then we are given, at least in some measure, knowledge of God in his internal relations as Father, Son and Holy Spirit. The epistemological force of the *homoousion* is all-important. If Jesus Christ is the image of God, the imaging of God in his

incarnate life on earth has a place of unique and controlling finality in our knowledge of God. But quite clearly, this formulation of the Christian doctrine of God could not have been developed without a reconstruction of the dualist foundations of ancient Greek and Roman culture in philosophy, science and religion,

In our own times, Christian theology has been struggling once more with dualist modes of thought that drive a wedge between Christ and God, and between the message of Christ and Christ himself. Some kind of Christianity detached from Christ becomes the focus of attention and, attached to human society, it becomes the object of phenomenological and sociological analysis. Trapped in the fragmentation and disruption of our so-called pluralist society, avant-garde theology is rife with modern forms Gnosticism and Arianism which can be paralleled point by point with their ancient counterparts. But we are in the fortunate position that our modern dualism has been undermined. Our dualist forms of thought have already been destroyed in the advance of scientific knowledge. The old epistemological, cosmological, and religious dualisms are without any force. This applies to the epistemological, phenomenological and deistic dualisms that underpin the revival of the nineteenth-century theologies of Schleiermacher and Ritschl, for in every field of inquiry, we establish genuine knowledge in terms of its internal relations and intelligibility. The difference can be indicated by pointing to the debate between Ernst Mach and Max Planck in quantum theory over the question of the reality of atoms. Mach claimed that they had no real existence and were no more than symbols that we use for it is impossible to know them in their internal relations. But of course there has been startling advance into the internal structure of atoms thus destroying the Kantian and Machian thesis that phenomenological knowledge was restricted to external relations or appearances.

This is the revolution that has been going on in recent decades in the very foundations of scientific knowledge. The social sciences still lag far behind, as do biblical and theological inquiry. In this transitional period, interdisciplinary dialogue, particularly between theological and natural science will play the most effective role in the emergence of a new openness to the creative impact of God, the unifying Source of all rational order and beauty in the universe.