

INTERPRETING NATURE AND SCRIPTURE

A new proposal for their interaction

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INTRODUCTION

Almost half a century ago, Bernard Ramm (1954) in his *The Christian View of Science and Scripture* gave a systematic treatment of the questions raised by science for the interpretation of Scripture. They included the traditional questions about the creation narratives, the story of Noah's flood, reports of miracles etc. There has been no follow up. I think this is due mainly to the view that the religious language of the Bible does not refer to nature and history in a rational manner. Ramm's questions may have been seen as assuming those kinds of reference and perhaps that is why his questions were considered irrelevant.

Today the split between the sensible and the supersensible, between religion as emotion and science as knowledge, between knowledge and faith is being challenged. Reliable knowledge has more dimensions than scientifically controlled experience and reason. This has opened the door for science to raise once again questions for the interpretation of Bible texts. Yet little attention is given to the meaning of Scripture for the interpretation of nature in science even though this is the other side of the coin. In relating what we understand of Scripture and nature we continue to suffer from the errors of biblicism on the one hand and liberal theology on the other. The challenge for biblical hermeneutics as I see it is to chart strategies for taking the Bible into account that do not suffer from these errors, but instead respect the integrity both of the interpretation of Scripture and of nature. One such strategy consists in acknowledging that interpretation is as much involved in the study of nature both pre-scientific and scientific as it is in the study of Scripture. This approach was proposed by Vern Poythress (1988) in his *Science and Hermeneutics*. He concludes that the interpretation of the Bible must include a critique of the background beliefs of both theology and science. This approach has not been implemented probably because it requires an understanding of the role of background beliefs in science and theology. Since this understanding has grown recently (van der Meer, 1996, 1999a, b, Brooke, Osler and van der Meer, 2001), Poythress proposal can be further developed. This contribution is a small step in that direction.

The human body is an ideal meeting place for theology and science because it displays the fullest spectrum of the manifold wisdom of God. If anywhere, it is in the study of the human body that "Science can purify religion from error and superstition" and "religion can purify science from idolatry and false absolutes...." (John Paul II, 1988: M13). My objective is to offer a hermeneutical procedure for the operation of these two types of purification by focussing on questions about body, soul, and resurrection. This procedure is intended to embody the vision that "Only a dynamic relationship between theology and science can reveal those limits which support the integrity of either discipline, so that theology does not profess a pseudo-science and science does not become an unconscious theology." (John Paul II, 1988: M14).

A clarification of terms is called for beginning with the terms 'nature' and 'science.' I use the term 'interpretation of nature' in the broadest possible sense including the interpretation of natural phenomena in science unless otherwise indicated. The pre-scientific and scientific interpretation of nature are often difficult to distinguish because science is a systematic form of pre-scientific problem solving. The focus of this paper is on the engagement of the interpretation of nature in science with the interpretation of Scripture in theology. Also, in using the terms 'religion' and 'theology,' I have already introduced much material for reflection. However, I have chosen to focus neither on religion nor on theology, but on the source of both, that is the Scriptures. The Bible claims to be a spiritual and moral guide in life. For centuries, Christians have participated in the life of scholarship, and for centuries they have assumed that the Bible is relevant for understanding both God and nature. The question is: how can the Bible be such a guide in a culture shaped by science and technology as we know it? How can it be such a guide in a culture that has gone through 'higher criticism' as well as through biblicism? A focus on the Scriptures is warranted by the development

of new doctrine informed by contemporary interpretations of nature and by the questions these new doctrines raise for the interpretation of the Scriptures. Let me give some examples which concern the human body.

The first example originates in process theology and concerns *the illnesses of body* (and spirit). According to process philosophy the universe is eternal and its constituents down to elementary particles have the ability of perception however small. God providentially guides this universe toward the greatest possible realizable value, not by determining or coercing creatures through efficient causality, but by 'luring' them with the persuasive power of the good. This approach does not ask what can be said exegetically about God's power in nature. This is not a theoretical question. In the Bible God's power over nature warrants the trust people have in Him. Christians trust God with their own life in the body as well as their expectation of a life after the body has died on the conviction that someone with the power to create this cosmos and heal sicknesses has the power to forgive sin. But how does one do pastoral work in the cancer ward when God is seen as luring cancer cells with the persuasive power of the good, however powerful a lure God may present to the natural processes in this world? In sum, there are important pastoral reasons for raising exegetical questions about God's power in nature, specifically in the human body.

My second example raises the question whether the *redemption of the human body* (and spirit) might be understood in terms of continuous evolutionary progress rather than a catastrophic discontinuity at the end of time. The evolutionary process by which God is taken to create the cosmos has been interpreted as grace (Gregersen, 2002). In this interpretation, grace refers to evolutionary progress towards a world without natural and moral evil. That is, 'nature' is considered as 'grace.' The view of grace as evolutionary creation is a theological proposal inspired by evolutionary biology. How does this view engage the interpretation of Scripture? Several questions could be raised. If the history of Israel can be redemptive, and if this redemptive history can be discerned in an hermeneutical procedure called redemptive-historical analysis, could an evolutionary history of nature including the human body be redemptive in that same sense? Could there be a redemptive history of nature? That is, could evolution as process be interpreted that way? What kind of hermeneutical procedure might this suggest? How would it be evaluated? The classical Christian understanding of providence as God acting in both nature and history means that grace can be both natural and supernatural. Does this hold when natural grace is interpreted in terms of the neo-Darwinian theory of evolution? Can God be a Darwinian? What are the hermeneutical challenges implied in a move from a discontinuous to a continuous eschatology?

My final example of the development of new doctrine that is informed by science and raises questions about the interpretation of Scripture is about *the resurrection of the human body*. Physicalism is the view that there is no other matter in the world than physical matter. Emergent physicalism is the view that mental activity and religious experience have emerged from physical matter. Theologically, this means that between this life and the next people may not exist except in the form of dust (Cooper, 1989, Anderson, 1998, Murphy, 1998: 23). One challenge for biblical hermeneutics is whether it can discriminate between monistic and dualistic anthropologies. The same texts have been interpreted monistically (Green, 1998) and dualistically (Cooper, 1989). Is biblical hermeneutics capable of providing boundaries for the interpretation of these passages? Further, in traditional Christian belief, the world to come is characterized by a life as recreated persons in a new creation. In process theology this is transformed to 'life' as a memory in the mind of God. Can biblical hermeneutics narrow down the options?

Clearly, these are questions that require reflection on the interpretation of Scripture as well as of nature specifically as offered in science, and on interaction between the two. I will suggest that both interpretations proceed step-wise through a hierarchy of levels with each lower level being a prerequisite for the existence

of the next higher level. Due to the technical nature of the lower levels of interpretation, there may not be much reason for interaction between the interpretation of Scripture and nature although in the case of science this remains to be seen in light of what the hermeneutical philosophy of science has argued is the constituting effect of conceptions of reality on experimentation and instrumentation. However, at the higher levels the interpretation of both Scripture and nature has links with the cultural and religious context. Each interpretative hierarchy will be illustrated with a brief case study. In the first case study we will see how the Bible influenced the interpretation of nature via the religious world view it created in the geneticist Theodosius Dobzhansky. The second case study focuses on the theologian Rudolf Bultmann and shows that scientific naturalism as a worldview has shaped his interpretation of Bible passages. In my proposal, a person's worldview links the interpretation of nature and Scripture. On each side, worldview has potential effects down the levels of interpretation. Conversely, each hierarchy of interpretation has bottom up effects that can cross over to the other hierarchy via the world view level that links the two hierarchies.

BUILDING BRIDGES FROM THE SIDE OF SCIENCE: THEODOSIUS DOBZHANSKY

Let me begin with a case study of the role of religious belief in biology. The Russian American geneticist Theodosius Dobzhansky was born in 1900 and moved to the U.S.A. at 27. That is, he experienced the Communist Revolution during his formative years and this had a psychological and spiritual impact. Ruse (1996) has argued this impact entered his science in two forms. First, he came to see the relationship between the individual and society as one of conflict and this was translated into a view of the relationship between organism and environment. Second, as a Russian Orthodox Christian he struggled with the evil and suffering brought upon family and friends by the Russian Revolution. "The urgency of finding a meaning of life grew in the bloody tumult of the Russian Revolution, when life became most insecure and its sense least intelligible." (Dobzhansky, 1967). The justification of God in the face of evil and the question of freedom became enduring religious quests for Dobzhansky who suffered from survivor's guilt.

In the US he became famous for his work on the genetics of micro-evolution and is known as one of the so-called architects of the synthesis between Darwinian evolution and the role of mutation. He believed that:

"evolution, like everything in the world, is a manifestation of God's activity." "I see no escape from thinking that God acts not in fits of miraculous interventions, but in all significant and insignificant spectacular and humdrum events. Pantheism, you may say? I do not think so, but if so then there is this much truth in pantheism" (Letter to J. Greene, November 23, 1961; Dobzhansky papers).

Further:

"Christianity is basically evolutionistic. It affirms that the meaning of history lies in the progression from Creation, through Redemption, to the City of God" (Dobzhansky, 1967: 112). "Evolution (cosmic and biological and human) is going towards something, we hope some city of God" (letter to J. Greene, November 23, 1961; Dobzhansky papers).

The meaning of evil was that it is a condition for progress towards organisms with the greatest freedom and adaptability. Evil and biological progress were two sides of the same coin.

"On the human level, freedom necessarily entails the ability to do evil as well as good. If we can do only the good, or act in only one way, we are not free. We are slaves of necessity. The evolution of the universe must be conceived as having been in some sense a struggle for a gradual emergence of freedom." (Dobzhansky, 1967: 120).

One could call this a free process defense of natural evil along the line of what is known as the free will defense of moral evil (Polkinghorne, 1989: 66-67; 1994: 83).

Levels of Interpretation of Nature in Dobzhansky

The interpretation of natural phenomena in science involves a number of levels of generality. In order of increasing generality they include the collection of data, the construction of theories both at low, intermediate and high levels of generality, the guidance by a research tradition, and by a worldview (Laudan, 1977, van der Meer, 1999a, b, Wykstra, 1996, Eger, 1999). In what follows I will describe the levels that operate in the work of Dobzhansky and then analyse inter-level effects with a view to understanding the links between his religious beliefs and his biological thought.¹

The lowest level discernable in Dobzhansky is that of the *construction and choice of theories*. The challenge was to explain how organisms could survive the accumulation of mutations which tended to be harmful in homozygotes, but which were also the source of adaptability. Two theories of natural selection were available, viz., the balance theory and the selection theory. The balance theory explains how a population maintains its adaptability in the face of natural selection. The answer is that it has a store of genetic variability hiding from selection in the form of recessive alleles in heterozygotes. These alleles are produced by mutation. In every new generation some of these alleles are exposed to selection as homozygotes. These homozygotes offer the population an opportunity to adapt to a new environment if required while keeping the same alleles in hiding from selection in heterozygotes. Over time a population accumulates a record of its exposures to a variety of environments in the form of a stock of successful alleles which provided adaptation in the past and can do so again in the future. Thus the balance theory explains that a population has the freedom to adapt to new environments because natural selection favours heterozygotes (Dobzhansky, 1937: 126-127). This theory incorporates a synthesis of Darwinian evolution and mutation. In the so-called selection theory or gradualist theory of evolution every allele is held to be subject to natural selection. This, Dobzhansky believed, reduces the freedom of a population to exist in different environments (adaptability) on the ground that natural selection removes genes.

The next level is that of the *research tradition*. “A research tradition is a set of general assumptions about the entities and processes in a domain of study, and about the appropriate methods to be used for investigating the problems and constructing the theories in that domain.” (Laudan, 1977: 81) At this level theories and their concepts are interpreted and the meaning of theoretical concepts and the type of acceptable theories are determined. In Dobzhansky this concerns the concepts of adaptability, mutation and natural selection, and the balance and selection theories. Mutation is the source of conflict between organism and environment because it is random with respect to the environment (Dobzhansky, 1937: 126-127). Natural selection was a negative force under both theories because it removes alleles from populations. The balance theory explains how a population can have adaptability despite this negative effect of natural selection. Dobzhansky developed the balance theory because he saw adaptability as a positive force driving evolutionary progress. The selection theory did not provide adaptability because all alleles were assumed to be subject to natural selection so that they would be lost from the population.

Finally, at the *worldview* level we find Dobzhansky’s religious belief that everything occurs under divine providence including mutation, natural selection, extinction and genocide. Dobzhansky thought about the relationship of organism to environment in terms of the relationship of individual to society as he had experienced it in his youth, viz., in terms of conflict. It was clear to Dobzhansky that God inflicted evil in

¹In Dobzhansky the pre-scientific and scientific interpretation of nature are unified so that it is difficult to distinguish between them.

the form of mutation, natural selection and extinction. He justified God by the traditional free will defence of moral evil and a free process defence of natural evil.

Effects of Dobzhansky's worldview
across the levels of interpretation of nature

The *worldview* level provides the context for the interpretation of theories in research traditions. By interpreting nature and society as the theatre of divine providence, Dobzhansky engaged religion, metaphysics and science in the same way as Newton who saw natural phenomena as manifestations of divine action, and whose concept of nature expressed this view. This fulfills a classic condition for the merger of thought about God and nature. Both Newton and Dobzhansky thought about nature in terms of what they knew about God and *vice versa*. Such mergers make it impossible to separate religion and science into entities that interact (Brooke, 1996: 3). Dobzhansky thought about the relationship of organism to environment in terms of the relationship of individual to society because he believed that both natural and social evolution were similar forms of divine providence. The negative content of this relationship originated in his experience of moral evil in the Russian Revolution and of 'natural evil' in mutation, natural selection and extinction. Social and biological evolution were one of a kind. The metaphorical analogy is between society eliminating individuals and the environment eliminating genes (natural selection). Thus Dobzhansky's negative interpretation of the concept of natural selection in his *research tradition* was a bottom up effect of his experience of society eliminating individuals *combined* with a top down effect of his religious view that social and biological evolution are similar manifestations of divine providence. It followed that the relationship between organism and environment is one of conflict. Hence, the prescription that theories explaining the relationship between organism and environment should do this in terms of conflict. The effect of this prescription was Dobzhansky's belief that natural selection eliminates genes.

Both the balance and selection theories satisfied this criterion. The choice between them is a second top down effect of worldview at the level of research tradition. Given that reality was the theatre of divine providence, it was clear for Dobzhansky that God inflicted evil in the form of mutation, natural selection and extinction. As a Christian, he had a religious need to explain evil and justify God, and he did so with the traditional free will defence of moral evil and a free process defence of natural evil. For Dobzhansky, mutation, natural selection and extinction were justified only because they provided the freedom for organisms to adapt to new environments. That is, mutation, natural selection and extinction were necessary consequences of God's desire to create adaptable organisms. The balance theory explained how that freedom was provided. Thus the ultimate ground for the balance theory was that it justified God in the face of natural evil by providing a free process defence of natural evil.

This top down effect was mediated by the concepts of freedom, adaptability and natural selection which received their biological interpretation at the level of the research tradition. Natural selection was a negative force. The biological interpretation of the conflict relation between society and individuals was a conflict relation between environment and organism. The role of the environment was to eliminate genes. Hence natural selection was incapable of explaining evolution. Dobzhansky rejected the selection theory because he concluded that natural selection gradually eliminates all alleles leaving the population no freedom to adapt to new environments. This effect on theory construction is a top down effect originating in Dobzhansky's *research tradition*. The warrant for this conclusion was that the freedom to adapt gives meaning to the evil of mutation, natural selection and extinction. This warrant is a top down effect originating in his religious

belief at the level of worldview.²

In contrast, the balance theory incorporates natural selection as the price for the freedom to adapt. The biological interpretation of the concept of freedom as adaptability betrays the influence of religious belief operating at the worldview level that evolution is progressive under divine guidance. Hence, adaptability was a positive force guaranteeing variability and, therefore, capable of explaining evolution. The concepts of freedom and adaptability *constitute* the balance theory of population genetics (Ruse, 1996) because the balance theory explains how a population can be free to adapt to new circumstances.

The constitutive effect of these concepts in biology is mediated by the metaphorical analogy between nature and society, specifically between the free process defence of natural evil and the free will defence of moral evil. Belief in divine providence explains why Dobzhansky thought about the relations between environment and organism as well as between society and individuals in terms of what he believed about divine providence, namely that God had accepted evil as the price of adaptability, freedom and progress. Moreover, his perception of reality in terms of conflict informed a research tradition which prescribed theories of conflict as an acceptable type of theory. The immediate source of this constitutive effect appears to be Dobzhansky's experience of the relationship between individual and society in terms of conflict. Yet the ultimate source is his religious belief that evil is the price for freedom because in the balance theory mutation and selection are the price for adaptability. The religious priority of human freedom over evil informed the biological priority of adaptability over natural selection as the force driving the evolution of nature and culture. One can, therefore, say that his religious need to explain evil constituted the very content of his balance theory of evolution via the metaphorical analogy between nature and society.³

In the balance theory, Dobzhansky used the concepts of adaptability and freedom to refer to the ability of a population of organisms including human organisms to adjust to a variety of environmental circumstances. This did not explain the uniquely human freedom to make moral choices. Therefore, these concepts did not refer to human freedom of choice. But Dobzhansky believed that this human freedom evolved somehow in the processes explained by the balance theory (Dobzhansky, 1967: 120 quoted above).

What is the epistemological nature of the link between the religious belief in divine providence and the explanation of progressive evolution in the balance theory? Obviously, the link is causal, not logical. A belief in divine providence itself does not entail a conflict view of the relationship between organism and environment. The conflict view also requires the experience of conflict. Nor does belief in divine providence entail adaptability, freedom or evolutionary progression from simple to complex. A further reason why the balance theory is not entailed by a free process defence of natural evil lies in the complexity of religious beliefs. In offering a free process defence of natural evil analogous to the free will defence of moral evil, a variety of other religious beliefs are implicit including (i) that one can think about God in human terms, particularly in terms of a human conception of love which excludes coercion, and (ii) that the origin of evil

²The constitution of the balance theory was accompanied by theory choice because theory construction involves making choices along the way.

³Obviously, bottom up effects are also possible. For instance, the balance theory affords maximum adaptability and freedom to a population because natural selection favours heterozygotes. That is why Dobzhansky could not keep the idea of biological and cultural progress out of his evolutionary theory.

was not an event involving the Fall of angels and humans, but that evil was inevitable, given God's desire to create a progressively evolving cosmos. This in turn involves the view that God is subject to the order of things as we know it, specifically that he is unable to bring about progress and freedom without natural and moral evil. Modifying any of these auxiliary beliefs undermines simplistic notions of the balance theory being entailed by a free process defence of natural evil. Despite this complex entanglement of religion and science, a safe conclusion can be made. The religious belief in divine providence in which social progress is paid for by moral evil and suffering has informed the balance theory of evolution in which freedom to adapt is paid for with natural evil of mutation and extinction. Knowledge about society has been transformed into a specific testable hypothesis in biology with the help of the metaphor of progress. The content of evolutionary biology is not entailed by the idea of providential progress, but evolutionary biology has been informed by it. That is, the link is causal and can be broken. This is why the idea of evolutionary progress has the status of an interpretation of evolutionary theory. As Ruse puts it in characterizing Dobzhansky's work: "Those who liked the religion could keep it, and those who did not could drop it."

To conclude, three levels of interpretation characterize Dobzhansky's biology. They are linked with his religion via his worldview. The balance theory was constructed and the selection theory rejected on the ground that natural selection reduces freedom to adapt. The warrant for this conclusion originated at the level of worldview and was mediated by his research tradition. Via the world view level, religion had four functions in Dobzhansky's biology: (i) it informed the interpretation of the concepts of natural selection and adaptability, (ii) via these concepts religious belief constituted the balance theory, (iii) excluded the selection theory, and (iv) thereby informed theory choice. Secondly, scientific explanations of a particular phenomenon cannot be constructed without external support. Sometimes specific religious beliefs provide this support by contributing cognitive content to the explanation. Thirdly, the external support can be removed when the theory has become self-supporting, i.e., has received empirical support. This is possible because explanations are logically independent of the external source and can be made causally independent. Finally, explanations are logically independent of the external source of support because the support comes from a network of ideas rather than from one idea. The conjunction of ideas in the source network can entail an explanation of a target phenomenon, but the entailment changes when one of the source ideas is replaced.

BUILDING BRIDGES FROM THE SIDE OF SCRIPTURE: RUDOLF BULTMANN

Perhaps the best-known theologian whose exegesis has been developed in interaction with the world view of the Enlightenment, and more specifically with that of the natural sciences is Rudolf Bultmann (1884-1976). Bultmann's primary concern was with the meaning of the Gospel for modern believers. But as a scholar, he also addressed unresolved questions about the relationship of the Bible to our knowledge of nature, history and morality that were the legacy of the tradition of Liberal Theology in which he worked (Johnson, 1987: 11-13). He has written much on the meaning of New Testament passages about body and soul. I will focus on Pauline texts traditionally taken to refer to the resurrection of the body including that of Jesus. I will begin with the way historical and scientific research provided Bultmann with an understanding of the Bible text in terms of human reasons and natural causes. Next I introduce his conceptions of myth, knowledge and language. Then follows a description of the levels of interpretation operating in Bultmann's exegesis and an analysis of how his worldview has affected each level.

Understanding the Bible in terms of human reasons and natural causes.

First, one question raised by Liberal Theology was how the church can proclaim a faith based on the

historical figure of Jesus, when evidence that would satisfy the requirements of objective historical enquiry is not available. Bultmann was a scholar in the tradition of Enlightenment naturalism and Liberal Theology. Accordingly, the text of any book including the Bible must be made intelligible in terms of reasons and natural causes. As for historical reasons, Gospel claims made about the body that are based on the action of supernatural forces in the natural world and on the duality of body and soul, can be understood as originating in Gnostic Christianity rather than in what happened in the Resurrection and the resurrections. Take a text such as II Corinthians 5: 1-4 (RSV):

[1] For we know that if the earthly tent we live in is destroyed, we have a building from God, a house not made with hands, eternal in the heavens. [2] Here indeed we groan, and long to put on our heavenly dwelling, [3] so that by putting it on we may not be found naked. [4] For while we are still in this tent, we sigh with anxiety; not that we would be unclothed, but that we would be further clothed, so that what is mortal may be swallowed up by life.

According to Bultmann (1952) Paul uses words such as *soma* (body), *psyche*, *pneuma*, *zoe*, mind, conscience, heart and flesh usually to refer to the whole person, the self. In this Paul is said to be consistent with the meaning of these words both in the Old and New Testaments. But there are exceptions in which Paul according to Bultmann separates body and soul dualistically. For instance, his words in II Cor. 5: 1-10 are dualistic "... not merely in form of expression, by speaking of the *soma* under the figure of the "tent-dwelling" and "garment," but also in the thought itself." The *soma* is presented not as ruled by sin from which the self desires to be freed, but as an inappropriate physical tent-dwelling from which the Christian will be redeemed. The expressions '*being naked*' and '*to put on the heavenly dwelling*' (vs. 2, 4) indicated a deep and genuine dualism to Bultmann (Bultmann 1952: 169n, 201-02). He also saw traces of body-soul dualism in other Pauline texts such as I Cor. 7: 1-7. "For here, in keeping with ascetic tendencies of dualism, he evaluates marriage as a thing of less value than 'not touching a woman' (v. 1); indeed he regards it as an unavoidable evil ('on account of fornication,' v. 2, tr.)." A dualism between the natural and the supernatural was spotted in texts which described the supernatural entering the natural world (Bultmann, 1952: 132, 136, 295). These include (i) Heb. 2: 10 in which Christ as son of God was said not only to be the one who saves, but also the one "through whom all things are and through whom we exist," (ii) I Cor. 15: 29, where he takes baptism as a form of magic that literally removes of sins, (iii) I Cor. 15: 5-8 where the resurrected Jesus is depicted as a visible fact in the realm of history, and (iv) Rom. 8: 38, Eph. 6: 12, Col. 2: 15, Gal. 4: 9, Col. 2: 8, 20 where 'the principalities and powers' are seen as supernatural powers acting in the natural world. In sum, Paul presents a largely unitary view of the person with some apparent exceptions.

Bultmann explained both the unitary view and the dualistic exceptions as a result of Paul's attempts to express a unitary view of the person in the dualistic terminology of Hellenistic and Gnostic Christianity, and getting trapped occasionally in the content of dualistic thought. According to Bultmann, "..., Paul did not dualistically distinguish between man's self (his "soul") and his bodily *soma* as if the latter were an inappropriate shell, a prison, to the former; ..." (Bultmann, 1952: 201). He saw in the dualistic texts the influence of Hellenistic Gnosticism on early Christianity because the action of supernatural forces in the natural world is a dominant feature of Gnosticism. On those occasions Paul was seen as arguing against "the Gnostic view that man's self at death will be released from the body (and from the 'soul') and will soar in the state of 'nakedness' into the heavenly world. [] The Christian does not desire, like such Gnostics, to be 'unclothed,' but desires to be 'further clothed'; he yearns for the heavenly garment, 'for we will not be found naked when we have divested ourselves (of our present physical body).'" That is, he interpreted Paul as adopting the dualistic terminology of Gnostic-Hellenistic Christians for the sake of arguing against them that following death, disembodied persons are incomplete until they have put on a newly created heavenly body. An instance where Paul gets trapped in the content of the Gnostic terminology is I Cor. 15: 5-8 where

according to Bultmann the Gnostics who denied any resurrection forced Paul to depict the resurrection of Jesus as a visible fact in the realm of history.

The Gnostic hypothesis sometimes led Bultmann to force the interpretation of the text to conform to the cultural role of Gnosticism as he saw it. For instance, in I Cor. 15: 12, Paul asks: "how can some of you say that there is no resurrection of the dead?" The addressees according to Bultmann (1952: 168-169) are Gnostic Christians. For them death releases the real heavenly self from the earthly prison. Bodily resurrection would have meant a return to the earthly prison. In support of the Gnostic beliefs of Paul's addressees Bultmann pointed to the practice of baptism on behalf of the dead (I Cor. 15: 29) because it was done on behalf of the disembodied spirits of Christian Gnosticism. But this evidence depends on the Gnostic hypothesis that he was trying to support and must, therefore, be rejected. In sum, historical research led Bultmann to conclude that Paul's dualistic texts reflect the influence of Christian Gnosticism and that faith in Jesus cannot be based on historical evidence because the Bible was not written with the intent to provide documentation that satisfies contemporary criteria for historical research.

The legacy of Liberal Theology also included the question: how can God act in a meaningful way in the life of the believer whose thought and action are shaped by the experience of the uniformity of nature? Working in the tradition of the Enlightenment, Bultmann was concerned not only to provide historical reasons for the text, but also to understand the text in terms of natural causes. He believed that God does not alter the laws of nature at any given moment. The uniformity of nature is not even an experience peculiar for the scientific age. "[T]he simple decision to work includes the thought that the things with which we wish to work will follow a conformity to law which our thoughts can master." (Bultmann, 1933, quoting Herrmann). This means that divine action in the world is manifest only in natural phenomena:

"We cannot use electric lights and radios and, in the event of illness, avail ourselves of modern medical and clinical means and at the same time believe in the spirit and wonder world of the New Testament. And if we suppose that we can do so ourselves, we must be clear that we can represent this as the attitude of Christian faith only by making the Christian proclamation unintelligible and impossible for our contemporaries." (Bultmann, 1984: 4-5).

God cannot be found in miracles because miracles are incompatible with the uniformity of causation (Bultmann, 1933). In sum while a supernatural spirit may act in a natural body or God act in nature, these actions will manifest themselves as natural events. There can be no resurrection of the body because it contradicts our experience of nature.

Myth.

Bultmann defines myth as a story that has supernatural forces acting as if they were natural forces. Such stories should not be taken objectively nor rejected because this would presuppose that supernatural acts can be known. Rather, their meaning in the lives of contemporary people must be determined. This determination requires demythologization, i.e. explanation in terms of human reasons and natural causes combined with interpretation in terms of faith. Only this interpretation has to have meaning for modern man (existential interpretation). This excludes miracles because they contradict the experience of the regularity of nature. Miracle stories must be reinterpreted as natural events that represent God's action in the world because God cannot be portrayed as a natural cause inserted in the causal chains of the natural world. There can be no description of God as if he is a natural being. Thus, demythologizing consists of interpreting Gnostic and New Testament myths existentially, i.e., in terms of their message for contemporary humanity. Bultmann saw Paul as offering an existential interpretation of Gnostic cosmology for the New Testament Christians. Likewise, Bultmann himself offered an existential interpretation of the New Testament for contemporary

Christians. Existential interpretation makes historical analysis of the New Testament possible because it sees the New Testament in terms of human rather than divine action (Henderson, 1966: 30). The resurrection of the body as understood in classical Christianity was naturalized by interpreting it as a development in a person's spiritual life. Finally, Bultmann also offered an existential interpretation of Christian theology in its interpretation of the expression 'son of god.' Demythologization here meant stripping the expression from its Greek interpretation as the union of a divine with a human nature, and interpreting it existentially as the meeting of two persons (Henderson, 1966: 34).

Finally, historical analysis in the tradition of Liberal Theology had left unresolved the question how the church can proclaim a future reward for submission to divine moral standards when the New Testament is filled with expectations for an end of history that never happened? Also, faith seen as fulfilment of divine command fails to account for the fact that believers are concerned with self-fulfilment. The failure for the parousie to occur in Paul's lifetime made it necessary for Bultmann to reinterpret Paul's expectations by moving the parousie into the future. The work of his mentor in New Testament studies, Johannes Weiss, suggested that an eschatological perspective on the New Testament might reveal the meaning of faith for modern people. But the parousie also had to be moved out of the realm of natural events because it assumed the action of supernatural forces in nature. This was achieved by an existential interpretation of descriptions of supernatural forces acting in nature on the basis of the existentialism of his friend Heidegger. Positively, existentialist interpretation or demythologization is interpretation that reveals the meaning of the myth for human existence. Negatively, it is criticism of the mythological world picture insofar it conceals the real intention of myth which is to talk about human existence as grounded in and limited by a transcendent, unworldly power, which is not visible to objectifying thinking. When the meaning of the text for my existence becomes clear it demands of me a decision between the mythological world picture with its objectifying knowledge and ideal of control and the existential surrender of all securities with its ideal of being unreservedly free for the future (Bultmann, 1941; in Ogden, 1984: p. 23). In this way existential interpretation delivers eschatological facts because according to it we exist ever in the moment of decision between the past and the future.

As for the resurrection of the body of Jesus he wrote "That the meaning of Jesus' resurrection is not that he is translated into the beyond, but that he is exalted to the status of Lord (Phil. 2:11)" [Bultmann, 1952: 306]. Thus the resurrection of Jesus was seen as referring to a change in the status of his life preceding his death in the eyes of his followers, not to a transition from an earthly to a heavenly existence or a return to an earthly existence.

The resurrection cannot - in spite of I Cor. 15: 3-8 - be demonstrated or made plausible as an objectively ascertainable fact on the basis of which one could believe. But insofar as it or the risen Christ is present in the proclaiming word, it can be believed - and only so can it be believed. [] For in the proclamation Christ is not in the same way present as a great historical person is present in his work and its historical after-effects. For what is here involved is not an influence that takes effect in the history of the human mind; what does take place is that a historical person and his fate are raised to the rank of the eschatological event. The word which makes this proclamation is itself a part of this event; and this word, in contrast to all other historical tradition, accosts the hearer as personal challenge. If he heeds it as the word spoken to him, adjudicating to him death and thereby life, then he believes in the risen Christ. (Bultmann, 1952: 305-306).

As for the body of others, Paul's usual anti-dualism led Bultmann to conclude that Paul did not "expect a release of the self from its bodily prison but expects instead the 'bodily' resurrection - or rather the transformation of the *soma* from under the power of flesh into a spiritual *soma*, i.e. a Spirit-ruled *soma*."

(Bultmann, 1952: 201). The distinction made by Bultmann is between a physical resurrection which could be ascertained objectively by the methods of historical science and an existential resurrection from a sinful to a redeemed life. "For the resurrection, of course, simply cannot be a visible fact in the realm of human history. When Paul is pushed to do so by Gnosticizing objections to belief in any resurrection whatever, he does, I grant, think he can guarantee the resurrection of Christ as an objective fact by listing witnesses who had seen him risen (I Cor. 15: 5-8, §15, 2)." This, however, is not Paul's considered understanding of the resurrection. Rather Christ's death is "the means of release from the powers of this age: Law, Sin, and Death." Paul reinterpreted the cosmic unity between Redeemer and redeemed in Gnostic mythology because it enabled him to interpret the salvation-occurrence "as happening actually to and for and in man." (Bultmann, 1952: 300).

Language and knowledge.

Bultmann worked with the view that language either refers to phenomena or expresses meaning. Referential language refers to the world objectively as in mythological or scientific language. There is no referential language that refers to phenomena in the world in a pre-scientific way. As a result, descriptions of phenomena that have occurred and events that have happened, but that are not accessible scientifically must be taken to express the original meaning given to them by the reporter in terms of his or her world view. This is because language according to Bultmann has a fixed meaning determined by its cultural origin. An example is Bultmann's contention that Paul believed in divine action in the natural world and the associated cosmology because of his adoption of Gnostic terminology. Bultmann assumed that Paul could not help adopting the Gnostic meaning because he had adopted the Gnostic terminology. This literalistic understanding of language kept him from considering that Paul could have held his beliefs quite apart from the Gnostic origin of his terminology - a plausible option because the terminology was shared by Gnosticism and Christianity. Existential language on the other hand expresses meaning. Bultmann put his distinction between objective and existential language as follows:

There is in fact a language in which existence naively expresses itself, and, correspondingly, there is a science that talks about existence without objectifying it into being within the world."

This language is other than the objectifying language of science and of myth and contains such expressions as 'I love you.' (Bultmann, 1984: 101). Since the world view of the New Testament reporters is false, the meaning of the events reported must be separated from the context in which it has been expressed. For instance, the description of Jesus' resurrection cannot be taken to refer to an event in a pre-scientific way, and since it is not accessible for scientific analysis it must be taken to express a meaning for his followers. This meaning must be recovered for modern believers by removing the mythological context which would make it unbelievable in a naturalistic context. Bultmann saw Paul attempting to separate the meaning of Jesus' resurrection from the dualistic terminology in which it was cast by Gnostic- Hellenistic Christians. Bultmann thought that Paul was successful in this attempt insofar as he maintained the unity of the person characteristic for orthodox Judaism. However, while a physical resurrection was an acceptable interpretation in Paul's time, this had become unacceptable within the scientific world view. Bultmann saw himself, therefore, as continuing Paul's reinterpretation of the disciples' report. For Bultmann the report of Jesus' resurrection was meant by his disciples to express Jesus' call to a conversion from a fleshly to a spiritual life to occur in this biological life.

Finally, these examples illustrate that Bultmann defined *knowledge* as scientific knowledge. Take this definition of myth. He defined myth as a story that mistakes supernatural forces for natural ones. This

definition is informed by his conception of knowledge as scientific knowledge or more precisely as knowledge in the service of human control over the world. Knowledge is that which can be known under the rule of naturalism. Therefore, stories about supernatural forces must be reinterpreted existentially, not objectively.

Levels of Interpretation of Scripture in Bultmann.

Interpreting a passage of the Bible may involve a range of activities in which Wolters (2000) discerns some nine levels. Some of these occur in the work of Bultmann and I will now identify them as possible levels for interaction with the interpretation of natural phenomena. Every level is required for the next to operate properly.

Diachronic literary analysis or analysis of text history refers to “all the critical methodologies which seek to trace the pre-history of the canonical text as it stands. It includes such approaches as source criticism, redaction criticism, and tradition history.” (Wolters, 2000). For instance, I and II Cor. indicate that Paul had written four letters to the Corinthians. Since internal criteria indicate that each of the current letters has two parts, Bultmann suggested that the original four letters must have been combined into two when the Corinthians circulated them (Bultmann, 1976: 22-23). One might think that this theory has no further consequences because all four letters have the same author who can be expected to present the same ideas about body, soul and resurrection. However, according to Bultmann, one can see an improvement in Paul’s understanding of Gnosticism between the first and the second letter. This improvement will be discussed below under *Ideological criticism of the author*. Theories about the text can also have more substantial implications. In the case of the three synoptic gospels (Mark, Matthew and Luke), for instance, it was the presence of several different layers of oral tradition manifest in literary form that led Bultmann to conclude: “The analysis of the synoptic gospels has shown more and more clearly how little we know for certain about Jesus.” (Bultmann, 1968: 223). This led to the conclusion that faith in Jesus must be based on something else than historical facts.

In *synchronic literary analysis* or analysis of the literary form of the final text, the kind of literary form (e.g., myth or history) will influence opinions on whether or not cognitive engagement between Bible and science is appropriate or possible. Bultmann (1984: 2) held that texts about bodily resurrection both of Jesus and others are myths, i.e., “the report of an occurrence or an event in which supernatural, superhuman forces or persons are at work ... []. Myth actually talks about transcendent powers or persons as though they were immanent and worldly - contrary to its real intention.” This intention is “to talk about human existence as grounded in and limited by a transcendent, unworldly power, which is not visible to objectifying thinking.” (Bultmann, 1984: 95, 98, 99). In putting things this way, Bultmann granted the possibility that God acts in the world, but that this act cannot be known objectively (scientifically) because it cannot be manipulated in experiment. There can only be natural phenomena interpreted as divine action in the world. For instance, an accident which happened to us may be interpreted as a divine act in our life and explained as the result of a faulty brake or someone else’s carelessness. He limited divine action to what is intelligible in terms of the world picture of the natural sciences and in terms of our self-understanding as modern persons (Bultmann, 1984: 5). An example of this is Bultmann’s conclusion that the Gnostic Christians forced Paul to depict Jesus’ resurrection as a visible fact in history (I Corinthians 15: 5-8, see above) which assumes a split between the natural and the supernatural. He rejected any mixing of the transcendent and the immanent not only in the resurrection of Jesus’ body (Bultmann, 1952: 294; 1984: 7, 37), but also in other miracles (Bultmann, 1984: 4), in divine intervention in the inner life of persons (Bultmann, 1984: 5) and in the

sacraments such as baptism understood not as symbols of supernatural power, but as natural events that put supernatural powers into effect (Bultmann, 1952: 135). These were rejected alongside the view that Jesus descended into hell (Bultmann, 1984: 98) and that spirits move the stars. According to Bultmann, there can only be natural phenomena interpreted as divine action in the world. The resurrection of Christ was not possible because it presupposes supernatural divine action in the natural world. God's action in the world must conform to the naturalistic interpretation of the world.

At the next level, *historical analysis of the context of a Bible text* may clarify or question a particular interpretation. This is different from an analysis of text history in that the context may include other parts of Scripture, information from archeology, from ancient historians, from social–scientific reconstructions of ancient society and thought. The goal is to identify the cultural context into which the concepts of the Old and New Testaments had to be translated in order to be communicated. Paul was exposed to at least four cultural factors related to a view of the person. These were the influence of orthodox Judaism with its characteristic holistic dualism flowing out of the Old Testament tradition, his upbringing in Tarsis which must have exposed him to the dualism of Hellenistic Judaism as well as to the dualism of Gnostic Christianity, and his encounter with the religious materialism of the Sadducees. The story of Paul's manipulation of the Sadducees and Farizees on the question of the resurrection of the body shows how well informed he was about the Hellenistic dualism of the Farizees and the religious materialism of the Sadducees.

An example of historical analysis of Pauline texts concerns the dating of Gnostic sources such as the Mandaean writings. Bultmann held that Gnosticism (i) is a non-Christian religion rather than a Christian heresy, (ii) existed during early Christianity, (iii) is illuminated by the sacred books of the so-called Mandaean religion, (iv) provided Paul with the concepts he needed for some of his theology, (v) was opposed by Paul (e.g. the world is the creation of God and not of demonic powers), and (vi) had a cosmology that is interpreted existentially by Paul. The Gnostic hypothesis assumes that Gnosticism predates Christianity. If it had emerged from Christianity it would have been too late to be an influence on Paul. Contemporaries of Bultmann did not believe that the Mandaean writings were independent of and chronologically prior to the New Testament writings.⁴ Thus, Bultmann adopted the Gnostic hypothesis from his pupil Hans Jonas (Bultmann, 1984: 15) without sufficient historical warrant. Recently, the Gnostic hypothesis has been rejected (Yamauchi, 1994).

The assumption underlying Bultmann's interpretation of Pauline texts on the activity of supernatural forces in nature and the human body was that in Paul the traditions of the Old Testament and of Gnosticism merged. This mixture of frameworks of interpretation suggested to Bultmann that Paul's depiction of the relation between nature and supernature would be fluctuating inconsistently between an Old Testament monism and a Gnostic dualism. The facts were different. In the majority of texts, Paul uses 'dualistic' terms to refer to the whole person.

Bultmann acknowledged the role of orthodox Judaism in Paul's usual view of the person as a unity of body and soul, but he interpreted the view of the person of orthodox Judaism as a form of monism rather than holistic dualism. "Man does not consist of two parts, much less of three; nor are *psyche* and *pneuma* special faculties or principles (within the *soma*) of a mental life higher than his animal life. Rather, man is a living

⁴In "Church and Gnosis." Burkitt interprets the Gnostics as Christians who attempted to adjust the OT cosmology to what was at that time modern science and the result was Gnosticism. This requires Gnosticism to post-date early Christianity (Henderson, 1966: 26).

unity.” (Bultmann, 1952: 209). This monism was identified as characteristic not only for the majority of Paul’s writings, but as flowing out of Paul’s knowledge of the Old Testament where soul, life, self and spirit are synonyms (Bultmann, 1952: 203-205). The influence of Hellenistic dualism on the other hand was seen in the dualistic Pauline texts. Bultmann interpreted Paul as attempting to express a holistic view of the person using the dualistic terminology of Hellenistic Gnosticism, and getting trapped occasionally in the content of dualistic thought.

The next level is that of *ideological criticism of the author*. This is based on the description at the preceding level of historical contextual influences emanating from the cultural and social ‘location’ of the author. It involves an evaluation of the effect of such local circumstances as gender, class, race, political or sexual orientation on the interpretation of the Bible text (Wolters, 2000). Related circumstances include upbringing and education seen as factors contributing to the worldview of an author which may affect interpretation. Wolters (2000) locates both ideological criticism of authors and ideological criticism of commentators at this level. In contrast, I locate the latter at a separate higher level because the worldview context of a commentator can affect that commentator’s ideological criticism of an author.

Operating on the level of ideological criticism of the author, Bultmann was concerned with the meaning of the Pauline texts about bodily resurrection for Paul’s audience. He was careful to indicate that texts with traces of Gnosticism are exceptions to the rule of a definitive contrast between Christianity and Gnosticism. It would be a mistake, Bultmann wrote, to interpret the soma-concept that is characteristic of Paul on the basis of such exceptions.⁵ In that light, Bultmann applied ideological criticism to Paul’s dualistic texts. For instance, the assumption that Paul is arguing against the Gnostics led Bultmann to the conclusion that Paul had initially mistaken his opponents in attributing to them the view that with death everything ends. Bultmann read this in I Cor. 15: 19: “If for this life only we have hoped in Christ, we are of all men most to be pitied.” and in I Cor. 15: 32: “If the dead are not raised, ‘Let us eat and drink, for tomorrow we die.’” Since the Gnostics believed that the real self continues its existence through death, Bultmann took Paul to have failed to inform himself about this aspect of Gnostic beliefs.

Bultmann (1952: 230) did express one misgiving with the Gnostic hypothesis. He wrote that “The historical observation, correct as far as it goes, that Old Testament tradition and Gnostic tradition have flowed together here, does not sufficiently explain the facts.” These ‘facts’ refer to Paul’s depiction of the creation as the theatre both of divine blessing for humanity and of the activity of evil powers restricted by the will of God. The Gnostic hypothesis, however, predicted that Pauline texts on creation should reveal a mix of occasional cosmic dualism with predominant monism similar to the case of the body. This they did not reveal. The Pauline texts on creation did not leave room for the Gnostic view in which the creation was fallen under the control of evil powers.

Moving to the eighth level, *redemptive-historical analysis* “looks at a Bible passage from the standpoint of its place in the grand narrative of the Christian canon.” (Wolters, 2000). This approach presupposes that the New Testament is a continuation of the history of the Old Testament. But, according to Bultmann, the history of Israel *as history* has no relevance in the life of Christians today. The *history* of Israel could be accepted

⁵For instance, while developing his monistic interpretations of N. T. texts about body and soul, Bultmann consistently refers to O. T. interpretations either to reveal differences or to show consistency such as in the fact that *soma* can denote both the body and the whole man, the person (Bultmann, 1952: 196). This applies also to psyche, pneuma (204), nous (211).

as salvation history only on condition of pre-existing faith because objective historical analysis cannot 'see' salvation (Bultmann, 1984: 115). Bultmann's separation of objective history and existential interpretation made it impossible to understand the New Testament as the fulfilment in history of the Old Testament because existential exegesis required an understanding of the New Testament in its relevance for the existence of contemporary believers. The New Testament could not be relevant for us because we do not live in a New Testament culture. It is easy to misunderstand Bultmann in this respect. "That God is not visible outside of faith does not mean that God is not real outside of faith. [] To claim that faith could be proved would imply that God could be known and established outside of faith and thus put God on the same level as the available world that can be disposed of by an objectifying view." (Bultmann, 1984: 114-115). Faith is an answer to the proclaimed word of God's grace, not as a compendium of doctrines nor as a document containing the faith of others, but only as a response of the contemporary believer to the proclamation.

Answers given at the preceding level influence what people take God to be saying to them and what this means for them personally and for the community of Christians. "As a distinct level of interpretation, *confessional discernment* focuses on what God has to say to his people. [] In academic discourse it is usually referred to as 'theological' interpretation, as discerning the 'message' or 'kerygma.'" (Wolters, 2000). "It is necessary," Wolters (2000) explains, "to distinguish between what a text meant for its original audience and what it means for believers today." For Bultmann, this distinction is the one between the mythological frame of reference of the New Testament and the scientific worldview of today. His main concern was with the meaning of the Gospel for modern believers.

For instance, the 'salvation-occurrence' as he called it is not a cosmic-natural occurrence as depicted in the Gnostic myth, but a genuine occurrence in man's actual life. It did not occur in the past on a cross, but it occurs whenever the word is proclaimed (Bultmann, 1952: 302). "The meaning of Jesus' resurrection was not that he is translated into the beyond, but that he is exalted to the status of Lord" (Bultmann, 1952: 306). For us, the resurrection of Jesus body means that we should understand ourselves as crucified with Christ and thereby also risen with him (1984: 40). Likewise, when Paul writes of the battle of the spirit powers against Christ or of Christ's battle against them, he and his audience understood this as a conflict between the powers of a transcendent supernatural world which could affect the immanent world inhabited by humans. "In reality," Bultmann wrote, "he is thereby only expressing a certain understanding of existence: The spirit powers represent the reality into which man is placed as one full of conflicts and struggle, a reality which threatens and tempts." The message of this myth for people today was that they are not in control of their life (Bultmann, 1952: 259). In sum, in classical Christianity the meaning of the Gospel is rooted both in God's action in nature and history and in its meaning for human existence. For Bultmann it was rooted only in its ability to address existential concerns. Its roots in God's action in nature and history had disappeared under the pressure of the scientific world view. Bultmann's program of demythologizing meant that the meaning of New Testament myths was to emerge out of an existential interpretation of the myths.

Finally, the *worldview level* includes an analysis of the reading of the biblical text by later commentators in terms of their worldview. Interpretations of texts and their authors also depends on assumptions which themselves may be ideological (Wolters, 2000). I include it as the highest level of interpretation rather than as part of the ideological criticism of the author because the ideology of the commentator can shape a commentator's understanding of the message at the level of confessional discernment. Bultmann recognized this himself when he wrote that "a particular understanding of the subject matter of the text, grounded in a life relation to it, is always presupposed by exegesis; and to this extent no exegesis is without presuppositions." (Bultmann, 1984:149). However, the exegesis of a text cannot be justified by its connection with presuppositions because this is a historical rather than a material link (Bultmann, 1984: 25). Bultmann's

relation to the text was shaped by his concern to make the Bible intelligible for contemporary believers. He developed an existentialist interpretation of Pauline texts based on Heidegger (Bultmann, 23, 25, 82) and Jonas (Bultmann, 1984: 15). In the process he ended up using some of the main features of 20thC Western culture such as objectivism and naturalism as criteria for intelligibility. Accordingly, ideological criticism of Bultmann has focussed on the role of existentialism, naturalism and objectivism.

Bultmann criticised Paul for what he perceives as a concern with objective knowledge that is misplaced because it is about Jesus who cannot be known objectively. In I Cor. 15: 5-8, Paul lists witnesses who have seen the risen Jesus. Bultmann (1952: 295) interpreted Paul as being deceived into thinking that he can guarantee the resurrection of Christ as an objective fact by listing witnesses. Further, he took the expression “there is no God but one” in I Cor. 8: 4-6 to mean “That God’s existence is not an objectively perceptible, mere existing like that of a thing. [] If God were being spoken of as only a cosmic Thing, the statement, “there is no God but one,” would not be right at all” according to Bultmann. “For in this sense of ‘is,’ other ‘gods’ and ‘lords’ ‘are.’” whereas God is unique in that he exists for us and can be understood only as such (Bultmann, 1952: 229). In both texts, Bultmann read Paul anachronistically as if he was concerned with contemporary questions about objective scientific knowledge and subjective personal knowledge while in fact these were Bultmann’s concerns. He also imposed upon the text a dilemma between an objective and an existential meaning. This ruled out the possibility that a fact with existential meaning such as the Resurrection had been observed. In sum, reading Pauline texts as if he was concerned about objective knowledge is a distortion informed by Bultmann’s ideology of objectivism.

Bultmann adopted the Gnostic hypothesis from his pupil Hans Jonas (Bultmann, 1984: 15) without sufficient chronological warrant. Such an uncritical attitude could be a reason for ideological criticism of Bultmann if there were evidence for this in his work. Bultmann provides such evidence by identifying Jonas’ existentialist interpretation of Gnostic myths as his model for the interpretation of Gnostic mythology in the New Testament (Bultmann, 1984: 15). That is, his research tradition was informed by the concern to make the Gospel relevant for the existence of 20thC Western believers. This required a reinterpretation of New Testament myths according to the criteria of naturalism and objectivism.

Bultmann’s interpretation of Pauline texts in which there is activity of supernatural forces in the natural world reveals the presence of a religious naturalism. He rejected divine and demonic action both in the human body and in the cosmos as incredible in the light of the natural sciences. I offer three reasons for the presence of naturalism. First, the majority of texts both in the Old Testament and the New Testament reveal a view of the person known as holistic dualism (Cooper, 1989). However, Bultmann interprets them as monistic consistent with a religious naturalism. Thus Bultmann’s critique of Paul’s body-soul dualism is warranted by his religious naturalism, not by other parts of Scripture. For instance, in I Cor. 15: 5-8, Bultmann (1952: 295) took Paul to be arguing against the Gnostic teaching that the supernatural can enter the natural in the form of a divine spark in a material body. This made the resurrection of the body superfluous because the ‘spiritual bearers of the heavenly spark would travel to heaven on their own strength. Paul was thought to have adopted Gnostic body-soul dualism to make the point that there is a bodily resurrection. However, there would have been no dualism to be explained by Bultmann’s Gnostic hypothesis if he had assumed that Paul combined the unity and separability of body and soul as in holistic dualism. Clearly, Bultmann was presupposing that the holistic view of the person in the Bible is not of the dualistic, but of the monistic kind. This made Paul’s distinction between body and soul look like a dualistic separation that could be explained in terms of Gnosticism. Both the problem and its explanation are unnecessary if Paul is understood as a holistic dualist in line with the rest of the Bible.

My second argument for the presence of naturalism in Bultmann's interpretation of Paul is that he ignored religious naturalists as possible opponents of Paul instead of Gnostic dualists. This concerns his criticism that Paul erroneously attributed to his Gnostic opponents the view that existence ends with death (I Cor. 15 : 12-32). One might raise the objection that this putative mistake disappears if Paul is assumed to have been arguing against religious naturalists who did believe that with death everything ends. They could have been Sadducees, a Jewish movement of religious materialists. In that case Paul did not misunderstand the Gnostic teachings, and his second letter to the Corinthians was not a correction of this mistake. Bultmann did not justify why he preferred the Gnostic theory over others.

Thirdly, Bultmann failed to provide internal evidence for the presence of traces of Gnosticism that is independent of his working hypothesis. This occurred despite his ideal that the criterion for the elimination of New Testament myths "must not be derived from the modern worldview but from the understanding of existence of the New Testament itself." (Bultmann, 1984: 12). The reason for this failure, I suggest, is his stated view that "What is at issue is the truth of this understanding, and the faith that affirms its truth is not to be bound to the New Testament's world of representations." (Bultmann, 1984: 10). This view appears to contradict his ideal. There is, however, no contradiction when one considers that according to Bultmann Paul usually considers the body and the soul to be a unity in accordance with most of the Bible. Bultmann interpreted this unity as a monism in terms of which Paul's dualistic slippers have to be interpreted. Thus the third reason for a presence of religious naturalism in Bultmann is that his naturalistic interpretation of the texts on body and soul allowed him to claim that his critique of the dualistic worldview of New Testament Christianity was "not derived from the modern worldview but from the understanding of existence of the New Testament itself." (Bultmann, 1984: 12). In sum, Bultmann's criticism of the body-soul dualism of New Testament Christians was not based on an understanding of existence of the New Testament. I conclude that the ideological nature of Bultmann's criticism of Paul's dualism was based on a religious naturalism, not on a presumed monism in the Old and New Testaments. In this, Bultmann failed to honour his own ideal that the criterion for the elimination of New Testament myths "must not be derived from the modern world view but from the understanding of existence of the New Testament itself." (Bultmann, 1984: 12). His research was informed by the desire to make the Gospel relevant for the existence of 20th century Western believers through a reinterpretation of New Testament myths in accordance with the demands of naturalism and objectivism.

Effects of Bultmann's worldview across the levels of interpretation of Scripture

In Bultmann the interpretation of nature and Scripture was connected at the level of his worldview. At this level the focus is not on how the meaning of Pauline texts is shaped by the context in which Paul was educated and worked, but on the context interpreters of Paul bring to the meaning of his texts. Bultmann distinguished clearly between what the text meant for Paul's audience and what it means for us. He did not question the content of the objectifying representations of the New Testament, but he questioned the world view of which they were a manifestation. "What is at issue is the truth of this understanding, and the faith that affirms its truth is not to be bound to the New Testament's world of representations" (Bultmann, 1984: 10). His principal strategy was to establish the meaning of a text for its original audience, to identify the world view behind it and to subject the latter to his own ideological criticism. This led to top down effects.

One top down effect occurred when Paul lists persons who have seen Jesus in the body after his death. Bultmann took the text to mean that Paul was concerned (mistakenly) with establishing the resurrection objectively as a supernatural event in the natural world. Since supernatural events reported in the Scriptures cannot be established objectively as events in the natural world, texts about the insertion of transcendent into

natural causes are myths. Ideological criticism of the commentator shaped synchronic literary analysis.

Further, such texts must be re-interpreted accordingly for a contemporary audience such that its existential meaning is not rooted in natural or cosmological meaning. Bultmann argued that salvation by Jesus demands a previous faith “For the resurrection, of course, simply cannot be a visible fact in the realm of human history.” (Bultmann, 1952: 295). One might think that supernatural events occurring in nature could be known subjectively so that existential value could arise out of natural fact, but this is not possible according to Bultmann. On the other hand, the fact that the bodily resurrection of Jesus cannot be known objectively did not lead Bultmann to say that it cannot occur. He wrote: “We find incredible a theory of satisfaction that describes God’s act as a cultic or juristic act and a Christ occurrence that cannot be understood as having to do with our own personal existence.” (Bultmann, 1984: 97). The resurrection of the body of Jesus is not a miraculous event due to the power of God, but “is nothing other than the emergence of faith in the risen one in which the proclamation has its origin.” (Bultmann, 1984: 39). The naturalistic presuppositions of Bultmann called for a change in the message of resurrection texts. Bultmann’s claim that religious naturalism characterized the Old Testament as well as most of Paul’s texts is questionable in light of the fact that orthodox Judaism holds a wholistic dualism (Cooper, 1989). Therefore, this is a top down effect in which ideological critique by the commentator shaped confessional discernment of the message of the text for people today.

This raises the question of the meaning of texts referring to the resurrection of the human body. Bultmann took expressions such as ‘the earthly tent’, ‘the building from God, an eternal house’ and ‘the heavenly dwelling’ as having had a dualistic meaning for Paul’s audience. Thus his naturalism had no top-down effect at the lexicographical level. But he also took Paul’s dualistic expressions as part of a context that must be considered outdated in the light of science. Therefore, there could be no resurrection of the human body for Bultmann. As in Jesus’ resurrection, the existential value of the resurrection of his followers was not rooted in their bodily resurrection from the dead, but in the fact that their figurative death, i.e., their conversion gave new meaning to their life. Here ideological criticism in the light of science affected confessional discernment of what the text means for people living in a scientific culture. By removing the natural meaning of such texts, Bultmann hoped to immunize religion against science.

A second implication of his naturalism concerns body-soul dualism. Most passages in both the Old and New Testaments referring to the body, the soul etc., can be interpreted as referring to the unity of the person. This is an interpretation in the tradition of orthodox Judaism with its characteristic holistic dualism. Philosophically this allows for three interpretations known as monism, dualism and holistic dualism. Bultmann interpreted Paul’s thought as shaped by the combined effects of Old Testament monism and the body-soul dualism of Hellenistic Judaism in Tarsis where he grew up (Bultmann, 1952: 202). Projecting his own interpretative categories onto Paul, he contrasted Paul’s dualistic texts with what he saw as Old Testament monism. Given this choice, Bultmann described his task as “To set forth connectedly the extent to which the understanding of the Christian message in Hellenistic Christianity was unfolded by means of Gnostic terminology.” This is a research tradition shaped by Bultmann’s presuppositions. Bultmann did not justify his monistic interpretation of Old Testament texts referring to body, soul, etc. However, given the availability of a legitimate alternative, viz., holistic dualism, and considering his scientism, it is reasonable to infer that his preference for monistic exegesis was mandated by a naturalistic interpretation of science. This implies that Paul’s so-called dualistic texts need to be seen as concessions to or acceptance of Gnostic or Hellenistic dualism. However, Paul’s dualistic texts can also be interpreted as forms of holistic dualism and so can the Old Testament texts so that there is consistency within the Scriptures (Cooper, 1989). In sum, scientific naturalism drove Bultmann’s monistic interpretation of the majority of texts on the body.

In conclusion, the fundamental concern that operated in Bultmann's ideological criticism of the worldview of Paul's audience was to make the Gospel relevant for the existence of 20th C Western believers. His strategy consisted of the reinterpretation of New Testament myths according to the criteria of naturalism and objectivism. That is, Bultmann's research tradition was informed by the ideologies of existentialism, naturalism and objectivism. Naturalism meant that supernatural events cannot occur in the natural world. At the lower level of synchronic literary analysis this presupposition constituted his conception of myth as a report of the action of supernatural powers in natural events. Since such events are not possible, the real intention of myth must be "to talk about human existence as grounded in and limited by a transcendent, unworldly power, which is not visible to objectifying thinking." (Bultmann, 1984: 95, 98, 99). He meant that there can only be natural phenomena interpreted as divine action in the world. Natural phenomena cannot testify to supernatural power by being miraculous. This presupposition also constituted Bultmann's research tradition of demythologization. Demythologization takes a naturalistic interpretation of nature based on the natural sciences as the standard for the kind of events that are possible and interprets myths accordingly. From the perspective of ideological criticism of the commentator, however, naturalism itself is an interpretation of the natural sciences and not implied by them. It is a philosophy of life or world view. Since it is a world view that is antithetical to that of the Scriptures it is not suitable as a framework for its interpretation. Bultmann's willingness to critique the truth of the New Testament world view is an instance of this objectivism. Therefore, while there is a bridge between the interpretation of Scripture and the interpretation of nature in science, the natural sciences serve as a source of cultural authority for naturalism. One result was that Bultmann's existential religion is a naturalistic religion. Another conclusion is, therefore, that the interpretation of the Pauline texts has lost its connection with internal criteria of meaning. The irony is that Bultmann himself stipulated and claimed that the interpretation of Scripture must use internal criteria only. If Gnosticism and dualism are seen to provide external criteria of meaning that need to be removed, so must naturalism. At his point, the interpretation of Scripture has lost its integrity. In sum, the effect originates at the level of Bultmann's worldview and reaches down via Bultmann's ideological criticism of the author Paul to Bultmann's characterization of texts as myth at the level of synchronic literary analysis.

THE INTEGRITY OF SCIENCE AND SCRIPTURE

There are effects of science down the levels of interpretation of Scripture as well as effects of religious beliefs based on Scriptural exegesis down the levels of interpretation of nature in science. How can the interpretation of each remain true to what is being interpreted? I propose *a model in which their engagement is mutual and respects the integrity of both*. In this model the interpretation of both Scripture and nature would proceed through a hierarchy of levels as described in the two case studies, with each lower level being a prerequisite for the existence of the next higher level. The levels can be distinguished, but not separated. This notion receives support from the history of interpretation of both Scripture and nature which reveal effects both up and down the levels of interpretation.

An important feature of this model is that mutual engagement between the interpretation of nature and Scripture occurs at the highest level in the interpretative hierarchy, the worldview level. For interpretation to remain true to what is being interpreted, one could picture the engagement between the interpretation of nature and Scripture in terms of a trigger. The mechanism of a gun is designed so that the trigger sets in motion a predetermined chain of causes and effects resulting in the firing of a bullet. In just the same way a scientific consideration could trigger a series of interpretative moves the dynamics of which reflects the requirements of good exegesis. For instance, in the past dualistic interpretations of Bible passages were in fashion, but in the last few decades there has been a switch to monistic interpretation (e.g., Brown, Murphy

and Malony, 1998). This switch was triggered by neuropsychology. The integrity of exegesis would be respected if its content was informed not by neuropsychology, but by the Bible. The metaphor of the trigger means that the relation of worldview to scientific theory and exegesis is causal, not logical. This allows an interpretation of nature and Scripture according to their own methods. Each has respect for the integrity of the other and is open for contributions from the other.

Respecting the integrity of interpretations of Scripture and nature means that interaction between the interpretative hierarchies at levels below that of the worldview must be prohibited. The intent of this hermeneutical procedure is to include a critical assessment of ideological interpretations at the worldview level as well as to exclude Biblicism. For instance, substantial engagement between interpretation of nature and Scripture occurred at the level of Bultmann's worldview. In that case, the integrity of Biblical hermeneutics can be respected by requiring a critical assessment of Bultmann's 'ideological' interpretations of nature and history. Augustine urged that knowledge of nature and history be used to help decide between different interpretations of Bible passages. He could take knowledge of nature at face value stipulating only that it should be reasonably established. For us scientific knowledge is far more problematic. Theories and explanations come and go. Also, ideological readings of natural phenomena are possible notwithstanding what I consider the moral duty of scientists to avoid them. Examples include such well-known notions as that of the eternal soul and the temporal body, geocentrism and heliocentrism, and the fixity or variability of biological species. These 'ideological readings' of nature give rise to top-down relationships. That is, interpretative moves at lower levels depend on those at higher levels. As we have seen, Dobzhansky's religious belief in divine providence in which social progress is paid for by moral evil and suffering has informed the balance theory of evolution in which freedom to adapt is paid for with natural evil of mutation. Religious knowledge about society has been transformed into a specific testable hypothesis in biology with the help of the metaphor of progress. Historical studies indicate that Dobzhansky is not an isolated case of an ideological reading of nature. For instance, the rediscovery of Aristotle in the Middle Ages made available seemingly well-established 'scientific' findings such as the geocentric world picture (Grant, 1986). Medieval interpretation of the Bible can be shown to have followed Augustine's advice in deferring to science. It thus perpetuated what can now be recognized as the unscientific influence of Aristotle (McGrath, 1998: 119-120). This pattern repeated itself in discussions about the fixity of biological species following Darwin (Ruse, 1996: 114-117). Similar situations may be found in current science. For instance, one could point to the confusion of 'is' and 'ought' in the assumption that human altruism might be explained as a case of kin selection in social insects or in the conclusion that homosexuality in humans is natural because it appears to be natural in animals. Likewise, the fundamental shift in the message of Jesus' resurrection in the hands of Bultmann warrants a critical assessment of his scientific naturalism as the interpretative context of choice over dualism. In sum, ideological readings of nature indicate that the interpretation of the Bible needs to make room for a critical assessment of interpretations of nature and history before it is decided that there is a question for biblical exegesis. In this way biblical hermeneutics can be open to its cultural context while maintaining its integrity. This is the main reason why I believe that interaction between Bible and science must be restricted to their interpretation at the worldview level where such assessment can take place.

At lower levels, integrity in the interpretation of both nature and Scripture can be maintained via the worldview level. Bultmann followed this procedure when he stated his goal not to allow his scientific naturalism to determine the meaning of words at the lexicographical level. For instance, he determined that Old Testament words referring to the body all mean to express the unity of the person (Bultmann, 1952) thereby leaving open how this unity is to be interpreted. Elsewhere, Bultmann interpreted it monistically in the tradition of naturalism rather than in the orthodox Judaic tradition of holistic dualism as in Cooper (1989). Locating the interaction between Bible and science at the worldview level in this way makes the need

for an assessment of ideologies transparent. On the other hand, Bultmann's designation of stories about the supernatural action of God in the natural world as inadequate God-talk (myth) exemplifies a failure to respect exegetical integrity at the synchronic literary level by the use of an external naturalistic criterion for adequacy.

At the lowest level of textual criticism, questions about the interpretation of a text are not likely to be raised by science since the establishment of textual reliability precedes engagement with science on issues of interpretation and belongs to the study of the history of its transmission. This level is analogous with the level at which in science questions may be raised about the reliability of measurements and observations. At this level, interpretation shapes how data are obtained experimentally. Engagement is also unlikely because the technical issues related to the collection of data experimentally are too different from those involved in establishing the reliability of a text. Such engagement could arise, however, if textual criticism or analysis of the history of a text were inconsistent with radiocarbon dating of ancient documents containing the original Bible texts. Likewise, at the level of theories about texts on the one hand and about population genetics on the other, there is no occasion for engagement directly between these lower levels because the theories are about mutually unrelated objects: texts and natural phenomena. What if the texts are about natural phenomena? Scriptural geology and Scriptural biology exemplify attempts at linking the lower level directly. They failed because Bible texts do not provide information about natural phenomena that satisfies the criteria of the natural sciences. However, such texts can give rise to a general view of reality at the worldview level that could become a specific testable theory in science. The indirect causal link between this theory and the text means that rejection or acceptance of the theory can have implications for the exegesis of the text only indirectly as a cause for more exegetical work. Since the relation between theory and text is mediated by worldview, it is not a relation of entailment. What if science is about the subject matter of a text, for instance the resurrection texts? Again, Bultmann does not allow a reinterpretation of these texts on the ground that we do not experience resurrections. Instead, he rejects the worldview of New Testament Christians on this ground and allows his naturalism to inform his existential exegesis. Hence, the resurrection of Jesus is interpreted as a symbol for the transition of his followers from spiritual death to spiritual life both of which occur in this life. Again, Bultmann's view of Jesus' resurrection is not entailed by naturalism because it requires the additional belief that naturalism applies generally. Other interpretations are possible. They could start with an acknowledgement that Bultmann has captured only part of the meaning of Jesus' resurrection, but only part of it. By leaving out the resurrection of the physical body, Bultmann leaves out the guarantee for the physical resurrection of Jesus' followers on a newly created physical earth. As Nancey Murphy observes: "If theological meanings are not grounded in theological facts - facts about the character and acts of God, in particular, then they are mere fairy tales, however comforting they may be." (Murphy, 1996: 153).

CONCLUSION

It has become evident that the understanding of nature both in and outside of science as well as the understanding of Scripture in theology each involves levels of interpretation. Each takes place according to its own procedures that are different because they seek to do justice to different objects. Further, worldview can have effects down the levels in each hierarchy of interpretation. What I have not shown is that worldview connects the two hierarchies in one person. That would require a case study of a person who was involved to the same degree in the scientific interpretation of both nature and Scripture. Due to the specialization of professions such cases cannot be found among contemporaries. Dobzhansky's interpretation of Scripture did not have the same depth as his interpretation of nature. Likewise, Bultmann was not a professional interpreter of nature. One might have to turn to Isaac Newton, Johannes Kepler or John Philoponos to find equal

involvement with both nature and Scripture. Therefore, what I have shown is that Dobzhansky's religiously formed worldview influenced his explanation of population genetics, and that Bultmann's scientifically shaped worldview affected his interpretation of New Testament texts about the resurrection. However, no Christian is without a pre-scientific interpretation of nature and Scripture. Therefore, what I have shown is that pre-scientifically worldview connects the two hierarchies in one person

Direct interaction between the hierarchies is possible at any level. However, this often creates problems such as, for instance, a neglect of differences in subject matter and in context. Interaction at the worldview level would avoid these problems because at that level the hierarchies of interpretation share the subject matter, namely nature seen as divine creation. There are at least two benefits of restricting direct interaction to the worldview level. First, it opens up worldview to critique. A critique of worldview can often proceed independent of the different scientific theories or exegeses presented under its umbrella because their link with world view is not logical, but causal and indirect. Second, ideas originating at the worldview level can be specified and become hypotheses whose testing can proceed according to criteria internal to science and exegesis. In this way the integrity of both is respected. "[R]eligion can purify science from idolatry and false absolutes." (Pope John Paul II, 1988: M13). For instance, Bultmann's understanding of science can be purified of the false absolutes of naturalism and its accompanying scientism by religion. But it can do so only from a position of integrity. This means that the story of creation, fall, and redemption cannot be retold naturalistically. Further, biblicism in science can be avoided while different scientific concepts and explanations of nature can be introduced. Likewise, "Science can purify religion from error and superstition;" (Pope John Paul II: 1988: M13). That is, science can purify religion from the error of telling its story in the terms of a false world picture. Celebrated examples include the correction of the geocentric interpretation of texts about the earth and of the static-Platonic interpretation of texts about 'kinds' of animals and plants. In such cases science can help correct exegesis and scientism in exegesis can be avoided because mutual purification presupposes that the integrity of both science and exegesis is respected. This can be achieved if science finds cause in theology to reconsider its knowledge and *vice versa*. To a Liberal theologian this may seem like biblicism while to a Fundamentalist this may seem like Liberal Theology. It is neither.

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