

BIBLICAL AUTHORITY AND THE SCIENTIFIC METHOD

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For Dr. Robert Knudsen

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Before the relationship between the Bible and science can be properly evaluated the terms and their underlying presuppositions must first be thoroughly scrutinized. After a critical evaluation of possible relationships, my own view will be developed on the basis of considering the concrete example of aspects of geological science.

1. BIBLICAL AUTHORITY

a. The Presupposition of Biblical Authority

The authority of the Bible, the written word of God, need not be defended in this paper as it is a doctrine to which all historic Calvinists unequivocally give a hearty “Amen”.

The holy scriptures of the Old and New Testament are the word of God, the only rule of faith and obedience.¹

Yet the implications of Biblical authority need to be carefully elucidated as the Christian contemplates scientific study. With Van Til it will be clearly asserted that Biblical authority must be presupposed if there is to be truly meaningful science.² The following are the reasons for such a dogmatic presupposition.

1. Even before the Fall Adam was not able to “read” God’s requirements for him from God’s creation. He needed special revelation to direct him to the task God had determined for him (Genesis 1:28-30, 2:16-17). As Geerhardus Vos expressed it:

Yet the nature of an intensified and concentrated probation required that man should be made acquainted with the fact of the probation and its terms. Hence the necessity of a special revelation providing for this.³

How could Adam have known from nature that the result of eating from the tree of good and evil would cause his death? This in no way denies the perspicuity of natural revelation because:

The perspicuity of God’s revelation in nature depends for its very meaning upon the fact that it is an aspect of the total and voluntary revelation of a God who is self-contained.⁴

2. If Adam in his state of integrity needed special communications from God how much more now that Adam and all his posterity are totally depraved? The Scripture testifies that there is no one who understands (Romans 3:11). It is true that all men know God but sin has caused them to deliberately turn away from Him (Romans 1:20-23). Thus in every aspect of his life man is a covenant-breaker, refusing to submit to the authority of God (cf. Ephesians 4:17-19). Can any such rebel, who hates God to the core, interpret any fact aright without submission

¹ The Larger Catechism, answer to Q. 3, What is the word of God? (my underlining)

² “Thus the Bible appears to us at the outset as the absolute authority by which we seek to interpret life.” Van Til, Cornelius, *Christian-Theistic Evidences* (1961), p. 53.

³ Vos, Geerhardus, *Biblical Theology*, p. 32. Note also what Van Til says: “It is of prime importance to observe that even in paradise man was never meant to study nature by means of observation and experiment without connection with positive super-natural thought communication given him by God.” *Introduction to Systematic Theology* (Syllabus, reprinted 1966), p. 68.

⁴ Van Til, Cornelius, *Apologetics* (Syllabus, reprinted 1971), p. 34.

to the God revealed in Scripture? No, for his overriding need is for a change of heart, a transforming of the dispositional complex (Murray), and this is possible only through that revelation which is the word of God, the Scriptures of the Old and New Testaments (James 1:18,21, 1 Peter 1:22-25). This is how desperately fallen man needs the special revelation of the grace of God in Jesus Christ.

3. That reason for the presupposition which underlies the above two, and thus is more comprehensive, is the fact that the world is God's creation. Van Til makes the following very basic and bold assertion:

As Christians we hold it to be impossible to interpret any fact without a basic falsification unless it be regarded in its relation to God the Creator and to Christ the Redeemer.⁵

The God who created all things is the only one who can make known the true meaning of any and every fact. Thus there is no brute fact, nothing that can be considered apart from God. Starting with Eve in the garden of Eden, it is this that man refuses to accept, believing that "facts and the truth about their relationships to one another can be known by man ... without getting any information about them from God as their maker and controller."⁶ However, the Christian must insist that man's thought is analogical, and this is expressed in man's complete dependence on God. Van Til defines it in the following way:

As man's existence is dependent upon an act of voluntary creation on the part of God, so man's knowledge depends upon an act of voluntary revelation of God to man. Even the voluntary creation of man is already a revelation of God to men. Thus every bit of knowledge on the part of man is derivative and reinterpreted. This is what we mean by saying that man's knowledge is analogical.⁷

In developing these basic reasons for presupposing the authority of the Scriptures much reliance has been made on the work of Van Til, as he is the reformed scholar par excellence who has constantly carried it out. If the above reasoning is true then there is no other authoritative word of God available to us apart from the Scriptures, no other infallible rule of faith and practice.⁸ We must now turn to consider more general implications for the study of science for the Christian who bows to the final and supreme authority of Scripture.

b. Biblical Authority and Scientific Study

1. God's creation cannot be studied in and of itself. No scientific study can abstract itself from its basic underlying presuppositions.⁹ So all study is religiously motivated, for in whatsoever he does man either acts as a covenant-keeper or a covenant-breaker. There are only two positions possible: either all things are considered in relation to the plan and purpose of the God of the Scriptures who made them; or phenomenon will be considered independently of God and His interpretation. Sadly, as will be later shown, there are many Christians with one

⁵ Van Til, Cornelius, *Christian-Theistic Evidences* (1961), p. 56.

⁶ Van Til, Cornelius, *Apologetics* (Syllabus, reprinted 1971), p. 10.

⁷ Van Til, Cornelius, *Introduction to Systematic Theology* (Syllabus, reprinted 1966), p. 12.

⁸ See, Summing up the AACS "dialog", *Presbyterian Guardian*, Vol. 42, No. 9, November 1973, p. 141.

⁹ Stanford Reid brings this out so clearly in the first chapter of his book, *Christianity and Scholarship* (Philadelphia, PA: Presbyterian & Reformed, 1966).

foot in this camp. Does this mean that no knowledge is possible for the man working with non-Christian presuppositions? No, for as Van Til iterates:

Non-Christian science has worked with the borrowed capital of Christian theism, and for that reason alone has been able to bring to light much truth.¹⁰

But we are equally sure that if the presuppositions of autonomy, chance and the Kantian limiting concept were given free reign, no presupposition would be possible. Negatively therefore, true science (used in its broadest possible sense) cannot be engaged in apart from Christian presuppositions.

2. The Christian presupposition is the inerrancy and authority of the God-breathed Scriptures. Here alone are created facts so interpreted according to the mind of God. As Calvin long ago wrote:

If true religion is to beam upon us, our principle must be, that it is necessary to begin with heavenly teaching, and that it is impossible for any man to obtain even the minutest portion of right and sound doctrine without being a disciple of the Scripture.¹¹

This is not to imply, what would be a ridiculous notion, that the Scriptures are a compendium of all possible knowledge. The Scriptures have a much more narrow design, that of redemption in Christ Jesus, but man's need of God's grace is the central fact of his life. Yet because man's sinful rebellion blinded him to God's natural revelation the special revelation of Scripture was necessary. As God is revealed as Creator and re-Creator we again insist that the Scriptures are a necessary presupposition for the right understanding of any fact. The precise relationships here will be studied later in terms of a specific science.

2. THE SCIENTIFIC METHOD

a. What is the Scientific Method?

Basic to, and at the heart of science is the experiment, although this must not be considered merely in terms of the physical sciences. Thus science is a method of study which seeks to explain events and states of affairs. Even theology can fit into this rubric if it is desired that it be considered a science.

Before embarking on any study the scientist has a problem to be solved, a question to be answered, or a hypothesis to be verified.¹² He will then go to the various sources of information available to him, and on the basis of his observations of experiments set up will generalize a conclusion.

For example, the simple question is raised as to the relationship between rainfall and the time of year. The relevant source of information he should observe is the rain-gauge reading over an allotted period of years. Clearly each year will have different results but a general trend will probably be discernible when an average for the rainfall for each month over the period

¹⁰ Van Til, Cornelius, *Christian-Theistic Evidences* (1961), p. 69.

¹¹ Calvin, John, *Institutes of the Christian Religion*, Book 1, VI, 2.

¹² See De Jong, *Education in the Truth* (Philadelphia, PA: Presbyterian & Reformed, 1969), pp. 25ff.

is calculated. If the original question had been out in the form of an hypothesis then the results would either confirm or negate the truth of the hypothesis.

Thus science is concerned with reality, with events and states of affairs which can be subjected to examination and thus verification or rejection.

b. Presuppositions of non-Christian Science

It is so often supposed that it is possible for any “well-meaning person” to come to the facts, consider them without any biased judgement, and therefore make true conclusions. This myth must be exploded as nothing could be further from the truth. In relation to Darwin and the evolutionistic school, R. E. D. Clark has shown in his book *Darwin Before and After*, that its main exponents embraced evolutionism because at one point in their lives they each deliberately rejected the Creator. Van Til quotes Cohen and Nagel to the same effect, when having rejected the final authority of the Bible, they write:

There remains then the method of science or reflective enquiry. It alone is free from caprice and wilfulness. ... On the other hand, the method of reflective enquiry ‘which takes advantage of the objective connections in the world around us, should be found reasonable not because of its appeal to the idiosyncrasies of a select individual, but because it can be tested repeatedly by all men.’¹³

The following are the basic presuppositions upon which all non-Christian science is based, presuppositions which are rarely brought to light, as most consider their scientific endeavour as being totally objective.

1. The autonomy and sufficiency of man’s reason. This sort of presupposition is even at the back of some supposedly Christian apologetics like that of Bishop Butler and the whole nature-grace scheme. It is argued that man has the ability to use his mind, in and of itself, to understand even the basic truth of the universe, that there is God. This is the presupposition that all men have a common basis of truly understanding certain basic facts. Van Til sums up this presupposition in the following way:

Science begins with brute facts. It assumes the mind of man as the ultimate interpreter of these brute facts. The mind of man finds that it cannot actually give a comprehensive interpretation of the facts. There remains a realm of mystery. It is within this leftover area of science that God must be sought. Even so he is always essentially penetrable to the human mind.¹⁴

This is exactly what Adam and Eve were tempted into doing by Satan. They discarded the word of God concerning the tree of the knowledge of good and evil, and as there was no possibility of making observation, they had to depend on their power of logic alone.

2. Neutrality and brute fact. This assumption cannot be separated from that of man’s autonomy, for neutrality is involved in the assumption that “human theoretical thought on its own can arrive at real truth because it is independent of all faith and beliefs.”¹⁵ So when Van

¹³ Quoted in Van Til, Cornelius, op. cit., p. 54.

¹⁴ Op. cit. p. 79.

¹⁵ Van Riessen, Hendrik, The Relation of the Bible to Science, *Christian Perspectives*, 1960, p. 10.

Til deals with the apologetic method of James Orr, who reasons using historical developments as a basis, he attacks Orr's basic presupposition.

The logic of history conceived by itself, and as intelligible to the believer and non-believer alike, is nothing but a universal that is based upon brute facts.¹⁶

Non-Christian science therefore does not philosophically presuppose that facts are related to each other and together to God who made them. Rather chance, or irrationalism, is ultimate, not God, who is Himself subject to these brute facts. It is true also that this presupposition is not strictly adhered to, for if it was there would be no possibility of anything having meaning. As Sartre has said, it would be "ooze oozing out of ooze". Or as Van Til often amusingly and graphically puts it, it would be like "one white cap of a shoreless and bottomless ocean saying to another white cap, 'Cogito ergo sum!'"¹⁷ But the very fact that scientists do investigate shows that they really expect to find order and meaning in the universe, although it cannot be their irrational presupposition which leads them to this.

3. Ability to perceive the total picture of things. Proudly the non-Christian scientist implicitly presupposes that with his mind he is able to bring all factors together to bear upon his study so as to arrive at an ultimate conclusion. He believes that all of reality is open to the knowledge of the scientist. It might appear that by using the Kantian limiting concept that non-Christian science has abandoned this presupposition, but it is rather merely a humble and temporary acknowledgement that man's endeavours have not yet reached the height of their capabilities. This is the hope that Kant has given to modern man in relation to the goal of existence:

We may strive as best we can to bring life into unity with the notion of supreme purpose. To be sure we shall never succeed in doing so completely ... Yet we must place before ourselves the goal of absolute perfection, both of ourselves and of the universe.¹⁸

c. Necessary Presuppositions of Truly Christian Science

The Christian, therefore, cannot engage himself in the scientific enterprise without giving serious thought to the foundation on which he is seeking to build. Far from being neutral, non-Christian science actually rules out the Christian interpretation of facts from the start. In having the goal of comprehending all existence man is usurping the place of God by wiping out the Creator-creature distinction.

The Christian must understand that all too often scientists have failed to apply the brake and realize that there are limitations to scientific knowledge. However, the limitations are not just where the state of affairs are not within the proper scope of science. Smethurst suggests that science cannot give information about spiritual reality nor aesthetic and moral values.¹⁹ But in giving scientific method, in and of itself, legitimacy in the study of the material world, he has from the start abandoned the Christian position to brute fact. He appeals to Eddington with favour that:

¹⁶ Van Til, Cornelius, op. cit., p. 51.

¹⁷ "I think, therefore I am", is the "first principle" of René Descartes's philosophy (Wikipedia).

¹⁸ Op. cit., p. 100. Van Til is summarizing the thought of Kant here.

¹⁹ Smethurst, Arthur F., *Modern Science and Christian Beliefs* (New York: Abingdon Press, 1955), p. 57.

... in approaching nature by the scientific method we deliberately select material suitable for study by that method, and tacitly agree to ignore all material and all phenomena which are not suitable for observation by it.²⁰

Having already expressed that spiritual realities are not suitable, how can the facts of the material world ever be considered as meaningful apart from the plan of God? Therefore, the Christian, from the start, has to consciously understand that in all his work he is dealing with the handwork of God. Because of its importance, Van Riessen labours the point that no scientific study is neutral. “The Christian approach confronts science with the question: What kind of faith is guiding the scientist?”²¹

This is the crux of the issue of science’s limitations.²² If the Christian comes before his scientific studies with the stance of a creature before his Creator then he has immediately rebuffed the three major non-Christian scientific presuppositions. He knows that God’s interpretation of the facts is ultimate; that all facts are what they are by virtue of the plan of God; and that reality is not completely penetrable to the mind of man.

It is with these established thoughts that we are now going to a more specific study of the relationship between God’s revelation and the scientific method.

3. THE RELATIONSHIP BETWEEN THE BIBLE AND SCIENCE

The aim of this section is to describe the three basic ways in which this relationship is presently analysed.

a. The Bible as a Textbook for Science

If anyone is to be branded with the mark of this evaluation of the situation it must be Henry Morris who has deliberately written on the subject, *The Bible is a Textbook for Science!*²³ Yet Morris immediately qualifies himself.

It is obvious, of course, that the Bible is not a scientific textbook in the sense of giving detailed technical descriptions and mathematical formulations of natural phenomena.²⁴

He does believe, however, that the Bible deals with natural phenomena and historical events in an objective way. The reason why God has given such information, according to Morris, is because it is quite impossible for man to know anything with certainty about the prehistoric past as he is only able to study present processes. He is prepared to go to specific texts throughout the Scripture and apply them directly to individual branches of science. For example, Ecclesiastes 1:6 refers to meteorology and the circulation of the atmosphere, and Isaiah 55:9 refers to astronomy and the infinite size of the universe.²⁵ The final paragraph of the chapter summarizes his thought.

²⁰ Op. cit. p. 59.

²¹ Van Riessen, Hendrick, op. cit., p. 42.

²² De Jong, Norman, op. cit., pp. 27-30. See also Clark, Robert E. D., *The Christian Stake in Science* (Chicago: Moody Press, 1967), pp. 20-21.

²³ Morris, Henry M., *Studies in the Bible and Science* (Philadelphia, PA: Presbyterian & Reformed, 1966), ch. XI.

²⁴ Op. cit., p. 108.

²⁵ Op. cit., pp. 117-120.

In the final analysis, all truth is one. God did not create one universe of physical reality and another of spiritual reality. The same God created all things, and His word was given by His Holy Spirit to guide us into all truth. The Bible is, for the Christian, the textbook of science and all knowledge. ²⁶

Morris is by no means the first to have called the Scriptures a textbook of science. Hooykaas quotes Voetius to the following effect.

The Bible 'teaches not only what is necessary to salvation, but also lays down principles of all other good sciences and arts' ... ²⁷

From various quarters this view is branded as dangerous.

The Bible does not give outlines of historical geology, nor accounts of scientifically controllable creative acts of God! If we think the Bible does provide these we have brought God's creative work down to scientific control ... ²⁸

The conception of the Bible as a kind of scientific textbook was neither supported by any scholarly study of the Bible nor by the results of scientific research itself ... Our contention is, then, that science cannot be built upon special texts of the Bible ... ²⁹

This concern arises from the setting forth by Society spokesmen of their own theories, based on observed data and certain Scripture truths or interpretations, as a "Christian answer" to evolutionists. All too often the uncritical reader gains the impression that this is "the Christian answer." ³⁰

There is undoubtedly truth in these criticisms as they are applied to the work of men like Morris, but I do not think his position is entirely fully represented by them. Morris thinks of himself as a presuppositionalist, accepting the Bible as God's own perfect revelation of the origin, purpose and destiny of the world. He therefore wants all the pertinent data understood within the framework of Biblical creationism and catastrophism. Strictly, it is not true that he understands the Bible as giving outlines of historical theology. The Christian has to choose between creationism and catastrophism, and uniformitarianism as explanatory principles. I believe that Morris rightly chooses the former as being Biblical. But when he builds his scientific hypotheses upon this framework, even though occasional appeal is made to Scripture data, he perhaps has not fully covered himself against the accusation that his hypothesis is not demanded by Scriptural exegesis. It must be made clear that such work cannot come under the category of theology. The danger is that the Christian faith becomes wedded too firmly to a particular theory just as it did at the time of Galileo.

²⁶ Op. cit., p. 120.

²⁷ Hooykaas, R., *Christian Faith and the Freedom of Science* (London: Tyndale Press, 1957), p. 10

²⁸ Van de Fliert, J. R., Fundamentalism and the Fundamentals of Geology, in *International Reformed Bulletin*, 32-33, January/April 1968, p. 5.

²⁹ Hooykaas, R., op. cit., pp. 14-15.

³⁰ From Editor's note in *Presbyterian Guardian*, Vol. 41, No. 8, October 1972, p. 126. The reference is to the activity of the Creation Research Society and the concern that their activities might harm the faith of some Christians.

b. The Bible Furnishing Basic Principles for Science

This is perhaps the general rubric that has had the greatest appeal to Christians down through the centuries. Hooykaas understands the Reformation to have freed science from the harmful shackles of religious dogmatism. Rather than being a kind of scientific textbook he prefers to see the relationship in terms of basic harmony. This is his third way:

... that of an organic unity between biblical faith and natural science.³¹

Davis A. Young expresses this same thought in a different way.

He (the Christian) ought to apply Scripture logically and consistently not only to the narrow religious sphere but to the totality of his life. Scripture provides an account of the origin and history of the earth. Therefore the Christian geologist has the solemn responsibility of applying the facts and principles of the Biblical record to the actual geological phenomena of the earth, ...³²

In practice, however, as I think Young's work illustrates, it is not easy to be consistent. We agree that the Bible is the final authority, and the world we study is God's creation, but does the Bible have any more direct relevance than this? There are many places in the Scripture where illustrations are used to highlight spiritual truths which are taken from the physical world. On an elementary level, we insist, of course, that Christ had His biology correct when He referred to the seed (Mark 4:1-8,19, John 12:24), and to fruit-bearing and pruning (Matthew 7:16-19, John 15:1-6). These processes are obvious to all by observation, but it can also be said that the Scripture indirectly teaches them. Likewise, is there any error in the table of nations (Genesis 10, 11) and the fact that language originated from Babel? Young wants a Scriptural foundation but seems to give too much importance to scientific observations and interpretations *per se*. This appears in his article referred to above.

c. The Bible Silent Concerning Science

It is a common opinion today to totally separate the modern scientific method from Biblical data. The Bible being pre-scientific, it is thought, cannot be considered in terms of modern scientific categories.

The prevailing mood is that science and religion must be kept well apart. The Christian who is a scientist must pursue his religion and his science separately in full confidence that they are independent disciplines.³³

Not only is this idea common amongst liberal theologians of today, but in a more subtle form it appears to be held by the Philosophy of the Cosmonomic Idea School under the leadership of the Calvinist, Dooyeweerd. If this is true,³⁴ as I will now try to substantiate, then the Biblical Christian position has been destroyed, for no longer do the Scriptures have the final and complete authority.

³¹ Hooykaas, R., op. cit., p. 14 and see pp. 14-18.

³² Young, Davis A., Some Practical Geological Problems in the Applications of the Mature Creation Doctrine, *Westminster Theological Journal*, Vol. XXXV, No. 3, Spring 1973, p. 268. See also Henry M. Morris' reply in Vol. XXXVI, No. 1, Fall 1973, pp. 65-77.

³³ Clark, Robert E. D., op. cit., pp. 11-12. Here Clark is summarizing the twentieth century attitude and devotes to chapter 2 to exploding the theory.

³⁴ "It is not true" (Knudsen).

This trend is particularly noticeable in the work of the Toronto School, the Association for the Advance of Christian Science (AACS). It is related to two of their central tenants.

- (i) The distinction between the written-word and the law-word, and
- (ii) The idea of sphere sovereignty.

In his book, *Understanding the Scriptures*, De Graaf tells us what he thinks the focus of the Scripture is:

... the references to God's creating do not answer our scientific, biological or geological questions, just as little as the Bible answers the questions of the historian or the anthropologist. The Bible is just not that kind of a book. It is not a textbook for any science, not even theology! The Scriptures 'only' intend to recite God's mighty acts in Jesus Christ ... ³⁵

Behind this view lies that distinction which Shepherd calls text-word and power-word. ³⁶ So we must turn our attention to this school's doctrine of Scripture.

(i) Doctrine of the word of God. The basic distinction is between the word of God and the Bible. There are three temporal forms of the word of God, creation, Christ and Scripture. According to De Graaf the Bible is not to be a collection of propositional truths and moral lessons. ³⁷ As such it addresses itself to the heart of man and thus only concerns the realm of faith. But its power operates in the following way:

Thus the Bible is not designed as the final revelation to instruct us directly today in what is well-pleasing unto God, but only and specifically tells us what the word of God required of a limited number of people living long ago under their own peculiar historical and cultural circumstances. ³⁸

As this word cannot be scientifically studied, it is the creation-word or law-word that is of great importance. The Scripture is only one positivization of realization of the creation law structure which is the mediator between God and His creatures. ³⁹ The study of different scientific subjects yields norms apart from those revealed in Scripture, as the study is directed to the law structures. This latter is the goal of science, according to Van Riessen.

... to know God's creation through the laws by which God reigns and which enable every creature to walk on earth with trust. ⁴⁰

This immediately raises the question of the authority of the law-word.

(ii) Authority of the law-word. According to Spier, it is a sin to transgress any norm in studying the law-word. ⁴¹ This position involves an implicit compromise of Biblical authority and has

³⁵ De Graaf, Arnold, *Understanding the Scriptures* (Toronto: AACS, 1968), p. 12.

³⁶ Shepherd, Norman, *Outlook*, February 1971, p. 19 & March 1971, p. 21.

³⁷ De Graaf, Arnold, op. cit., p. 18.

³⁸ Shepherd, Norman, op. cit., p. 21.

³⁹ For a refutation see Frame, John M., *The Amsterdam Philosophy* (Phillipsburg, N.J.: Harmony Press), pp. 29ff.

⁴⁰ Van Riessen, Hendrik, op. cit., p. 50.

⁴¹ Spier, J. M., *An Introduction to Christian Philosophy* (Philadelphia, PA: Presbyterian & Reformed, 1954), pp. 112-122. In his book, *What is Calvinistic Philosophy?* (Grand Rapids, Michigan: Eerdmans, 1953), he distinguishes between two types of sin (pp. 76-77). On the deepest level it is against fundamental religious laws. Transgression is also possible against temporal, modal laws. Aesthetic laws of a specific historical period are an example.

great implications for the relationship such scientists presuppose with the scientific method. Shepherd applies it to the doctrine of creation, according to the Dooyeweerdian scheme.

God's creative deed as central revelation or power-word has direct bearing on all scientific endeavour, and therefore has bearing upon the work of the geologist or biologist as scientist. But creation as an article of the Christian faith, or as it is described in the early chapters of Genesis, is not the concern of the geologist or biologist as scientist. As scientist he is working on another aspect of reality, not the faith-aspect which is the domain of the theologian. The theologian therefore cannot tell the geologist that he must accept as divinely revealed truth in his work as geologist, that there were successive acts of creation in temporal order.⁴²

John Frame's conclusion is similar.

This movement also prevents any criticism of scientific theories on the basis of Scriptural exegesis.⁴³

That this is a correct conclusion seems to be confirmed by a study of Van de Fliert's article already referred to.⁴⁴ He drives such a wedge between the Scripture and geological study, seemingly an over-reaction to what he calls the 'fundamentalistic' school of Morris, so that throughout his article, while there is much appeal to geological phenomena, there is none to Scripture. His basic commitment is expressed as follows:

As a historical geologist, who always has to do with documents of a geologic past in the earth's crust, I cannot pretend to speak even one reliable word about geologic history except on the basis of what I called above: structural constancy.

⁴⁵

Is structural constancy a valid principle? It surely is reasonable, but its validity can only be tested by the Scriptures. Not that the Scriptures formulate such a presupposition explicitly. The danger is that structural constancy becomes a neutral area, a brute fact, open to the Christian and non-Christian alike. It seems that the Dooyeweerdians, in practice, have allowed non-Christians to interpret some facts aright, those which are in many of the modal spheres.⁴⁶ From the very beginning the Christian must bring the Scriptures to bear upon his studies. The propositions and moral commandments are authoritative for him as long as this world shall continue. "To the teaching and to the testimony!" (Isaiah 8:20).

4. A DEVELOPMENT OF THE SCIENTIFIC METHOD ON THE BASIS OF BIBLICAL AUTHORITY

It has already been pointed out again and again that the Bible is the sufficient rule for all God's creation.

⁴² Shepherd, Norman, op. cit., March 1971, p. 22.

⁴³ Frame, John M., op. cit., p. 52.

⁴⁴ See footnote 28.

⁴⁵ Van de Fliert, J. R., op. cit., p. 22. See also the criticism of his views in the same journal, 38, July 1969, pp. 27-33, and his reply, pp. 34-39.

⁴⁶ "Can't they 'borrow capital'? See your p. 5" (Knudsen).

... we must remember that God has given us Scripture because without it we are blind to God's revelation in the world. Scripture was given to save us from our sinful wisdom, to correct our sinful ideas. The words of Scripture must take unconditional precedence over any ideas we have gained from other sources. We must bring our philosophies, sciences, world-and-life views, all to the Scripture.⁴⁷

This is such a wide field that we must take one specific example to illustrate what we believe to be the stake of the scientific method in Biblical authority. We have many times referred to the study of the rocks of the earth, and in the light of this science we will see what the Bible contributes.

The basic presupposition of stratigraphic science is that of uniformitarianism, so that there are two fundamental principles:

- (i) Younger rocks lie on top of older rocks.
- (ii) The processes observable today are the only ones that can be used to explain the past.

It is this last principle that Morris is very fond of challenging on the basis of 2 Peter 3:4. To illustrate we will use the time of Noah and the flood, something to which Jesus often referred (cf. Matthew 24:37-39). According to the command of God Noah began to build the ark, not by the sea, but in the mountains. Can you imagine the conversation that Noah had at lunch time with the skilled craftsmen he employed? Of course they were willing to work for him but who ever heard of a flood so great that even the mountains would be covered? They had never experienced such a thing, nor had their ancestors, so they paid no attention to Noah's preaching (2 Peter 2:5, Luke 17:26-27). So just as with Adam, Noah's generation crowned reason king and dethroned God's interpretation of the facts. Now God has specifically promised that the world will never be overrun by water again (Genesis 9:11, cf. 2 Peter 3:5-7), yet there is not a non-Christian scientist who is prepared to grant the past occurrence of a universal flood. In my judgement, that it was universal, cannot be controverted.⁴⁸ Therefore, the non-Christian scientific method, *a priori*, rules out the possibility that the Noahic Flood is the explanation of the stratigraphic we presently observe. But we must not go to the other extreme and insist that from Scriptural exegesis the Noahic Flood is that interpretive principle, for the Bible is silent in the matter.

The Christian might, if he chooses, accept the two fundamental principles of stratigraphy noted above, but he cannot do so completely uncritically. While he cannot make dogmatic assertions about the stratigraphic effects of the flood, he must take account of the following facts in his hypothesis:

- (i) The fossil record reflects God's curse following the fall of man,⁴⁹ and
- (ii) The destructive and creative forces of the water present by virtue of the origin and amount recorded as being present.

⁴⁷ Frame, John M., What is God's Word? *The Presbyterian Guardian*, Vol. 42, No. 9, November 1973, p. 143.

⁴⁸ See Morris and Whitcomb on the *Genesis Flood* for Scriptural exegesis from Genesis 7.

⁴⁹ Morris, Henry M., *Studies in the Bible and Science* (Philadelphia, PA: Presbyterian & Reformed, 1966), p. 71.

It is on this Scriptural basis, the results of which are from exegesis, that the Christian must establish his geological theories. The Bible is not silent concerning geologic principles. A geologist therefore cannot ignore the fact that God created all things on successive “days”; that death in the world is a result of sin; and that the world has experienced one great catastrophic flood. The precise use he makes of this data might vary, but no geologic fact will be out of accord with these facts. The Christian geologist, therefore, will bring his studies as much into conformity with these Biblical representations as possible.

Here we refute De Graaf’s suggestion that while the Bible is essentially religious, the scientific nature of creation and the flood are not. The creation and flood are meaningless if not according to the plan of God. They are essentially religious, and thus can never be truly studied apart from this outlook.

What is to be concluded from the above specific consideration of historical geology? The Bible and this science are not operative in differing spheres, the pistical and the physical. The Bible speaks directly and to the heart of all scientific endeavour with the necessary presuppositions we have already formulated. Yet the Bible is not a textbook of scientific hypotheses and laws so these have to be studied on the foundation of, in accordance with, and sometimes directly based upon, Scriptural data. Thus the Biblical presupposition is more than a general one. It means, also, that there is no such thing as a neutral scientific method,⁵⁰ as such, which is a basis of agreement between Christians and non-Christians. If the principle of uniformity is sometimes tacitly appealed to, then it is with the consciousness that there is order and continuity in the world only because God its creator and sustainer. We insist that the scientific method is basically religious, being motivated by the implicit presupposition of the worker.

5. CONCLUSIONS

1. The Christian must recognize the *a priori* nature of all scientific activity including his own.
2. The scientific method is only possible because all things are related together in the plan of God (Ephesians 1:11). So Van Til maintains:
 ... that unless God has caused the existence of the universe, there would be no possibility of scientific thought.⁵¹
3. Every discipline must be specifically related to the Scriptural doctrines of creation and fall as these are both cosmic in extent.
4. Relevant Scriptural principles and passages must be sought out and sound exegesis done as a foundation for scientific hypotheses.

⁵⁰ See the evaluation of Dooyeweerd’s apologetics in Frame, John M., *Amsterdam Philosophy* (Phillipsburg, N.J.: Harmony Press), pp. 49-51.

⁵¹ Van Til, Cornelius, *Christian-Theistic Evidences* (1961), p. 86.