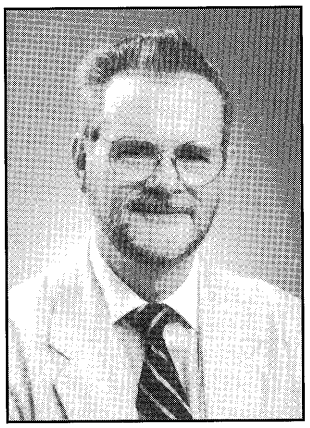
Calvin and the Stars, Kuyper and the Fossils: Some Historiographical Reflections



by Keith C. Sewell

Preface

This article makes no claims to originality. My purpose is to emphasize the importance of the history of historiography—including the history of the writing of the history of science. By looking carefully at the history of the literature on a given topic, we can gain insights into the role of religious starting points in shaping the way that the story has been told. Moreover, a closer examination of the context from which contributions to the literature have emerged can enable us to discern undeclared starting points and unexamined or forgotten motivations. Furthermore, if we are familiar with the history of the historiography of a certain episode or idea, we are less likely to be taken in by the latest version or theory. Indeed, it may turn out that more "popular" works tend to perpetuate errors already exposed and discredited in the more specialized literature. Of course, these observations apply to all branches of historical study and not just to the history of astronomy and geology.

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Calvin and the Stars

Of all British philosophers in the twentieth century, Bertrand Russell (1872-1970) probably achieved the highest level of public recognition. Russell received repeated exposure in the national media for his less than conventional views on conscription, pacifism, and sexual ethics, and for his leadership role in the Campaign for Nuclear Disarmament.

Philosophically, his most decisive contribution was his articulation of the standpoint known as "logical constructionism," particularly in the *Principia Mathematica* (three volumes, 1910-13), co-authored with A. N. Whitehead, and in his lectures on *The Philosophy of Logical Atomism* (1918). After 1919, Russell became a much sought after lecturer, and many of his later and more accessible writings are the products of such speaking engagements. One such work is his *Religion and Science* (1935). Here we read, in the context of a discussion of the response to the heliocentric theory of Copernicus,

> Luther said that "People give ear to an upstart astrologer who strove to show that the earth revolves, not the heavens or the firmament, the sun and the moon. Whoever wishes to appear clever must devise some new system, which of all systems is of course the very best. This fool wishes to reverse the entire science of astronomy; but sacred Scripture

tells us that Joshua commanded the sun to stand still, and not the earth." Melanchthon was equally emphatic; so was Calvin, who, after quoting the text "The world also is established, that it cannot be moved" (Psalm 93:1), triumphantly concluded, ***"Who will venture to place the authority of Copernicus above that of the Holy Spirit?"***[1]

It is important to keep a number of points in mind when assessing these statements. First, Russell was deeply agnostic in his response to the claims of Christianity, and this agnosticism certainly influenced his view of the history of science.[2] Second, he generally adhered to the "warfare model" of the relationship between Christianity and science, as exemplified in the writings of John William Draper (1811-1882) and Andrew Dickson White (1832-1918).[3] Third, this approach was undoubtedly connected to the traditions in protestant Christianity with which he was most familiar. According to Russell's daughter, Katherine Tait, "In . . . the only form of Christianity my father knew well, the life of this world was no more than a gloomy testing ground for future bliss."[4] In his formative years, Russell was exposed to Welsh Nonconformity and other British protestant traditions that knew little of the positive Calvinian understanding and appropriation of the biblical teaching concerning the order of creation. For him, Christianity appeared ethereally otherworldly, intensely moralistic, and scientifically obscurantist.[5]

Finally, it should be noted that Russell provided no reference to the alleged statement by John Calvin, "Who will venture to place the authority of Copernicus above that of the Holy Spirit?" The Luther statement was well known, appearing as it does in the *Tischreden*.[6] Not only was the Calvin assertion more problematic, but it was also repeated by Russell in his best selling *History of Western Philosophy* (1945), as follows:

> Calvin similarly demolished Copernicus with the text, "the world also is established, that it cannot be moved" (Psalm 93:1), and exclaimed: "Who will venture to place the authority of Copernicus above that of the Holy Spirit?"[7]

In the absence of any supportive reference, Russell's readers were entitled to ask if Calvin ever said or wrote such a thing. Of course, the obvious first recourse would be to Calvin's own *Commentary on the Psalms*, and specifically to his discussion of the first verse of Psalm 93. These are Calvin's words:

> The heavens revolve daily, and immense as is their fabric, and inconceivable the rapidity of their revolutions, we experience no concussion—no disturbance in the harmony of their motion. The sun, though varying its course every diurnal revolution, returns annually to the same point. The planets, in all their wanderings, maintain their respective positions. How could the earth hang suspended in the air if not upheld by God's hand? By what means could it maintain itself unmoved, while the heavens above are in constant rapid motion, did not its Divine Maker fix and establish it?[8]

While it would be hard to sustain the thesis that Calvin was a Copernican from these words, there is no substantiation here of Calvin's explicit repudiation of Copernicus as asserted by Russell. There is no suggestion here of Copernicus being exalted by anyone above the Holy Spirit.

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However, particularly in his *Religion and Science*, Russell had acknowledged a definite indebtedness to the American author, Andrew Dickson White, historian and militantly secular first President of Cornell University. In the early 1890s, White wrote an article in which he stated the following:

> Calvin took the lead, in his *Commentary on Genesis*, by condemning all who asserted that the earth was not at the center of the universe. ***"Who,"*** he said, ***"will venture to place the authority of Copernicus above that of the Holy Spirit?"***[9]

White later re-worked and incorporated this passage in a book that became highly influential, his *A History of the Warfare of Science with Theology* in Christendom, as follows:

> While Lutheranism was thus condemning the theory of the earth's movement, other branches of the Protestant Church did not remain behind. ***Calvin took the lead, in his* Commentary on Genesis, *by condemning all who asserted that the earth was not at the center of the universe. He clinched the matter by the usual reference to the first verse of the ninety-third Psalm, and asked, "Who will venture to place the authority of Copernicus above that of the Holy***

Spirit?" Turretin, Calvin's famous successor, even after Kepler and Newton had virtually completed the theory of Copernicus and Galileo, put forth his compendium of theology, in which he proved, from a multitude of scriptural texts, that the heavens, sun, and moon move about the earth, which stands still in the centre. [10]

While these assertions broadened the possibilities by introducing Calvin's *Commentary on Genesis* into the discussion, White does not resolve our problem because he gives no footnote for his quotation from Calvin. However, White does say, "On the teachings of Protestantism as regards the Copernican theory, see citations in Cannon Farrar's *History of Interpretation*, 'Preface'. . . ."[11]

In 1885, Frederick William Farrar (1831-1903), a leading clergyman in the Church of England in the latter part of the nineteenth century, gave the Brampton Lectures at the University of Oxford on the subject of "The History of Interpretation." In his *Preface* to the lectures, published the following year, Farrar cited Calvin as but one example of how Churchmen have been in error over the centuries. Farrar's exact words were these: "'***Who,' asks Calvin, 'will venture to place the authority of Copernicus above that of the Holy Spirit?***'" [12]

Farrar was not singling out Calvin for special treatment,[13] for he continued with this statement: "'Newton's discoveries' said the Puritan John Owen, 'are against evident testimonies of scripture.' With what outbursts of denunciation has almost every new science been received by narrow literalists!"[14] The reference to "narrow literalists" is significant. Farrar contended that "Texts have been used a thousand times to bar the progress of science, to beat down the sword of freedom, to destroy the benefactors of humanity, to silence the voice of truth."[15]

However, as if to tantalize us further, Farrar also failed to substantiate this quotation of Calvin from the works of Calvin himself. His son, Reginald Farrar, in a book that he wrote about his father's life and work, nevertheless offers a clue to the puzzle. In his *The Life of Frederick William Farrar* (1904), Reginald wrote of his father as follows:

> In judging ... all his books, it must not be forgotten that there are two orders of scholars, the "intensive" and the "extensive" school, both necessary to the world—those whose function is original research, and those whose function is to interpret and make available the labours of the former class, whose work would otherwise remain buried under its own weight. And it is to this latter class that my father unquestionably belonged.[16]

Moreover, the son portrayed the father as constantly engaged in pastoral work, reading, and a substantial correspondence. Nevertheless, the son adds,

> It may be safely said that my father *never* paused, as do some preachers, to *choose* a quotation which should illustrate his meaning. We cannot do justice to this aspect of his preaching unless we try to realize that quotation to him was entirely spontaneous, almost involuntary, because his marvelous memory was stored, nay, saturated with passages from poets which had become, as it were, a part of his very being, and which, when the appropriate association evoked them, came unbidden to his lips. [17]

In fact, at the beginning of his *History of Interpretation*, F.W. Farrar had forthrightly acknowledged that "In a work which covers such vast periods of time and which involves so many hundreds of references it would be absurd to suppose that I have escaped from errors." [18]

Escaped he had not. We may well come to the conclusion that Farrar's "quotation" was the product of an overburdened memory rather than deliberate falsification, and that the Churchman had unwittingly provided fuel for Russell's anti-Christian fire. However, this conclusion hardly settles the matter. A.D. White had referred to Calvin's *Commentary on Genesis* in claiming that the reformer had condemned Copernicus, while F.W. Farrar, whom White had read, made no such connection. So there remained a problem: Where then did A.D. White derive the belief that the *Commentary on Genesis* supported his assertion?

In order to answer this question, we must move from English Anglicanism to American Presbyterianism. More particularly, we must turn to another late nineteenth-century work to which A.D. White refers.[19] It is by Charles Woodruff Shields (1825-1904). Shields was a man of the Princeton School, no less than Professor of the Harmony of Science and Revealed Religion at Princeton University, New Jersey. Shields wrote as follows:

> Luther, with characteristic bluntness, denounced Copernicus as an upstart astrologer, who sought notoriety by trying to overturn the whole science of astronomy, as if the earth could revolve around the sun, when the scriptures tell us that Joshua commanded the sun to stand still, and not the earth. The mild Melanchthon, in his *Elements of Physical Doctrine*,

not only reasoned against the Copernican theory with Scriptural and scientific arguments, but held that the civil authorities ought to suppress such a wicked and atheistical opinion. **Calvin introduced his commentary on Genesis by stigmatizing as utter reprobates those who would deny that the circuit of the heavens is finite and the earth placed like a little globe at the centre.** The orthodox Turretin, while yet Newton was completing the demonstration of Kepler, issued from Calvin's chair a *Compendium of Theology,* in which, with a scholastic array of proof texts, objections and answers, he argued that the heavens, sun and moon are in motion, but the earth is at rest. [20]

So, it was from Farrar that White derived the unsubstantiated Copernicus reference, and it was from Shields that he derived Calvin's assertion of geo-centricity. Furthermore, it is hard to escape the conclusion that Shields, who certainly did not regard himself as anti-Calvinistic, had in truth misrepresented what Calvin said at the start of his commentary of the first book of Moses called Genesis. This is what Calvin actually says in his *Commentary on Genesis*:

> We indeed are not ignorant that the circuit of the heavens is finite, and that the earth, like a little globe, is placed at the center. [21]

Here is an assertion of geo-centricity, and in this respect Shields is clearly following Calvin, but although Calvin is severe towards his adversaries in this passage, he does not stigmatize as reprobates those who embrace the position of Copernicus. In fact, he does not mention Copernicus at all.

The truth is that Calvin's astronomical understanding was pre-Copernican rather than dogmatically anti-Copernican. Moreover, while Calvin was definitely not anti-scientific, his understanding of many things would appear to be clearly pre-scientific. It is in such terms that we should understand his preference for a geo-centric viewpoint.[22] If what we would now call "science" disturbed him, it was not the endeavor itself but the possibility that it might detract from the worship and service of Almighty God.[23]

In this sense, science was like much else that is legitimate: it may be put to wrongful use by a fallen and disobedient humankind. If Calvin sensed the potential for secularization, the champions of secularization in the nineteenth century were among those who seized upon the false quotation because it all too clearly exemplified their image of what they saw as an obscurantist Christianity. The supposed quotation from Calvin was too good to pass up: Russell derived his false assertion from White, who could point to two Christian writers as authorities on the matter, namely Farrar and Shields.

In due course, many others were to follow White and Russell. For example, we find the following statement in the writings of the highly influential Thomas S. Kuhn:

> Calvin, in his *Commentary on Genesis*, cited the opening verse of the Ninety third Psalm—"the earth also is [e]stablished, that it cannot be moved" and he demanded, "***Who will venture to place the authority of Copernicus above that of the Holy Spirit?***" [24]

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The repetition of the error became much less excusable following the publication of three articles in *The Journal of the History of Ideas* in 1960 and 1961, namely Edward Rosen's "Calvin's Attitude towards Copernicus,"[25] Joseph Ratner's "Some Comments on Rosen's 'Calvin's Attitude towards Copernicus'," [26] and Edward Rosen's rejoinder, "A Reply to Dr Ratner."[27]

To Edward Rosen must go the honor of having unraveled the origins of the wrongful ascription to John Calvin of the now familiar quotation. It was Rosen who traced the lineage of error outlined above. In due course, the spuriousness of the quotation became known and was noted by a variety of writers.[28]

Yet even here we must enter some caveats. First, there were always doubters, among them Reijer Hooykaas of the Free University of Amsterdam.[29] His work embodied an almost complete reversal of the "warfare" thesis of the relationship between Christianity and Science. He presented a range of arguments supporting the view that the Christian

religion, rightly understood, shorn of the influences of Aristotelianism, and particularly as exemplified by the Calvinian reformation with its positive understanding of the order of creation, was pro-scientific and not anti-scientific.[30] Moreover, just prior to the appearance of the *Journal of the History of Ideas* articles, John Dillenberger had reported that he was unable to locate an explicit reference to Copernicus in the writings of Calvin.[31]

Secondly, in his article in the *Journal of the History of Ideas*, Joseph Ratner challenged the concluding assertion made by Edward Rosen that Calvin never heard of Copernicus and could therefore never have condemned him in the explicit terms of Farrar's erroneous quotation.[32] This challenge opened up a more intractable problem. The focus shifted now from tracing the impact of a nineteenth-century error into the twentieth century to attempting to substantiate a negative proposition with respect to the sixteenth century—that Calvin did *not* know of Copernicus.

Copernicus published his *De Revolutionibus Orbium Caelestium* in 1543. The work was known to Luther, who died in 1546. Calvin died in 1564, close to two decades later. Rosen's argument is problematic—an argument from silence. On the other hand, Ratner's challenge came without substantiation.

There the matter remained until 1966, when the great Calvin scholar Pierre Charles Marcel published a short discussion in the French journal *La Revue Réformée*. Marcel argued that there was a strong presumption in favor of the view that Calvin did know of Copernicus, although there was still no firm evidence.[33] Then a further contribution was published in France by Richard Stauffer. This author argued that a passage in Calvin's *Sermons* on I Corinthians made clear that Calvin knew of the heliocentric theory of Copernicus and that he rejected it in the strongest terms.[34]

This view was challenged by both Rosen and Marcel.[35] For many, the passage adduced by Richard Stauffer was not overwhelmingly decisive, although it certainly supports the assertion that Calvin had some knowledge of the Copernican theory. The passage is as follows:

> [The Christian is not to compromise so as to obscure the distinction between good and evil, and is to avoid the errors of] "those dreamers who have a spirit of bitterness and contradiction, who reprove everything and pervert the order of nature. We will see some who are so deranged, not only in religion but who in all things reveal their monstrous nature, ***that they will say that the sun does not move, and that it is the earth which shifts and turns***. When we see such minds we must indeed confess that the devil possesses them, and that God sets them before us as mirrors, in order to keep us in his fear. So it is with all who argue out of pure malice, and who happily make a show of their imprudence. When they are told: "That is hot," they will reply: "No, it is plainly cold." When they are shown an object that is black, they will say that it is white, or vice versa. Just like the man who said that snow is black; for although it is perceived and known by all to be white, yet he clearly wished to contradict the fact. And so it is that they are madmen who would try to change the natural order, and even to dazzle eyes and benumb their senses.[36]

Here we certainly see Calvin wrestling with the key concept of heliocentricity. He is clearly uncomfortable with a theory that seems to be at too great a variance with our ordinary experience of things. Yet there is no decisive repudiation of Copernicus by name. This statement by Susan E. Schreiner may therefore still stand:"Calvin presupposed a geocentric world view and regardless of the heated debate between Edward Rosen and Joseph Ratner, there is no real evidence that Calvin ever read Copernicus."[37]

Indeed, Calvin may never have *read* Copernicus, but the passage from the sermon on I Corinthians makes it particularly difficult to sustain the view that he never *heard* of the theory of heliocentricity. Supporting the idea that Calvin was familiar with the heliocentric theory, A. Mitchell Hunter, more than half a century ago, reminds us, that

> Though Copernicus had finished his treatise in 1530 . . . he did not publish it until 1543, six years after Calvin issued the first edition of the Institutes. It is almost incredible that he did not hear of it, for Beza had read it . . . .[38]

So how are we to understand Calvin's stance, especially in view of his well-known cordiality towards astronomy as indicated in this passage?

> Moses makes two great luminaries; but astronomers prove, by conclusive reasons, that the star of Saturn, which, on account of its great distance, appears the least of all, is greater than the moon. Here lies the difference; Moses wrote in a popular style things which, without instruction, all ordinary persons, endued with common sense, are able to understand; but astronomers investigate with greater

labor whatever the sagacity of the human mind can comprehend. Nevertheless, this study is not to be reprobated, nor this science condemned, because some frantic persons are wont boldly to reject whatever is unknown to them. For astronomy is not only pleasant, but also very useful to be known: it cannot be denied that this art unfolds the admirable wisdom of God. Wherefore, as ingenious men are to be honored who have expanded useful labor on this subject, so they who have leisure and capacity ought not to neglect this kind of exercise. Nor did Moses truly wish to withdraw us from this pursuit in omitting such things as are peculiar to the art; but because he was ordained a teacher as well of the unlearned . . . as of the learned, he could not otherwise fulfil his office than by descending to this grosser method of instruction. Had he spoken of things generally unknown, the uneducated might have pleaded in excuse that such subjects were beyond their capacity.[39]

In answering this question we do well not to forget that Luther is also part of this story. He was mentioned by White, Shields, and Russell; and his repudiation of Copernicus can be substantiated. Two considerations emerge when the context of Luther's responses is considered.

First, there can be little doubt that Luther was deeply attached to the *ipsissima verba* of scripture, which may have predisposed him against astronomical and other scientific theses that challenged a literalistic approach to the understanding of the biblical text. Luther seems to have had a greater tendency towards literalism than Calvin. A deeply literal attachment to the words themselves may also be detected in Luther's reported strident repetition of the words "This is my body" at the Colloquy of Marburg in October 1529.[40]

The curious affair of the anonymous introduction to Copernicus' *De Revolutionibus* might be viewed in this light. Oseander, a protestant of the Lutheran school, wrote an anonymous preface to De Revolutionibus in which he represented Copernicus as offering a calculation based on heliocentricity *as only a hypothetical exercise*, whereas Copernicus actually envisaged the objective correctness of the heliocentric proposition. Possibly Oseander considered himself driven to this course of action in order to save the authority of the Bible—literalistically understood—from the contradiction that would apparently arise if Copernicus' thesis was itself taken literally rather than hypothetically.[41]

Second, there was the issue of astrology. Here the observations of Heinrich Bornkamm are deeply pertinent:

> On no other branch of nature study did Luther have so much occasion to express himself as on astrology . . . . His entire century— including nearly all the humanists—shared in the belief in astrology. Copernicus and Kepler clung to it. In Luther's own circles horoscopes were cast and constellations were studied. Melanchthon kept dinning his evil forebodings and dismal prophecies into Luther's ears. Luther mockingly said that Melanchthon pursued the study of astrology "as I take a drink of strong beer when I am troubled with grievous thoughts." Thanks to thorough instruction in natural philosophy at Erfurt, Luther cast the superstition of his time aside. He admittedly also believed that comets, rainbows,

Calvin's view of the authority of Scripture was directive rather than regulative.

> and other phenomena in the heavens could be signs and hints from God, as everything in nature was a sign to him. But it seemed ridiculous and impious to him to try to make this a science. Events are not dependent on the stars but on God. "Our God does not consult the sky." [42]

If the truth be told, in this respect Luther was significantly in advance of his own more supposedly scholastically learned and sophisticated disciple Philip Melanchthon.[43] We must also not forget that in the sixteenth and seventeenth centuries, scientific astronomy and superstitious astrology could be united in the outlook of the same person. For some, the attraction of a more accurate astronomy was the casting of more accurate horoscopes.[44]

As for John Calvin, he took great pains to distinguish between astrology and astronomy. While he supported the latter, he wrote against astrology in a work entitled *Avertissement contre l'astrologie judiciaire (Admonition against the Astrology that is called Judicial)* (1549).[45] Moreover, in his entire approach, Calvin seems to have been less inclined towards biblicism. Consider, for example, these statements drawn from his discussion of Psalm 136:

> Moses calls the sun and moon the two great lights, and there is little doubt that the Psalmist here borrows the same phraseology. What is immediately added about the stars, is, as it were, accessory to the others.

> It is true, that the other planets are larger than the moon, but it is stated as second in order on account of its visible effects. The Holy Spirit had no intention to teach astronomy; and, in proposing instruction meant to be common to the simplest and most uneducated persons, he made use by Moses and the other Prophets of popular language, that none might shelter himself under the pretext of obscurity, as we will see men sometimes very readily pretend an incapacity to understand, when anything deep or recondite is submitted to their notice. Accordingly, as Saturn though bigger than the moon is not so to the eye owing to its greater distance, the Holy Spirit would rather speak childishly than unintelligibly to the humble and unlearned.[46]

Here is an important statement about both the perspicacity and intention of Holy Scripture. It fully respects the divine inspiration and authority of Scripture, and in principle it sets aside any need for the kind of literalism that the twentieth century would associate with fundamentalism. Here is a view of the scriptures that has no need to panic before the latest theories of a Copernicus, Kepler, or Galilieo.[47] Calvin may well be best understood as pre-Copernican rather than anti- or pro-Copernican. Nevertheless, even if on occasions he was inclined to be anti-Copernican, his view of biblical hermeneutics was such that it did not dogmatically preclude the acceptance of heliocentricity.[48]

Nevertheless, writers such as Paolo Rossi still insist on representing Calvin as if he were some sort of naïve literalist.[49] More grievous still are those who cling to the erroneous quotation "Who will venture to place the authority of Copernicus above that of the Holy Spirit" for the purposes of treating the Christian religion as a discredited theory. A trace of this tendency may be found in Brian Silver's declaration: "The straight-laced Protestant John Calvin also blasted Copernicus . . . ."[50] More flagrant yet has been the use of the original erroneous quotation by philosophy popularizer and Russell-admirer Bryan Magee[51] in a glossy and heavily marketed publication, where we are confronted in large font with the now all too familiar quotation: ***Who will venture to place the authority of Copernicus above that of the Holy Spirit? — JOHN CALVIN*** [52]

Beyond the obvious conclusion that old and entrenched errors die hard, especially when perpetuated by prestigious authors, what conclusions might we draw from all of this? First, we can conclude that a little historical knowledge is a dangerous thing. Reliance upon a single compendious text may serve to entrench the reader within a circle of mutually supporting misunderstandings. There can be no substitute for a detailed knowledge of the literature. This is not to lay upon everyone the absurd burden of being a specialist in everything. It is, however, to say that it is better to reflect upon the differing perspectives of a variety of authors than to place oneself in the hands of a single authority. Those who place themselves solely in the hands of Silver on science or Magee on philosophy will not have their minds disabused of a proven falsehood. For their readers, Calvin's reputation with respect to science remains tarnished. At the same time, we need to recognize that the best contemporary scholarship is much less likely to exhibit the smears and slurs to which Calvin has often been subjected in the earlier literature. For example, Kenneth J. Howell's *God's Two Books* treats Calvin with far greater fairness than did the secularized Protestants of the late nineteenth and early twentieth centuries.[53]

Second, the remedy lies not only in comparing authority with authority but also in analyzing the history of the historiography of each discipline and problem, along with the history of the discovery and appropriation of the sources. Such procedures not only uncover the frequently undisclosed starting points and half-acknowledged agendas of primary and secondary authors but also serve as a salutary reminder of our relative position in the course of human history.

Third, the complexity of issues surrounding Calvin's supposed and/or probable outlook towards the Copernican thesis should have a cautionary effect on our assessment of comparable historical situations. This issue raised the important question of how the church, as the people of God with Bible in hand, is to respond to extra-biblical evidence.[54] If that question came to the first Protestants of the sixteenth century by way of the "astronomical revolution of the sixteenth century," it came to their mid to late nineteenth-century successors by way of the Darwin-Wallace evolutionary theory of the origins of species.

Kuyper and the fossils

The two historical situations are more intimately related than might at first be thought. On Saturday, June 30, 1860, John William Draper, author of one of

the key texts in the "warfare" literature referred to above, addressed the "Zoology and Botany" division of the British Association in Oxford, with what John Richard Green described as "an hour and a half of nasal Yankeeism." [55] The restiveness apparently thus engendered in the meeting seems to have exploded shortly thereafter in a confrontation that itself entered the annals of the "warfare between science and religion." We refer to the alleged exchange between Samuel Wilberforce, then (Anglican) Bishop of Oxford, and Thomas H. Huxley, assuming unto himself the role of defender and advocate of the theories of Charles Darwin. According to the legend that had built up by the end of the nineteenth century concerning this exchange,

> Wilberforce turned to him [Huxley] and "with smiling insolence begged to know whether it was through his grandfather or his grandmother that he claimed to be descended from a monkey." Huxley exclaimed to his neighbour, "The Lord hath delivered him into my hands." He ended his speech with these words, "If I am asked whether I choose to be descended from the poor animal of low intelligence and stooping gait, who grins and chatters as we pass, or from a man endowed with great ability and a splendid position who should use these gifts to discredit humble seekers after truth, I hesitate what answer to make."[56]

Shrewd historians have always had doubts about this story, noting that it took many decades for the "received version" to appear.[57] More recent research has served to unmask falsehoods, place all concerned more effectively in their context, and so help to set the record straight.[58] There can be little doubt that this exchange, or more correctly, perceptions of this exchange and its implications, helped fuel and bolster the "warfare" literature that gave rise to the misrepresentation of Calvin already discussed.[59]

At the same time, Christians themselves may adopt a warfare model in discussing "religion and science," especially if taking a fundamentalist stance regarding the inspiration and authority of scripture when seeking to combat "evolution." Here, not least, the Calvinian understanding of the scope of Holy Scripture is definitely needed. Without such insight, we may well find ourselves committing to the world-picture of the biblical authors in the name of being obedient to the biblical message, even though the latter transcends the cultural and pre-scientific circumstances in which the scriptures were inspired in the first place.

Moreover, these considerations come into play when we consider Anglophone literature on Abraham Kuyper. For many years, readers of English had to content themselves with the hagiographic work of F. Vander Berg, latterly supplemented by the writings of McKendree R. Langley and Louis Praamsma.[60] In recent years the situation has changed considerably, with the publication of a number of substantial volumes.[61] However, a portion of this more recent output seems to tend towards the evangelicalization of Kuyper's neo-Calvinian standpoint. There seems to be an inclination to set aside Kuyper's strictures towards "Methodism."[62] References to Kuyper as an evangelical are unhelpful, arguably obscuring more than they ever clarify.[63]

The regulative view of Scripture might actually facilitate the secularization of our culture.

Such an approach opens up the way to an appropriation of Kuyper by the more fundamentalistically minded wing of evangelicalism. For example, James E. McGoldrick states,

> Not only did Kuyper object to evolution as ***an*** explanation for life in the universe, he assailed it because its proponents made it the basis for an anti-Christian world-view. They argued that they had found an absolute, all-embracing principle that is applicable to all of life and to every discipline of study, including religion. [64]

Such assertions need to be assessed with great care. Kuyper's objections were indeed to evolutionism—to what he frequently referred to as "the dogma of Evolution" or the "Evolution-dogma."[65] His opposition was to any *theory* that purported to be the explanation of all that is. Such totalization amounted to a dogma-driven reductionism that exceeded the bounds of science. For Kuyper, the problem with evolution did not lie so much with it *as a theory as such*, although there were problems there also, but with evolutionism advanced as the over-arching, all-consuming worldview. This distinction is not altogether clear in McGoldrick, perhaps in view of the possible fundamentalist-inclined proclivities of his readership.[66]

The truth is that Kuyper stood much closer to the view of Calvin—with its rich appreciation of the order of creation—than to that of the fundamentalists. If Calvin and Luther could both reject the (at best) pseudo-science of astrology, and if Calvin recognized that the Bible speaks in terms of everyday experience and not abstract theory, so also Kuyper was no obscurantist. Here he proves that he was a long way from repudiating science as such or all of the science of his day:

> Who of us still capable of enthusiasm would conceal the ecstasy so often provoked by the profound insight these studies give into the essential structure of the world? But the knowledge of these unveiled facts may not be equated with the Evolution-dogma falsely distilled from them.[67]
>
> . . . Every sincere person immediately agrees with that which is logically deduced from established facts, but before accepting these intertwined deductions as a well-rounded system, you must test the philosophical principles underlying these basic operations against the axioms of your own thinking . . . . This watchfulness is all the more urgent since our adversaries are inclined not only to establish the facts but also to construe them philosophically.[68]

In his approach toward science, Kuyper adheres to a position that arguably arises from the central and most basic doctrine of the Calvinistic reformation: the sovereignty of God. His position suggests that once we recognize the sovereignty of God, our theorizing enjoys the widest possible range of hypothesis formulation and that it is not for us to presume to bind the Almighty so as to say that God could not have created in this, that, or the other way. For according to Kuyper,

> Of course it is an entirely different question . . . whether religion as such permits a spontaneous unfolding of the species in organic life . . . . This question must be answered affirmatively, without reservation. We will not force our style up on the Chief Architect of the universe. If he is to be the Architect not in name only but in reality, He will also be supreme in the choice of style. Had it thus pleased God not to create the species but to have one species emerge from another by enabling a preceding species to produce a higher following species, Creation would still be no less miraculous. [69]

In other words, Kuyper opposed the "system" of Evolution*ism* because it required an "aimlessly and mechanistically constructed cosmos"—one that was somehow its own autonomous yet blind, directing principle. Such a view was fundamentally inconsistent with a cosmos constantly and in every respect dependent upon its Creator.[70] In this respect, evolutionism exceeded the bounds of science and assumed the role of an ideologically constituted false religion. However, for all these misgivings, Kuyper rightly leaves many questions open. The range of possible hypotheses is not to be ideologically restricted but may be as wide as the sovereignty of the Creator is complete. Therefore, not only are we free to address questions pertaining to the emergence, diversity, distribution, and extinction of species in geological time; but we are also called to do so.

Both Calvin and Kuyper exceeded the limitations of a false biblicism in their own days. Disciplined and detailed historical work enables us to place both men in their historical contexts and thereby understand them more accurately. They and all other historical figures call for an effort of historical understanding on our part. Without such an effort, we stand perilously close to the prospect of bearing a false witness against them.

In our elucidation of these issues, the history of historiography has its part to play, especially when it takes into consideration the religious starting point of all historical theorizing. Insight into the functioning of such starting points enables us to unmask the basis of the various distortions that cloud our historical understanding and assists us in detecting the historical origins of those distortions. This unmasking and detection is certainly so in respect to the misrepresentations of Calvin. The history of historiography may also help teach us to be on the alert for any emerging tendency to present Kuyper primarily, or perhaps even exclusively, in evangelical or even fundamentalist terms.

END NOTES

1. Bertrand Russell, *Religion and Science* (New York: Oxford University Press, 1935), 23. The emphases are mine.
2. Ibid., 43, 79-80, 194, 244. See also Bertrand Russell, *Why I am not a Christian, and Other Essays on Religion and Related Subjects* (New York: Simon and Schuster, 1957), in this context especially 3-22, 48-52, 72-87.
3. Bertrand Russell, *Religion and Science*, 7-19. The most relevant works are John William Draper, *History of the Conflict between Religion and Science* (New York: Appleton, 1875), in this context especially 167-173,

and Andrew Dickson White, *The Warfare of Science* (New York: Appleton, 1876), which paid only passing attention to Calvin. Of greater significance is his much more comprehensive two-volume *A History of the Warfare of Science with Theology in Christendom* (1896). This work has been variously reprinted (including New York: George Braziller, 1955). For the context of the latter, see A. D. White, *The Autobiography of Andrew Dickson White* (Vol. I, New York: Century, 1914), 422-426. For an important discussion of the "warfare" metaphor in this context, see James R. Moore, *The Post-Darwinian Controversies: A Study of the Protestant Struggle to Come to Terms with Darwin in Great Britain and America*, 1870-1900 (Cambridge: Cambridge University Press, 1979), 19-100. For a further repudiation of the "warfare" metaphor, see David N. Livingstone, *Darwin's Forgotten Defenders: The Encounter Between Evangelical Theology and Evolutionary Thought* (Edinburgh: Scottish Academic Press, 1987). For a discussion of the context within which the "warfare" metaphor arose, see Colin Russell, "The Conflict Metaphor and its Social Origins," *Science and Christian Belief* 1 (1989), 3-26.

4. Katherine Tait, *My Father Bertrand Russell* (New York: Harcourt, Brace, Jovanovich, 1975), 183.
5. The influence of fathers is not absolute. In later years Katherine Tait professed the Christian religion herself. Ibid., 185-189.
6. "So it goes now. Whoever wants to be clever must agree with nothing that others esteem. He must do something of his own. This is what the fellow does who wishes to turn the whole of astronomy upside down. Even in these things that are thrown into disorder I believe the Holy Scriptures, for Joshua commanded the sun to stand still and not the earth [Joshua 10:12]." Translated thus in the American edition of *Luther's Works*, Volume 54, edited and translated by Theodore G. Tappert (Philadelphia: Fortress Press, 1967), 359. The full entry appears at 358-359, and is headed "Luther rejects Copernican cosmology — June 4, 1539 # 4638. Cf. Wilhelm Norlind, "Copernicus and Luther: A Critical Study," Isis 44 (September 1953), 273-276.
7. Bertrand Russell. *History of Western Philosophy* (New York: Simon Schuster, 1945), 528. The emphases are mine. Russell was insistent that the new astronomical science of the sixteenth and seventeenth centuries prospered in Protestant lands rather than Catholic not because the Protestants were more supportive of science, but because of the relative weakness of the Protestant clergy, 528-529.
8. John Calvin, *Commentary on the Book of Psalms*, 1557, last revised by Calvin, 1563, first English edition by Arthur Golding, 1571, here as translated by James Anderson in the Calvin Translation Society edition (London, 1845, reprinted, Grand Rapids: William B. Eerdmans, 1948), Volume IV, 6-7.
9. Andrew Dickson White, "New Chapters in the Warfare of Science," *Popular Science Monthly* 40 (1891/92), 587. The emphases are mine.
10. Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* (1896), Volume I, 127. The emphases are mine.
11. Ibid., 128.
12. Frederick William Farrar, *The History of Interpretation* (London: Dent and Dutton, 1886), "Preface," xviii. The emphases are mine.
13. This said, Farrar clearly favored "the titanic force" of Luther, over "the remorseless logic of Calvin." F.W. Farrar, *The History of Interpretation*, 323. For Farrar on Calvin, see 3, 342-352.
14. Ibid., "Preface," xviii.
15. Ibid., 41.
16. Reginald Farrar, *The Life of Frederick William Farrar* (New York: Crowell, 1904), 193.
17. Ibid., 255-256.
18. F.W. Farrar, *The History of Interpretation*, "Preface," xxix.
19. Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom*, Volume I, 127.
20. C. W. Shields, *The Final Philosophy, or System of Perfectible Knowledge Issuing from the Harmony of Science and Religion* (New York: Scribner, Armstrong, 1877, 1879), 60. The emphases are mine.
21. *Commentary of the First Book of Moses called Genesis,* 1554, first English translation by Thomas Tymme, here translated by John King, Calvin Translation Society edition (London, 1847, reprinted, Grand Rapids: William B. Eerdmans, 1949), Volume I, 61.
22. See Christopher B. Kaiser, "Calvin's Understanding of Aristotelian Natural Philosophy: Its Extent and Possible Origins," in *Calviniana: Ideas and Influence of Jean Calvin*, edited by Robert V. Schnucker (Kirksville, Missouri: Sixteenth Century Journal Publishers, 1988), 77-92, at 85-89.
23. Cf. John Calvin, *Institutes of the Christian Religion*, I. v. 5, translated by Ford Lewis Battles and edited by John T. McNeill (Philadelphia: Westminster Press, 1960), Volume I, 57-58.
24. Thomas S. Kuhn, *The Copernican Revolution* (Cambridge, Massachusetts: Harvard University Press, 1957), 192. The emphases are mine. Kuhn gives White as his source.
25. Edward Rosen, "Calvin's Attitude Toward Copernicus," Journal of the History of Ideas 21 (1960), 431-441. Reprinted in *Copernicus and his Successors (London*: Hambledon Press, 1995), 161-171.

26. Joseph Ratner, "Some Comments on Rosen's 'Calvin's Attitude Toward Copernicus'," *Journal of the History of Ideas* 22 (1961), 382-388.
27. Edward Rosen, "A Reply to Dr. Ratner," *Journal of the History of Ideas* 22 (1961), 386-388.
28. For example, Marie Boas Hall, *The Scientific Renaissance*, 1450-1630 (London: Collins, 1962), 127-128, and especially 355, note 31, and Harold P. Nebelsick, *Circles of God: Theology and Science from the Greeks to Copernicus* (Edinburgh: Scottish Academic Press, 1985), 204, and especially 262, note 13.
29. Reijer Hooykaas, "Thomas Digges' Puritanism," *Archives Internationales d'Histoire des Sciences* 8 (1955), 151; "Science and Reformation," *Journal of World History* 3 (1956), 136-138; and "Calvin and Copernicus," *Organon* 10 (1974), 139-148. Cf. Reijer Hooykaas, *Religion and the Rise of Modern Science* (Edinburgh: Scottish Academic Press, 1972), 117-122, 154. For an assessment of Hooykaas, see H. Floris Cohen, *The Scientific Revolution: A Historical Inquiry* (Chicago: University of Chicago Press, 1994), 310-314.
30. Hooykaas argued this case extensively, and most accessibly in his *Religion and the Rise of Modern Science*, and *Robert Boyle: A Study in Science and Christian Belief* (Lanham: University Press of America, 1997). It might be argued that this viewpoint pays inadequate attention to the deistic tendencies of the Baconian position that it appears to privilege. In this context see particularly Basil Wiley's chapter on "Bacon and the Rehabilitation of Nature" in *The Seventeenth Century Background* (London: Chatto and Windus, 1934), especially at 28-30.
31. John Dillenberger, *Protestant Thought and Natural Science* (New York: Doubleday, 1960), 38, note 33: "I have been unable to find the passage in Calvin and doubt that it exists."
32. Joseph Ratner, "Some Comments on Rosen's 'Calvin's Attitude Toward Copernicus'," 382.
33. Pierre Charles Marcel, "Calvin et la science: comment on fait l'histoire," *La Revue Réformée* 68 (1966), 50-51.
34. Richard Stauffer, "Calvin et Copernic," *Revue de l'Histoire des Religions* 179 (1971), 31-40.
35. Edward Rosen, "Calvin n'a pas lu Copernic," *Revue de l'Histoire des Religions* 182 (1972), 183-185, and Pierre Charles Marcel: "Calvin & Copernic, La Légende ou les Faits?" *La Revue Réformée* 31 (1980/81), 1-210. The latter appeared in a condensed English language version as "Calvin and Copernicus" in *Philosophia Reformata* 46 (1981), 14-36.
36. John Calvin's Sermon on I Corinthians 10: 19-24, in the *Calvini Opera Selecta* [being Volumes 29 to 87] in the *Corpus Reformatorum* (Berlin, Leipzig and Zurich, 1863-1900), Volume 49, 677, as translated by Robert White in "Calvin and Copernicus: the Problem Reconsidered," *Calvin Theological Journal* 15 (1980), 233-243, at 236-237. The emphases are mine. Cf. John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991), 96-97.
37. Susan E. Schreiner, *The Theater of His Glory: Nature and the Natural Order in the Thought of John Calvin* (Durham, NC: Labyrinth Press,1991), 22
38. A. Mitchell Hunter, *The Teaching of Calvin* (London: Lutterworth Press, 1950), 289.
39. John Calvin, *Commentaries on the First Book of Moses called Genesis* [1554], Calvin Translation Society edition, 1847, 1949, Volume I, 86-87. The comment is on Genesis 1:16.
40. According to Richard Marius, in the matter of the Zurich view of the Lord's Supper in relation to Luther's consubstantiation standpoint, "When his Swiss foes Oecolampadius and Zwingli tried to answer him with mild language, Luther responded with unmitigated rage and railing." Richard Marius, *Martin Luther: The Christian between God and Death* (Cambridge, MA: Harvard University Press, 1999), 474. Cf. Bernhard Lohse, *Martin Luther: An Introduction to His Life and Work* (Edinburgh: T. & T. Clark, 1987), 69-77, and Heinrich Bornkamm, *Luther in Mid-Career*, 1521-1530 (Philadelphia: Fortress Press, 1983), 505-551. For Zwingli in this connection, see George R. Potter, *Zwingli* (Cambridge: Cambridge University Press, 1976), 288-292, 309-316, 320-332, and Ulrich Gabler *Huldrich Zwingli: His Life and Work* (Edinburgh: T. and T. Clark, 1986), 132-138.
41. Oseander's preface "to the Reader" stated, "the author of this work has done nothing blameworthy. For it is the duty of the astronomer to compose the history of the celestial motions through careful and skillful observation." Oseander then insisted,

> "if any causes are devised by the imagination ... they are not put forward to convince anyone that they are true, but merely to provide a correct basis for calculation. Now when from time to time there are offered for one and the same motion different hypotheses ... the astronomer will accept above all others the one that is the easiest to grasp. The philosopher will perhaps seek the semblance of the truth. But neither of them will understand or state anything certain, unless it has been divinely revealed to him."

Stephen Toulmin and June Goodfield, *The Fabric of the Heavens*, (London: Hutchinson, 1961), 177.

According to J. L. E. Drayer:

> That Oseander and not Copernicus was the author of the strange preface, does not seem to have become generally known for a long time, although a careful reader might have noticed that the wording of it was hardly

compatible with its having been written by the author of the book. Kepler found out the author's name from a learned colleague at Nürnberg and announced it in a very conspicuous place, on the back of the title-page of his book on Mars issued in 1609; but it is certainly to be regretted that Copernicus had until then in the eyes of many people lain under the imputation of having proposed a startling hypothesis while believing it to be false.

J. L. E. Drayer, *A History of Astronomy from Thales to Kepler* (New York: Dover, 1953), 321. Cf. Pierre Duhem, *To Save the Phenomena: An Essay on the Idea of Physical Theory from Plato to Galileo* (Chicago: University of Chicago Press, 1969), 66-70. [French edition published in Paris in 1908]. For Johannes Kepler in this context see Edward Rosen, "Kepler and the Lutheran Attitude towards Copernicanism," *Vistas in Astronomy* 18 (1975), 225-231. The question of Osiander's *Preface to De Revolutionibus* is shrewdly discussed by Heiko A. Oberman in *The Dawn of The Reformation* (Edinburgh: T. and T. Clark, 1986), at 189-192.

42. Heinrich Bornkamm, *Luther's World of Thought* (Saint Louis, Missouri: Concordia, 1958), 185.
43. Which is not to say that Melanchthon repudiated Copernicus as some would suggest. Rather, he fashioned his own characteristic appropriation and utilization of Copernican theory. See Bruce T. Moran, "The Universe of Philip Melanchthon: Criticism and the use of the Copernican Theory," *Comitatus* 4 (1973), 1-27, especially 8ff, and 13ff. Also, Robert S. Westman, "The Melanchthon Circle, Rheticus, and the Wittenberg Interpretation of the Copernican Theory," *Isis* 66 (1975), 165-193, especially at 172-174.
44. The great Johannes Kepler is prominent at this point. See John V. Field, "A Lutheran Astrologer: Johannes Kepler," in the *Archive for the History of the Exact Sciences* 31 (1984), 189-272. Field insists that "Kepler's concern with astrology was not peripheral to his cosmological theories," 222.
45. See the short but pertinent article by Christine McCall Probes on "Calvin on Astrology," in the *Westminster Theological Journal* 37 (1975/75), 24-33. The tract by Calvin appears in the *Calvini Opera Selecta* [being Volumes 29 to 87] in the *Corpus Reformatorum*, Volume 35, at 515-516. Cf. A. Mitchell Hunter, *The Teaching of Calvin* (London: Lutterworth Press, 1950), 290-91. Long before Bertrand Russell had become a popular anti-Christian writer on science, Dorothy Stimson had wisely written that "Calvin ... was apparently little touched by this new intellectual current [the rise of modern science]. He did write a semi-popular tract against the so called 'judicial' astrology, then widely accepted, which he, like Luther, condemns as a foolish superstition, though he values 'la vraie science d'astrologie' from which we understand not merely the order and place of the stars and planets, but the causes of things." Dorothy Stimson, *The Gradual Acceptance of the Copernican Theory of the Universe* (Hanover, NH: Baker & Taylor, 1917), 41. See also Bernard Cottrett, *Calvin: A Biography* (Grand Rapids: William B. Eerdmans, 2000), 1-7, 283-285.
46. John Calvin, *Commentary on the Book of Psalms* [1557] Calvin Translation Society edition (1849, 1949), Volume V, 184-185, concerning Psalm 136:7.
47. Cf. the words of Herman Ridderbos:

> We may not apply to the Scripture standards which do not suit it. Not only does it give no exact knowledge of mathematics or biology, but it also presents no history of Israel or biography of Jesus that accords with the standards of historical science. God speaks to us through the Scriptures not in order to make us scholars, but to make us Christians. To be sure, to make us Christians in our science, too, but not in such a way as to make human science superfluous or to teach us in a supernatural way all sorts of things that could and would otherwise be learned by scientific training and research. What Scripture does intend is to place us as humans in a right position to God, even in our scientific studies and efforts. Scripture is not concerned only with persons' religious needs in a pietistic or existentialistic sense of that word. On the contrary, its purpose and authority is that it teaches us to understand everything sub specie Dei—humanity, the world, nature, history, their origin and their destination, their past and their future. Therefore the Bible is not only the book of conversion, but also the book of history and the book of creation.

Herman Ridderbos, *Studies in Scripture and its Authority* (St. Catharines: Paideia Press, 1978), 23-24.

48. Cf. B. A. Gerrish, "The Reformation and the Rise of Modern Science," in *The Impact of the Church upon its Culture: Reappraisals in the History of Christianity*, edited by Jerald C. Brauer (Chicago: University of Chicago Press, 1968), 233, cf. 245-250.
49. Paolo Rossi, *The Birth of Modern Science* (Oxford: Basil Blackwell, 2000), 60. Rossi does not give the spurious quotation from Calvin repeated by Russell, but he seems to want a Calvin who would say such a thing and ignores Calvin's positive estimation of astronomy as a science.
50. Brian L. Silver, *The Ascent of Science* (New York: Oxford University Press, 1998), 53.
51. For Magee's philosophical development, see his *Confessions of a Philosopher: A Journey Through Western Philosophy* (New York: Random House, 1997), especially Chapter 12, "Getting to Know Russell," at 203-212. Statements made in the British (Orton Books) edition of this work—but not the quotation here discussed—gave rise to civil litigation in

England, in which the Queen's Bench Division of the High Court of Justice recorded a settlement in favor of the claimant and against Bryan Magee as co-defendant. It transpired that Magee was unable to substantiate a leading statement. *The Guardian*, November 11, 1999.

52. Bryan Magee, *The Story of Philosophy* (London and New York: Dorling Kindersley, 1998), 65.
53. Kenneth J. Howell, *God's Two Books: Copernican Cosmology and Biblical Interpretation in Early Modern Science* (Notre Dame, IN.: University of Notre Dame Press, 2003). In the present context, see especially 3-5, 139-144.
54. Cf. Davis A. Young, *The Biblical Flood: A Case Study of the Church's Response to Extrabiblical Evidence* (Grand Rapids: William B. Eerdmans, 1995), especially 306-313.
55. Leslie Stephen (editor), *The Letters of John Richard Green* (London: Macmillan, 1901), 44-45.
56. S.C. Carpenter, *Church and People, 1789-1889: A History of the Church of England from William Wilberforce to "Lux Mundi"* (London: Society for the Promotion of Christian Knowledge, 1933), 471
57. See, for example, Owen Chadwick, *The Victorian Church*, Volume II (London: A. & C. Black, 1970), 10-12.
58. See James R. Moore, *The Post-Darwinian Controversies*, 60-62; J. R. Lucas, "Wilberforce and Huxley: A Legendary Encounter," *Historical Journal* 22 (1979), 313-330; and especially Sheridan Gilley, "The Huxley-Wilberforce Debate: A Reconsideration," in *Studies in Church History, Volume XVII: Religion and Humanism* (Oxford: Basil Blackwell, 1981), 325-240. See also in this context, David N. Livingstone, *Darwin's Forgotten Defenders: The Encounter Between Evangelical Theology and Evolutionary Thought*, 33-35. A later discussion by J. Vernon Jensen, "Return to the Wilberforce-Huxley Debate," *British Journal for the History of Science* 21 (1988), 161-179, is especially useful on the lead-up to the confrontation.
59. For Andrew Dickson White on this episode, see his *A History of the Warfare of Science with Theology in Christendom,* Volume I, 70-71.
60. F. Vander Berg, *Abraham Kuyper* (Grand Rapids: William B. Eerdmans, 1960); McKendree R. Langley, *The Practice of Political Spirituality: Episodes from the Public Career of Abraham Kuyper, 1879-1918* (Jordan Station, Ontario: Paideia Press, 1984); and Louis Praamsma, *Let Christ be King: Reflections on the Life and Times of Abraham Kuyper* (Jordan Station, Ontario: Paideia Press, 1985).
61. Peter S. Heslam, *Creating a Christian Worldview: Abraham Kuyper's Lectures on Calvinism* (Grand Rapids: William B. Eerdmans, 1998); Luis E. Lugo (editor), *Religion, Pluralism and Public Life: Abraham Kuyper's Legacy for the Twenty-First Century* (Grand Rapids: William B. Eerdmans, 2000); James E. McGoldrick, *Abraham Kuyper: God's Renaissance Man* (Darlington: Evangelical Press, 2000); and John Bolt, *A Free Church, A Holy Nation: Abraham Kuyper's American Public Theology* (Grand Rapids: William B. Eerdmans, 2001).
62. Cf. Abraham Kuyper, *The Work of the Holy Spirit* (Grand Rapids: William B. Eerdmans, 1956), xii-xiv.
63. "Kuyper was an evangelical Christian, but with a difference." James D. Bratt, *Abraham Kuyper: A Centennial Reader* (Grand Rapids: William B. Eerdmans, 1998), 8.
64. James E. McGoldrick, *Abraham Kuyper: God's Renaissance Man*, 104. The emphasis is mine.
65. Abraham Kuyper, "Evolution" [Rectoral Address delivered at the Free University of Amsterdam on October 20th, 1899], translated by Clarence Menninga, in James D. Bratt (editor), *Abraham Kuyper: A Centennial Reader* (Grand Rapids: William B. Eerdmans, 1998), 405-440. The expressions referred to here, as translated, appear with particular frequency in the initial portions of the address. The translation first appeared as "Evolution" in the *Calvin Theological Journal* 31 (1996), 11-50.
66. It is perhaps noteworthy that McGoldrik's publishers have issued various fundamentalist anti-evolution titles over the years, the first of which was H. Enoch, *Evolution or Creation* (1967).
67. Abraham Kuyper, "Evolution" in James D. Bratt (editor), *Abraham Kuyper: A Centennial Reader*, 416.
68. Ibid., 416-417. Kuyper here does tend to suggest that "the facts as such" are neutral. Of course, various phenomena certainly exist independently of our knowledge of them; however, "the facts" that we may state concerning such phenomena are always known and viewed contextually. This said, Kuyper's distinction between the evidence discovered and addressed by special sciences such as geology and paleontology, and the broader conclusions drawn from such evidence, is nevertheless sustainable.
69. Ibid., 436-437.
70. Ibid., 438.